

Shropshire Associates LLC

SBE Certified

Traffic Engineering, Transportation Planning & Design

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November 1, 2021

Pierson Pleasantville, LLC
Mr. Bill Bowling
P.O. Box 704
Bridgeport, NJ 08014

(via email: BBowling@piermat.com)

Re: **Traffic Engineering Assessment**
Pierson Concrete Plant
Dennis Township, Cape May County, NJ
SA Project No. 21243

Dear Mr. Bowling:

In response to your request, Shropshire Associates LLC has prepared a Traffic Engineering Assessment to evaluate the impact of the traffic to be generated by the proposed concrete plant along westbound Woodbine-Ocean View Road (CR 550) in Dennis Township, Cape May County, NJ. The site currently contains R.E. Pierson Materials and will be adding a concrete plant on the existing property. Access to the site will continue to be provided via the one existing full-movement driveway along westbound Woodbine-Ocean View Road.

It should be noted that mixer trucks are already generated in the study area for construction projects. In addition, some materials used for the concrete production are mined on the existing materials site. Based on these factors, the external roadway site traffic component of the proposed concrete plant will be minimized.

Existing Conditions

A field reconnaissance was conducted in the vicinity of the site to determine the features of the adjacent roadway network within the study area. A description of the roadways and intersections are provided below.

Along the site's frontage, **Woodbine-Ocean View Road (CR 550)** is a two-lane undivided roadway that is under the jurisdiction of Cape May County and is classified as an Urban Major Collector. Woodbine-Ocean View Road has an approximate cartway width of 40', consisting of 13' travel lanes and 7' shoulders in each direction. Woodbine-Ocean View Road has a posted speed limit of 50 MPH in the vicinity of the site. For the purpose of this study, Woodbine-Ocean View Road is assumed to extend in a general east-west direction.

Corsons Tavern Road (CR 628) is a two-lane undivided roadway that is under the jurisdiction of Cape May County and is classified as an Urban Major Collector. Corsons Tavern Road has an approximate cartway width of 34', consisting of 11' travel lanes and 6' shoulders in each direction. Corsons Tavern Road has a posted speed limit of 45 MPH in the vicinity of the site. For the purpose of this study, Corsons Tavern Road is assumed to extend in a general north-south direction.



Kings Highway (CR 608) is a two-lane undivided roadway that is under the jurisdiction of Cape May County and is classified as an Urban Local. Corsons Tavern Road has an approximate cartway width of 32', consisting of 12' travel lanes and 4' shoulders in each direction. Corsons Tavern Road has a posted speed limit of 45 MPH in the vicinity of the site. For the purpose of this study, Corsons Tavern Road is assumed to extend in a general north-south direction.

The **Woodbine-Ocean View Road (CR 550)/Corsons Tavern Road (CR 628)** intersection is controlled by a fully-actuated two-phase traffic signal. All approaches consist of a single shared lane for all permitted movements.

The T-shaped **Woodbine-Ocean View Road (CR 550)/Kings Highway (CR 608)** intersection is stop-controlled along the northbound Kings Highway approach. The northbound Kings Highway approach consists of one shared lane for left and right-turn movements. The eastbound Woodbine-Ocean View Road approach consists of a shared lane for through/right-turn lane. The westbound Woodbine-Ocean View Road approach consists of a shared lane for through/left-turn lane.

The T-shaped **Woodbine-Ocean View Road (CR 550)/R.E. Pierson Driveway** intersection is stop-controlled along the southbound R.E. Pierson driveway approach. The southbound R.E. Pierson driveway approach consists of one shared lane for left and right-turn movements. The eastbound Woodbine-Ocean View Road approach consists of a shared lane for through/left-turn lane. The westbound Woodbine-Ocean View Road approach consists of a shared lane for through/right-turn lane.

Traffic Counts

To determine the amount of traffic on the adjacent roadway network, manual turning movement counts (MTMC) were conducted at the study intersections in October 2021 during the weekday AM (6:30 AM – 9:00 AM) and weekday PM (3:00 PM – 6:00 PM) peak periods. A summary of the traffic counts can be found in the appendix to this assessment and the existing volumes are illustrated on Figure 1, with the recorded traffic count data attached for reference.

Future Conditions

As indicated above the proposal is for the construction of a concrete plant. The traffic resulting from the proposed development will not affect the adjacent roadway network until 2024, when the development is expected to be fully built-out and occupied. A 1.00% annual traffic growth is projected along the adjacent roadway network in the area of the site. The No-Build volumes were estimated by applying a 1.00% annual growth rate to the existing roadway volumes and are indicated on Figure 2.

Trip Generation

The amount of traffic to be generated by the proposed concrete plant can best be estimated by using operational information provided by the client. As operating hours will generally range from 6:00 AM to 4:00 PM, the combined employee and truck site traffic will not peak during the street peak hours. In order to use conservatively high traffic projections, it is anticipated that the proposed concrete plant will generate a maximum of 12 mixing trucks in and out during the AM peak hour, along with 1 aggregate truck in and out during the AM peak hour, totaling 13 inbound and 13 outbound trips during the AM peak hour. During the PM peak hour, it

is anticipated that the proposed concrete plant will have 4 mixers arriving to the site and 4 drivers and 3 staff workers will depart the site during the PM peak hour, totaling 4 inbound and 7 outbound trips during the PM peak hour. The total amount of traffic generated by the proposed development is summarized below in Table 1.

Development	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Concrete Plant	13	13	26	4	7	11

The traffic to be generated by the proposed concrete plant must then be distributed to the adjacent roadway network in a manner in which we can reasonably expect trucks and employees to travel. The site traffic was assigned to the roadway network based on the existing flow of traffic along the adjacent roadway network (Figure 3). The site traffic (Figure 4) was then added to the No-Build volumes to project the Build volumes, which are illustrated in Figure 5.

Operational Analysis

In order to measure the quality of the traffic flow for the adjacent roadway, capacity analysis for the study locations were performed based upon the methods outlined in the *Highway Capacity Manual*. Capacity analysis is a procedure used to estimate the ability of the roadway network to carry traffic. Capacity analyses are performed based on a Level of Service methodology. Level of Service (LOS) is a qualitative measure that characterizes the operational conditions of a roadway or intersection based on the perceptions by motorists and passengers. Levels of Service are defined for each type of facility (i.e. freeways, highways, signalized intersections, unsignalized intersections). These Levels of Service range from LOS A to LOS F, with a LOS A representing the best operating conditions and a LOS F representing the worst operating conditions.

The LOS for signalized intersections are classified in terms of delay, which is based on the extent of driver discomfort and frustration, fuel consumption, and lost travel time. The delay experienced by a motorist consists of many factors that relate to control, geometrics, and traffic. Some of these factors include the quality of progression, traffic signal cycle length, the green ratio, and the volume-to-capacity ratio. The Level of Service for an unsignalized intersection is determined based on the average control delay associated with each minor movement (i.e. yielding left-turn movements from the major roads, and stop-controlled movements from the minor approaches. The Level of Service criteria for unsignalized and signalized intersections is summarized in Table 2.

Table 2 - Level of Service Criteria		
Level of Service	Unsignalized Delay (sec)	Signalized Delay (sec)
A	≤ 10	≤ 10
B	$> 10 \text{ and } \leq 15$	$> 10 \text{ and } \leq 20$
C	$> 15 \text{ and } \leq 25$	$> 20 \text{ and } \leq 35$
D	$> 25 \text{ and } \leq 35$	$> 35 \text{ and } \leq 55$
E	$> 35 \text{ and } \leq 50$	$> 55 \text{ and } \leq 80$
F	> 50	> 80



The operating conditions at the study intersections and the proposed site access were evaluated using the above-described methodology and the latest Synchro software. The Existing, No-Build, and Build Levels of Service are illustrated on Figures 6, 7, and 8; respectively. The detailed capacity analyses worksheets for the intersection analyses are attached to this assessment with a description of the operating conditions summarized below.

Woodbine-Ocean View Road and Corsons Tavern Road Intersection

Currently, the Woodbine-Ocean View Road (CR 550) and Corsons Tavern Road (CR 628) signalized intersection operates at an overall LOS B during both the AM and PM peak hours. The eastbound and westbound Woodbine-Ocean View Road approaches operate at a LOS A during both the AM and PM peak hours. The northbound and southbound Corsons Tavern Road approaches operate at a LOS B during both the AM and PM peak hours.

Under the future No-Build and Build scenarios, the Woodbine-Ocean View Road and Corsons Tavern Road intersection will continue to operate at an overall LOS B during both the AM and PM peak hours. All individual movements will continue to operate at existing levels of service. The traffic resulting from the proposed concrete plant will cause no changes in the future levels of service at this study location during both the AM and PM peak hours.

Woodbine-Ocean View Road and Kings Highway Intersection

Currently, the northbound Kings Highway stop-controlled approach operates at a LOS B during both the AM and PM peak hours. The westbound Woodbine-Ocean View Road conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under the future No-Build and Build scenarios, all individual movements will continue to operate at existing levels of service. The traffic resulting from the proposed concrete plant will cause no changes in the future levels of service at this study location during both the AM and PM peak hours.

Woodbine-Ocean View Road and Site Driveway intersection

Currently, the southbound R.E. Pierson driveway stop-controlled approach operates at a LOS A during both the AM and PM peak hours. The eastbound Woodbine-Ocean View Road conflicting left-turn movements operate at a LOS A during both the AM and PM peak hours.

Under the future No-Build scenario, all individual movements will continue to operate at existing levels of service.

Under the future Build scenario, the proposed concrete plant will utilize the existing R.E. Pierson driveway. The southbound site driveway stop-controlled approach will operate at a LOS B during both the AM and PM peak hours. The eastbound Woodbine-Ocean View Road conflicting left-turn movements will continue to operate at a LOS A during both the AM and PM peak hours.

Air Quality Analysis

The New Jersey Department of Environmental Protection (NJDEP) outlines an air quality evaluation protocol in *Air Quality Analysis for Intersections* (May 2004). NJDEP requires dispersion modeling to demonstrate that the National Ambient Air Quality Standards (NAAQS) for carbon monoxide will not be exceeded due to the additional traffic to be generated by a proposed development. As per N.J.A.C. 7:27-13.5, carbon monoxide concentrations shall not exceed 35 ppm for one-hour average concentrations and 9 ppm for eight-hour average concentrations.

Levels of service (LOS) results are the basis for determining whether or not an intersection requires dispersion modeling. Generally, a LOS A, B or C indicates that vehicle delays at an intersection are not significant enough to generate excessive CO concentrations. At signalized intersections, any movement that functions at a LOS D, E or F requires CO dispersion modeling. For unsignalized intersections, a LOS E or F on the stop-controlled approaches, and a LOS D, E or F for the major street left-turn movement indicates the need for CO dispersion modeling. The MOBILE6.2 Emission Factors and CAL3QHC modeling programs are used for dispersion modeling as specified by NJDEP.

As the unsignalized site driveway and Woodbine-Oceanview Road/Kings Highway intersection is projected to operate with movements at LOS B or better, air quality modeling is not required. The signalized intersection of Woodbine-Oceanview Road/Corsons Tavern Road is also projected to operate with movements at LOS B or better and air quality modeling is not required. Based on the projected levels of service, the area traffic will comply with air quality standards with the addition of the traffic generated by the proposed concrete plant.

Conclusion

The traffic to be generated from the proposed concrete plant will have a minimal impact on the adjacent roadways based upon the following results of the traffic assessment:

- Based on the operational information provided by the client, the traffic resulting from the proposed development will generate a maximum of 26 new trips during the AM peak hour and 11 new trips during the PM peak hour.
- Access is proposed via one existing full-movement driveway along westbound Woodbine-Ocean View Road.
- The traffic resulting from the proposed concrete plant will cause no changes in the future levels of service at the Woodbine-Ocean View Road and Corsons Tavern Road signalized intersection. Overall, the Woodbine-Ocean View Road and Corsons Tavern Road signalized intersection will continue to operate at a LOS B during both the AM and PM peak hours. All individual movements will continue to operate at existing levels of service.
- The traffic resulting from the proposed concrete plant will cause no changes in the future levels of service at the Woodbine-Ocean View Road and Kings Highway stop-controlled intersection. All individual movements will continue to operate at existing levels of service.



- At the site driveway, the eastbound Woodbine-Ocean View Road conflicting left-turn movements into the driveway will operate at a LOS A during both the AM and PM peak hours, while the southbound outbound stop-controlled movements will operate at a LOS B during both the AM and PM peak hours.
- The levels of service indicate that there are minimal traffic delays on the area roadway network resulting from the proposed concrete plant.

Should you have any questions or require additional information, please feel free to contact us.

Sincerely,
Shropshire Associates LLC



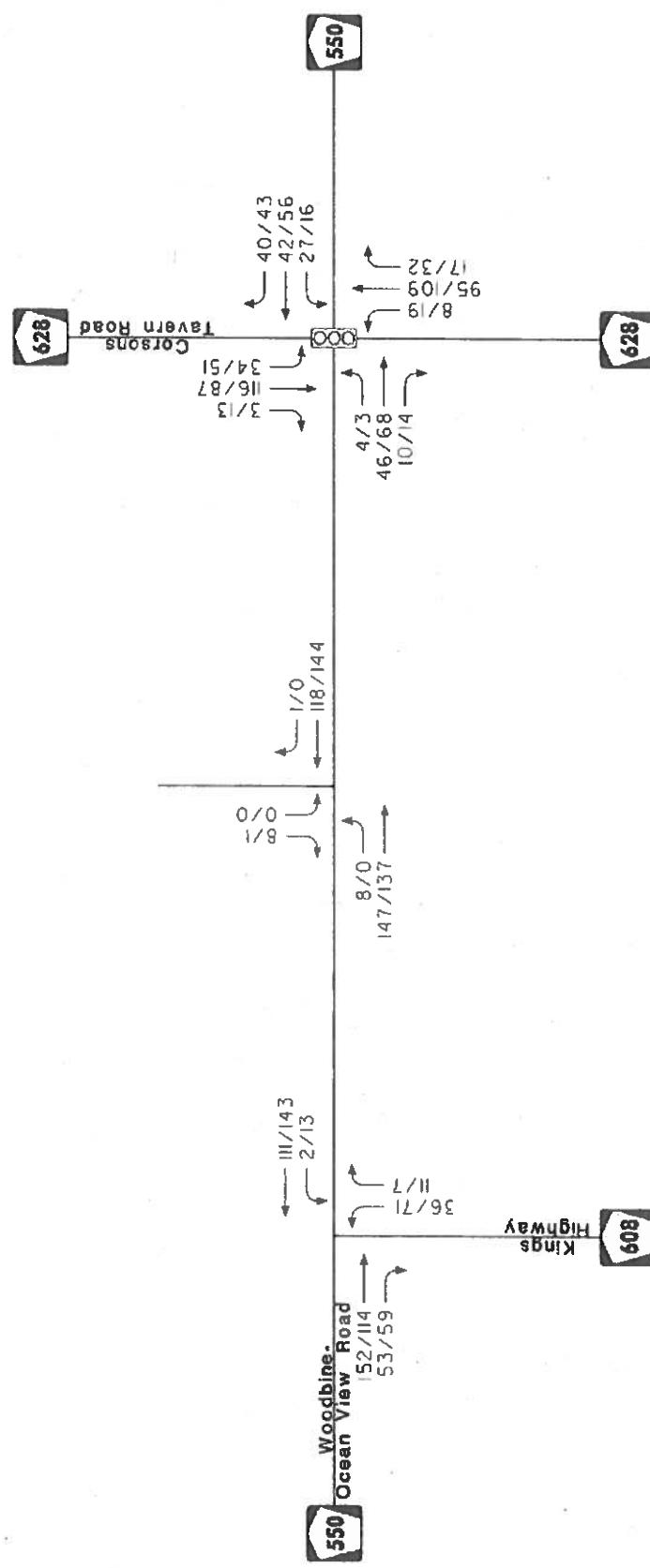
David R. Shropshire, P.E., P.P.
Professional Engineer
N.J. License No. 33943
DRS/jab
Attachments

cc: Brian J. Murphy (via email: b.murphy@mvegllc.com)

Shropshire Associates LLC

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FIGURE 1
EXISTING VOLUMES



Pierson Concrete Plant - Dennis
Dennis Township, Cape May County, New Jersey

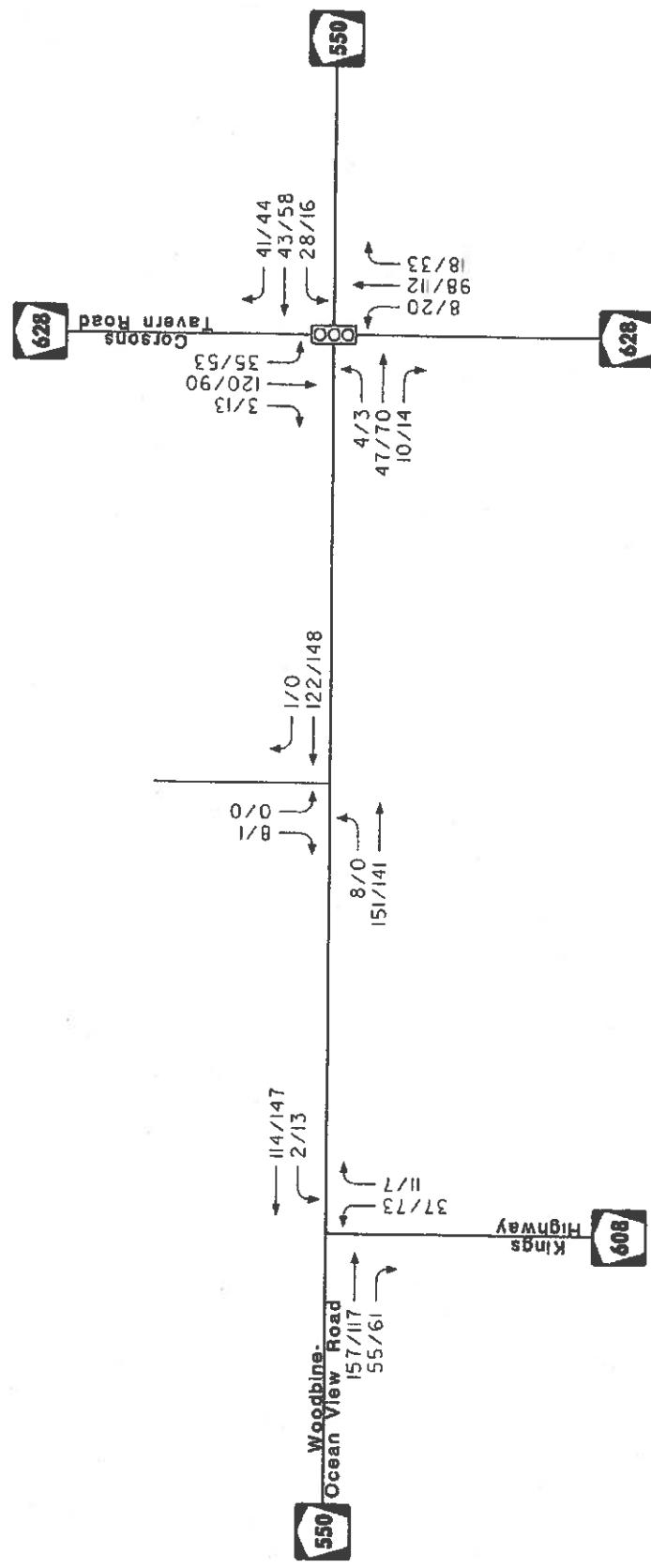
November 2021

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FIGURE 2
NO-BUILD VOLUMES



Pierson Concrete Plant - Dennis

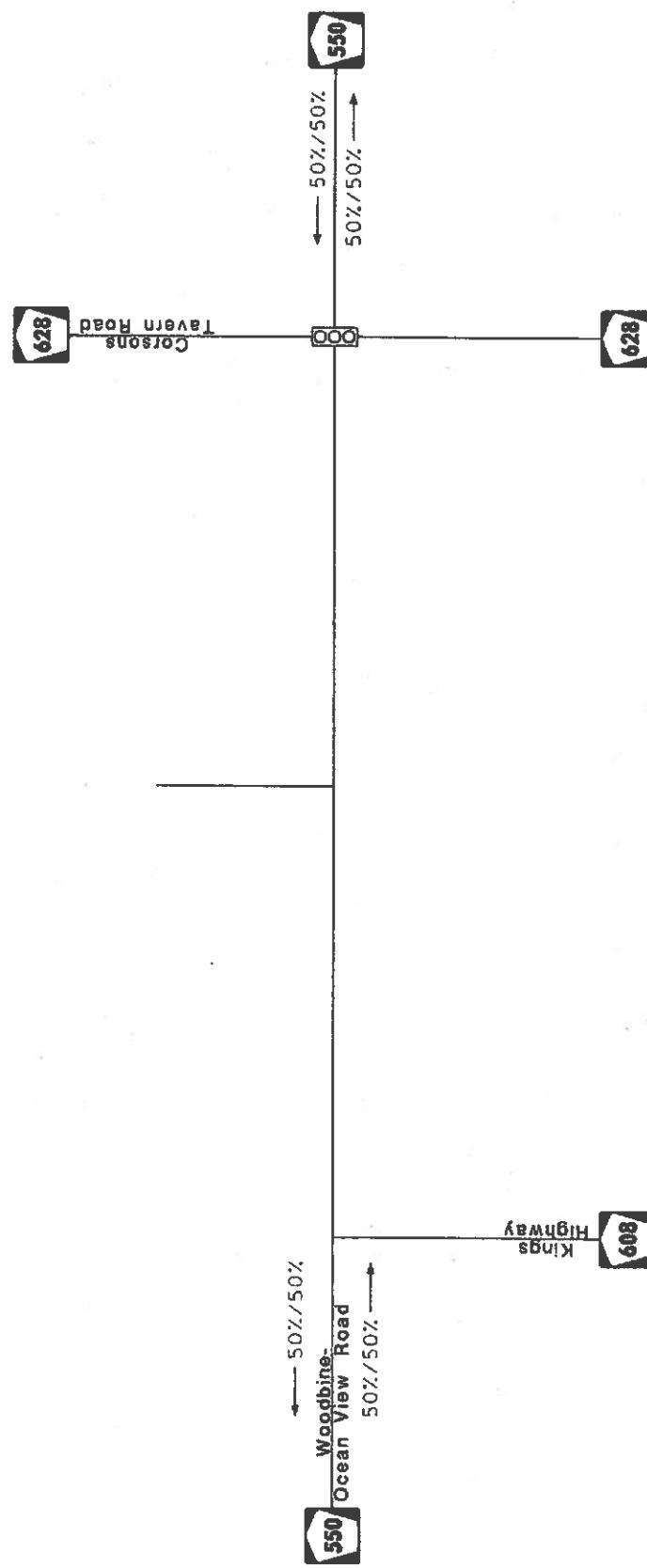
Dennis Township, Cape May County, New Jersey
November 2021

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FIGURE 3
TRIP DISTRIBUTION



Pierson Concrete Plant – Dennis

Dennis Township, Cape May County, New Jersey
November 2021

TRAFFIC SIGNAL
 AM/PM PEAK HOUR

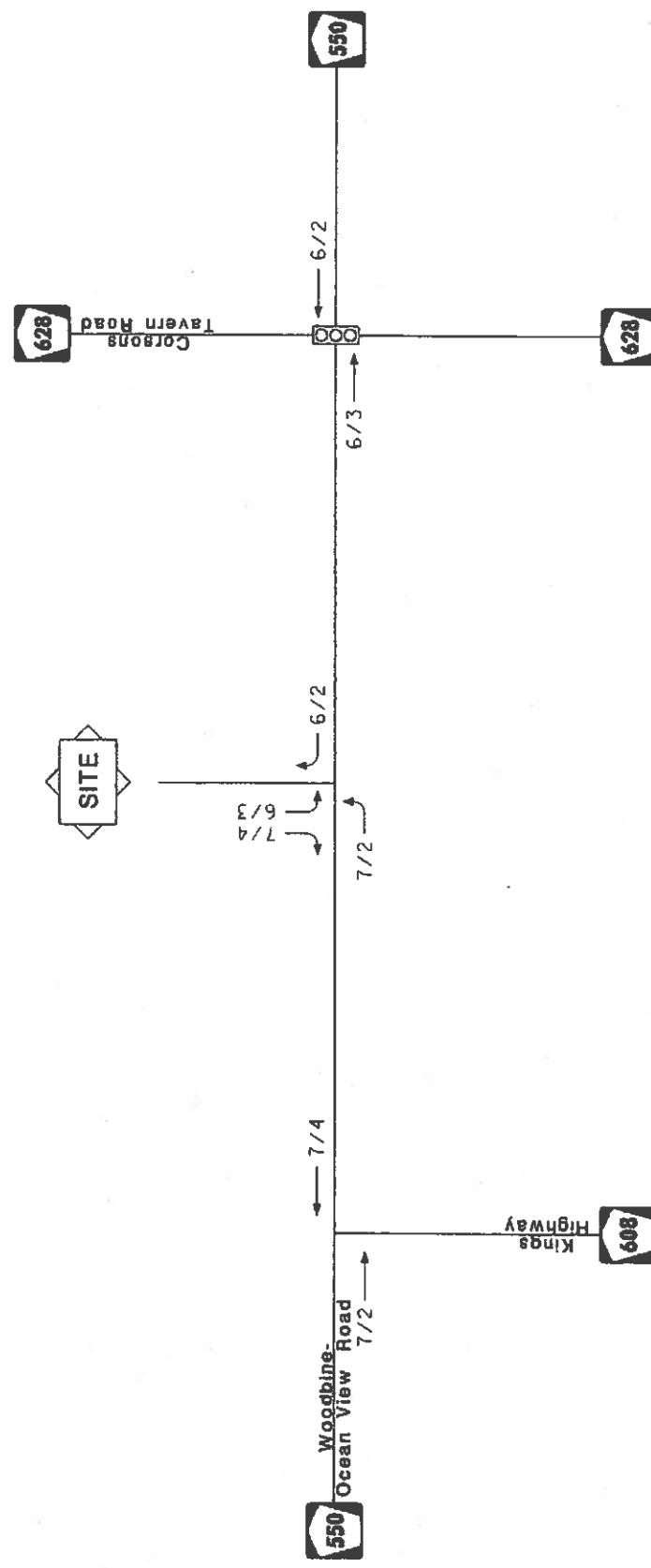
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SA Project No. 21243

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FIGURE 4
SITE TRAFFIC



Pierson Concrete Plant - Dennis

**Dennis Township, Cape May County, New Jersey
November 2021**

November 2021

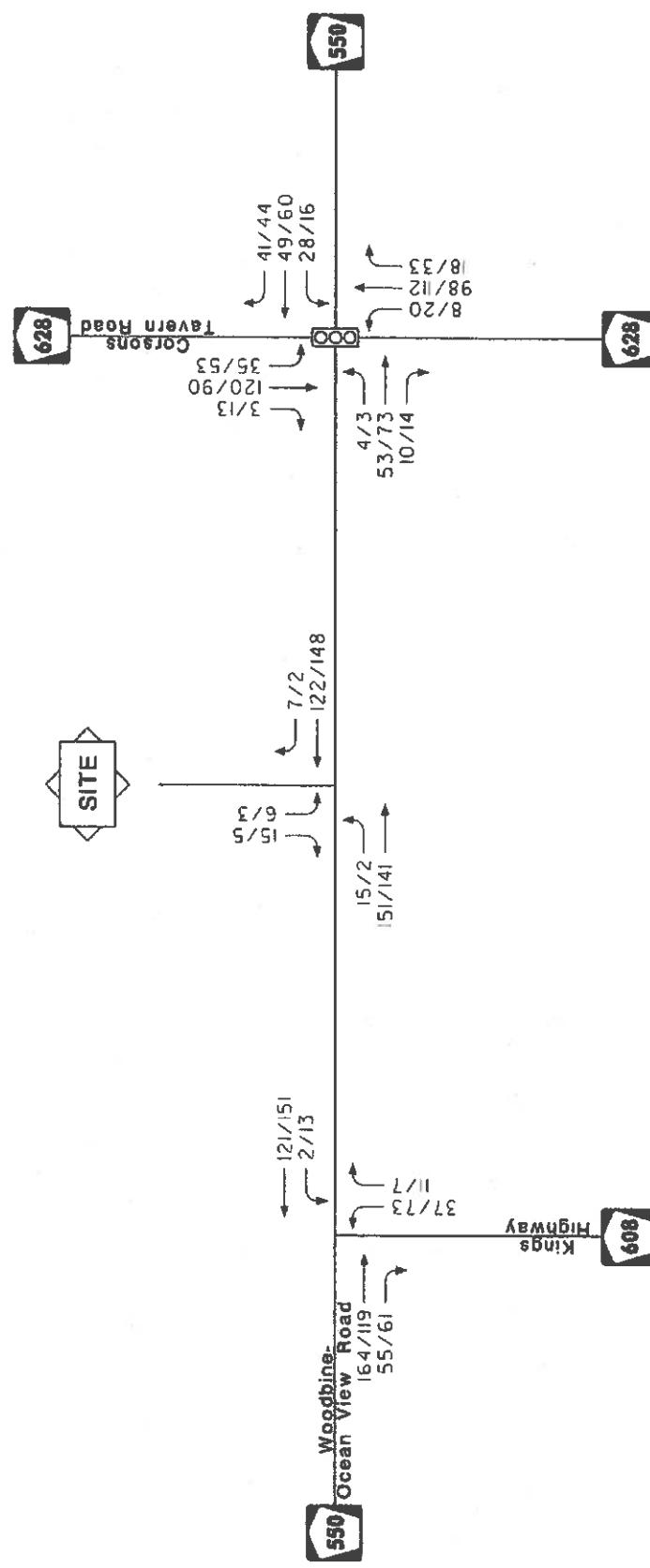
TRAFFIC SIGNAL
AM/PM PEAK HOUR

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FIGURE 5
BUILD VOLUMES



Pierson Concrete Plant – Dennis
Dennis Township, Cape May County, New Jersey
November 2021

TRAFFIC SIGNAL
AM/PM PEAK HOUR

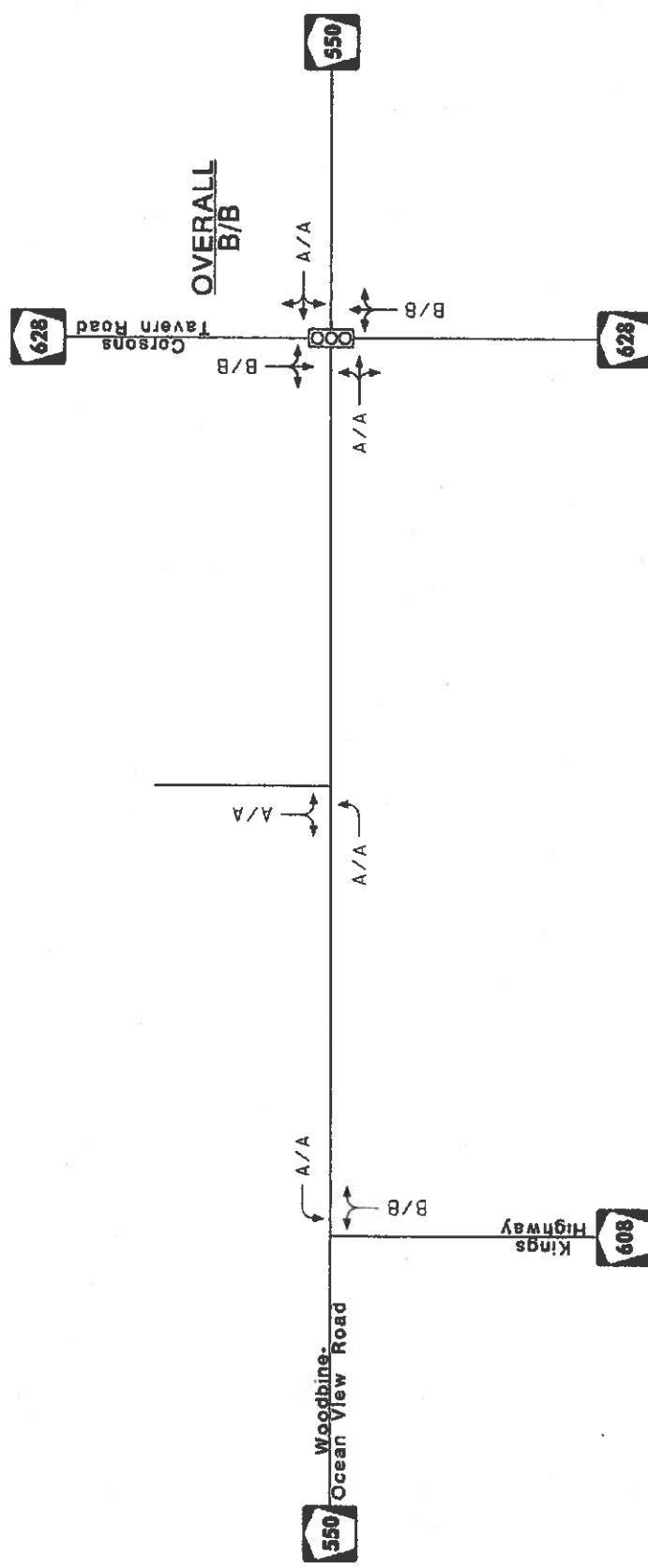
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FIGURE 6 EXISTING LEVELS OF SERVICE



Pierson Concrete Plant - Dennis

**Dennis Township, Cape May County, New Jersey
November 2021**

INNOVATION 2021

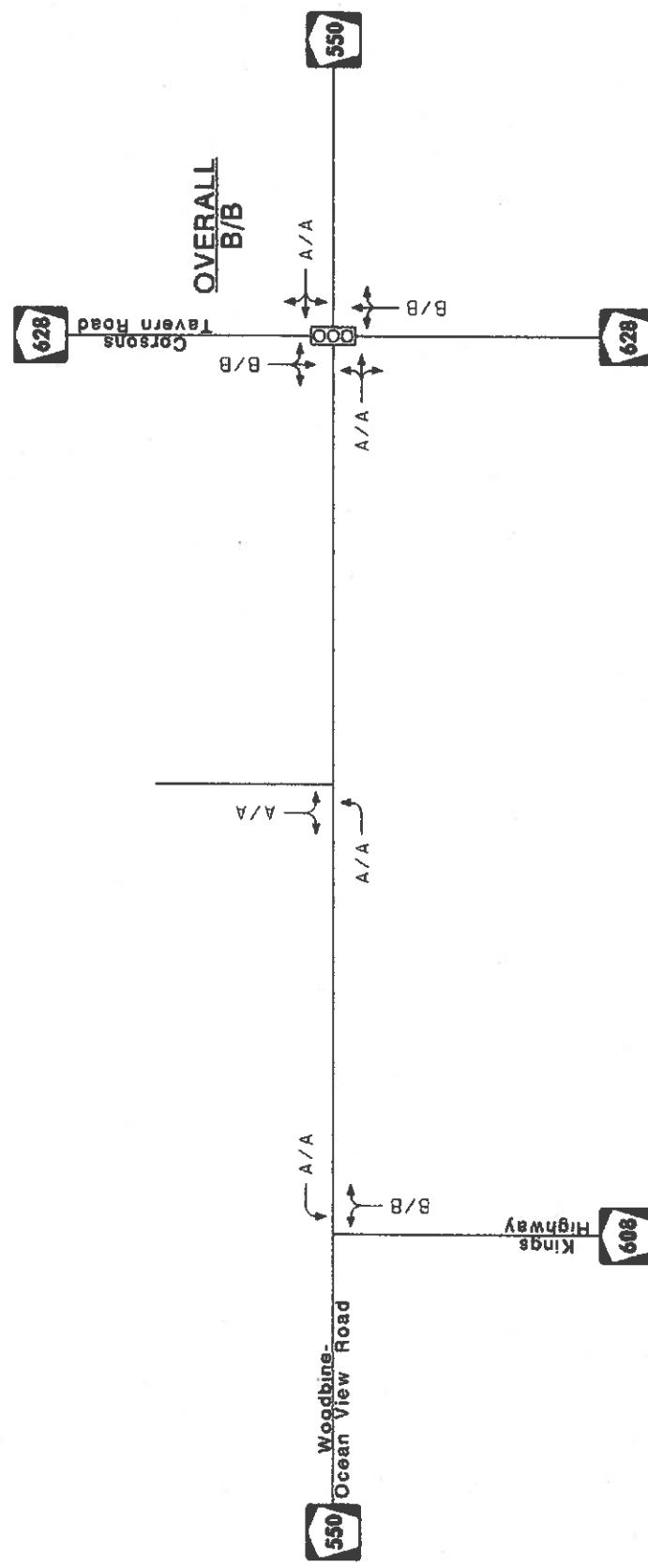
TRAFFIC SIGNAL
AM/PM PEAK HOUR

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FIGURE 7
NO-BUILD LEVELS OF SERVICE



Pierson Concrete Plant - Dennis
Dennis Township, Cape May County, New Jersey
November 2021

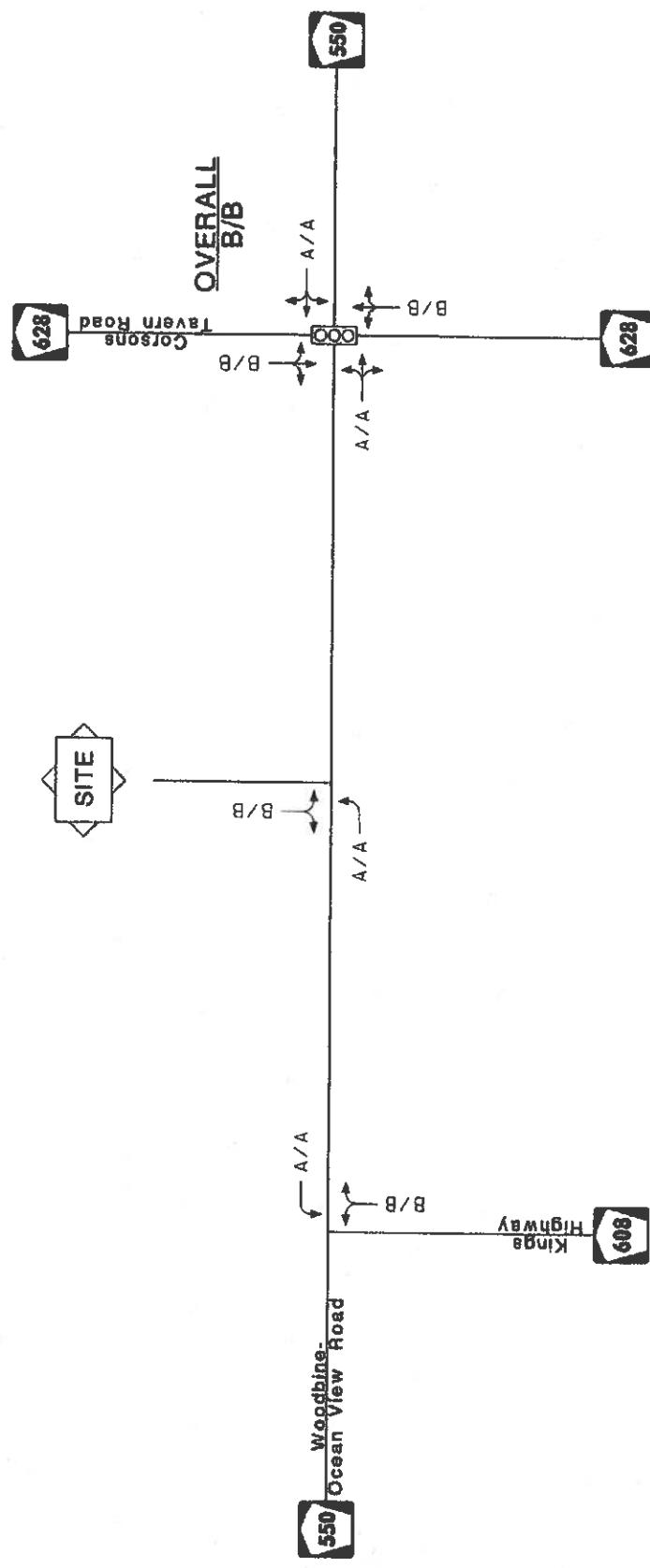
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TRAFFIC SIGNAL
 TRAFFIC AM/PM PEAK HOUR
 SA Project No. 21243

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FIGURE 8
BUILD LEVELS OF SERVICE



Pierson Concrete Plant - Dennis

Dennis Township, Cape May County, New Jersey
November 2021

TRAFFIC SIGNAL
 AM/PM PEAK HOUR
 SA Project No. 21243

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Atco, NJ 08004

N/S Route: Corsons Tavern Rd.

E/W Route: Woodbine-Ocean View Rd.

Dennis Township/Cape May County/NJ

Tues/Cloudy to Rain/JH/D4-2870

File Name : 21243003

Site Code : 21243003

Start Date : 10/12/2021

Page No : 1

Groups Printed- Unshifted - Heavy Construction Vehicles																					
Start Time	Corsons Tavern Rd. Southbound				Woodbine-Ocean View Rd. Westbound				Corsons Tavern Rd. Northbound				Woodbine-Ocean View Rd. Eastbound								
	Right	Thru	Left	App Total	Right	Thru	Left	App Total	Right	Thru	Left	App Total	Right	Thru	Left	App Total					
06:30 AM	2	16	8	1	27	4	1	3	1	9	1	14	1	0	16	1	2	2	0	5	57
06:45 AM	0	16	3	0	19	3	9	3	2	17	2	26	1	0	29	3	5	0	0	8	73
Total	2	32	11	1	46	7	10	6	3	26	3	40	2	0	45	4	7	2	0	13	130
07:00 AM	1	19	10	0	30	11	6	5	3	25	2	18	1	0	21	3	8	0	0	11	87
07:15 AM	1	34	2	3	40	10	6	4	4	24	1	16	1	0	18	3	12	0	0	15	97
07:30 AM	1	30	7	0	38	7	10	10	5	32	5	23	0	0	28	2	6	0	0	8	106
07:45 AM	0	24	9	0	33	10	11	7	3	31	5	18	3	3	29	4	14	1	0	19	112
Total	3	107	28	3	141	38	33	26	15	112	13	75	5	3	96	12	40	1	0	53	402
08:00 AM	0	31	11	1	43	4	12	6	2	24	2	29	2	0	33	3	11	3	0	17	117
08:15 AM	0	31	7	1	39	4	9	4	5	22	2	25	3	0	30	0	15	0	1	16	107
08:30 AM	0	26	7	0	33	4	8	6	0	18	4	18	2	1	25	3	9	1	0	13	89
08:45 AM	0	24	6	0	30	6	5	6	1	18	1	15	3	1	20	1	8	1	1	11	79
Total	0	112	31	2	145	18	34	22	8	82	9	87	10	2	108	7	43	5	2	57	392
*** BREAK ***																					
03:00 PM	1	24	12	1	38	8	9	7	1	25	5	31	2	0	38	2	12	1	1	16	117
03:15 PM	1	20	11	0	32	9	10	5	3	27	4	24	1	2	31	2	15	1	0	18	108
03:30 PM	0	17	18	0	35	7	12	4	4	27	6	27	2	0	35	0	9	2	0	11	108
03:45 PM	0	30	15	0	45	7	15	4	4	30	6	32	6	1	45	1	16	4	2	23	143
Total	2	91	56	1	150	31	46	20	12	109	21	114	11	3	149	5	52	8	3	68	476
04:00 PM	1	23	7	0	31	1	15	6	0	22	11	17	3	0	31	3	11	1	0	15	99
04:15 PM	0	19	5	0	24	11	14	8	6	39	5	22	1	2	30	2	12	1	3	18	111
04:30 PM	2	32	13	1	48	13	16	8	0	37	6	29	6	2	43	3	14	1	0	18	146
04:45 PM	4	15	10	0	29	7	10	5	2	24	8	31	2	0	41	4	18	2	1	25	119
Total	7	89	35	1	132	32	55	27	8	122	30	99	12	4	145	12	55	5	4	76	475
05:00 PM	5	18	20	1	44	4	14	2	5	25	6	24	8	1	39	3	18	0	1	22	130
05:15 PM	0	22	8	0	30	9	16	1	3	29	5	25	3	4	37	2	18	0	0	20	116
05:30 PM	2	18	6	0	24	5	8	2	2	17	5	22	4	4	35	0	10	1	0	11	87
05:45 PM	1	14	11	2	28	4	7	2	2	15	5	12	1	1	19	1	9	0	0	10	72
Total	8	70	45	3	126	22	45	7	12	86	21	83	16	10	130	6	55	1	1	63	405
Grand Total	22	501	206	11	740	148	223	108	58	537	97	498	56	22	673	46	252	22	10	330	2280
Apprch %	3	67.7	27.8	1.5		27.6	41.5	20.1	10.8		14.4	74	8.3	3.3		13.9	76.4	6.7	3		
Total %	1	22	9	0.5	32.5	6.5	9.8	4.7	2.5	23.6	4.3	21.8	2.5	1	29.5	2	11.1	1	0.4	14.5	
Unshifted % Unshifted	22	425	202	11	660	147	222	104	58	531	97	444	56	22	619	45	251	22	10	328	2138
Heavy Construction vehicles	0	76	4	0	80	1	1	4	0	6	0	54	0	0	54	1	1	0	0	2	142
% Heavy Construction vehicles	0	15.2	1.9	0	10.8	0.7	0.4	3.7	0	1.1	0	10.8	0	0	8	2.2	0.4	0	0	0.6	6.2

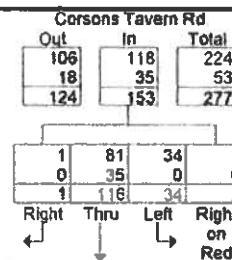
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N/S Route: Corsons Tavern Rd.
E/W Route: Woodbine-Ocean View Rd.
Dennis Township/Cape May County/NJ
Tues/Cloudy to Rain/JH/D4-2870

File Name : 21243003
Site Code : 21243003
Start Date : 10/12/2021
Page No : 2

	Corsons Tavern Rd. Southbound				Woodbine-Ocean View Rd. Westbound				Corsons Tavern Rd. Northbound				Woodbine-Ocean View Rd. Eastbound								
Start Time	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Int Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	30	7	0	38	7	10	10	5	32	5	23	0	0	28	2	6	0	0	8	106
07:45 AM	0	24	9	0	33	10	11	7	3	31	5	18	3	3	29	4	14	1	0	19	112
08:00 AM	0	31	11	1	43	4	12	6	2	24	2	29	2	0	33	3	11	3	0	17	117
08:15 AM	0	31	7	1	39	4	9	4	5	22	2	25	3	0	30	0	15	0	1	16	107
Total Volume	1	116	34	2	153	25	42	27	15	109	14	95	8	3	120	9	46	4	1	60	442
% App. Total	0.7	75.8	22.2	1.3		22.9	38.5	24.8	13.8		11.7	79.2	6.7	2.5		15	76.7	6.7	1.7		
PHF	.250	.935	.773	.500	.890	.625	.875	.675	.750	.852	.700	.819	.667	.250	.909	.563	.767	.333	.250	.789	.944
Unshifted	1	81	34	2	118	25	42	27	15	109	14	77	8	3	102	8	46	4	1	59	388
% Unshifted	69.8	100	100	77.1		100	100	100	100	100	100	81.1	100	100	85.0	88.9	100	100	100	98.3	87.8
Heavy Construction Vehicles	0	35	0	0	35	0	0	0	0	0	0	18	0	0	18	1	0	0	0	1	54
Non-Heavy Construction Vehicles	0	30.2	0	0	22.9	0	0	0	0	0	0	18.9	0	0	15.0	11.1	0	0	0	1.7	12.2
Vehicle Miles Traveled																					



Peak Hour Data

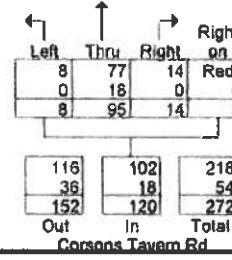
Woodbine-Ocean View Rd			
Out	In	Total	
51	110	161	
59	59	118	
0	60	60	
51	0	51	
0	51	51	
1	111	111	

Right Thru Left ↑

↑ North
Peak Hour Begins at 07:30 AM
Unshifted Heavy Construction Vehicles

Woodbine-Ocean View Rd			
Out	In	Total	
25	42	67	
0	109	109	
54	0	54	
0	60	60	
203	0	203	
0	15	15	

Right Thru Left ↑ Right on Red



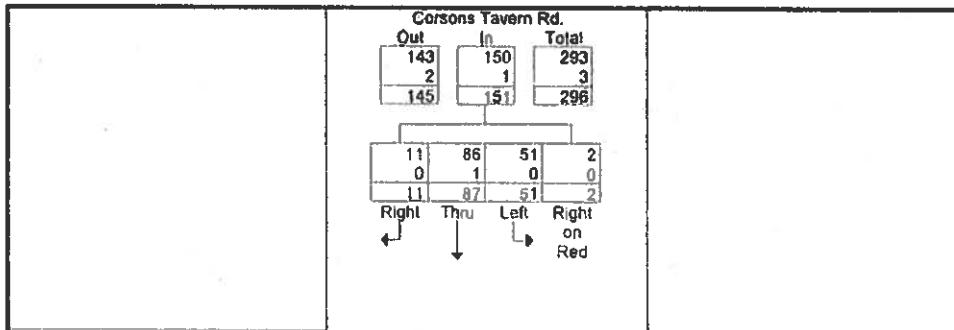
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

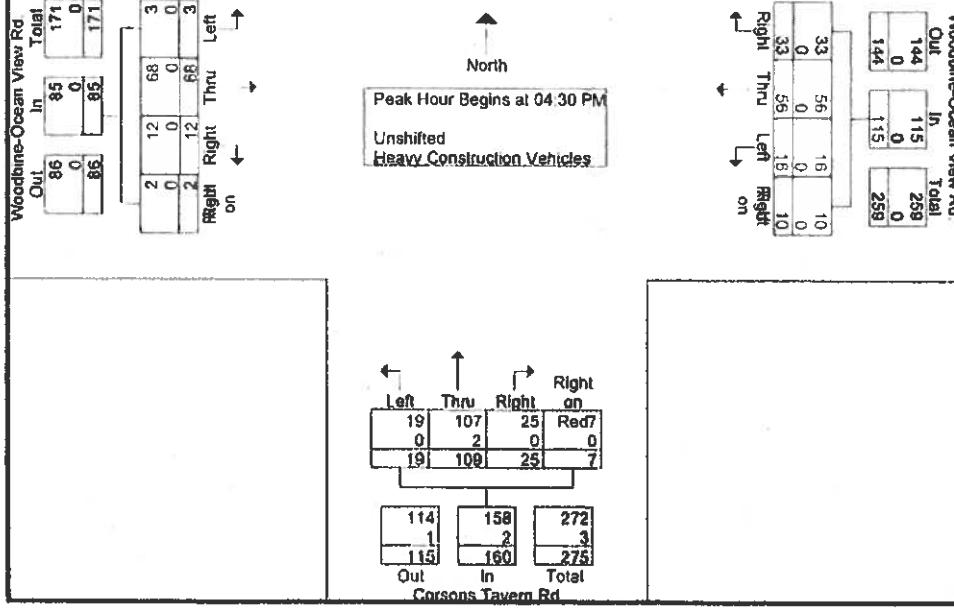
N/S Route: Corsons Tavern Rd.
E/W Route: Woodbine-Ocean View Rd.
Dennis Township/Cape May County/NJ
Tues/Cloudy to Rain/JH/D4-2870

File Name : 21243003
Site Code : 21243003
Start Date : 10/12/2021
Page No : 3

Start Time	Corsons Tavern Rd. Southbound					Woodbine-Ocean View Rd. Westbound					Corsons Tavern Rd. Northbound					Woodbine-Ocean View Rd. Eastbound					
	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Right	Thru	Left	Right on Red	App Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	2	32	13	1	48	13	16	8	0	37	6	29	6	2	43	3	14	1	0	18	146
04:45 PM	4	15	10	0	29	7	10	5	2	24	8	31	2	0	41	4	18	2	1	25	119
05:00 PM	5	18	20	1	44	4	14	2	5	25	6	24	8	1	39	3	18	0	1	22	130
05:15 PM	0	22	8	0	30	9	16	1	3	29	5	25	3	4	37	2	18	0	0	20	116
Total Volume	11	87	51	2	151	33	56	16	10	115	25	109	19	7	160	12	68	3	2	85	511
% App. Total	7.3	57.6	33.8	1.3		28.7	48.7	13.9	8.7		15.6	68.1	11.9	4.4		14.1	80	3.5	2.4		
PHF	.550	.680	.638	.500	786	635	875	500	500	777	781	879	594	438	.930	750	944	.375	.500	.850	.875
Unshifted	11	86	51	2	150	33	56	16	10	115	25	107	19	7	158	12	68	3	2	85	508
% Unshifted	98.9	100	100	99.3		100	100	100	100	100	100	98.2	100	100	98.8	100	100	100	100	100	99.4
Heavy Construction Vehicles	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Heavy Construction Vehicles	0	1.1	0	0	0.7	0	0	0	0	0	0	1.8	0	0	1.3	0	0	0	0	0	0.6



Peak Hour Data



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203

Atco, NJ 08004

N/S Route: Site Driveway
 E/W Route: Woodbine-Ocean View Rd.
 Dennis Township/Cape May County/NJ
 Tues/Cloudy to Rain/EM/D4-3142

File Name : 21243002
 Site Code : 21243002
 Start Date : 10/12/2021
 Page No : 1

Groups Printed- Unshifted - Heavy Construction Vehicles											
	Site Driveway Southbound			Woodbine-Ocean View Rd. Westbound			Woodbine-Ocean View Rd. Eastbound				
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total	
06:30 AM	5	0	5	0	19	19	21	0	21	45	
06:45 AM	0	0	0	0	26	26	20	0	20	46	
Total	5	0	5	0	45	45	41	0	41	91	
07:00 AM	0	0	0	1	26	27	30	1	31	58	
07:15 AM	2	0	2	0	27	27	36	3	39	68	
07:30 AM	4	0	4	1	27	28	36	4	40	72	
07:45 AM	2	0	2	0	25	25	36	0	36	63	
Total	8	0	8	2	105	107	138	8	146	261	
08:00 AM	0	0	0	0	39	39	39	1	40	79	
08:15 AM	1	0	1	0	30	30	33	2	35	66	
08:30 AM	0	0	0	0	23	23	33	4	37	60	
08:45 AM	1	2	9	0	24	24	34	4	38	71	
Total	8	2	10	0	116	116	139	11	150	276	
*** BREAK ***											
03:00 PM	0	0	0	0	37	37	31	0	31	68	
03:15 PM	0	0	0	0	39	39	28	0	28	67	
03:30 PM	1	0	1	0	30	30	37	0	37	68	
03:45 PM	0	0	0	0	38	38	41	0	41	79	
Total	1	0	1	0	144	144	137	0	137	282	
04:00 PM	0	0	0	0	21	21	31	0	31	52	
04:15 PM	0	0	0	0	38	38	28	0	28	66	
04:30 PM	0	0	0	0	37	37	43	0	43	80	
04:45 PM	0	0	0	0	38	38	26	0	26	64	
Total	0	0	0	0	134	134	128	0	128	262	
05:00 PM	0	0	0	0	34	34	32	0	32	66	
05:15 PM	0	0	0	0	37	37	30	0	30	67	
05:30 PM	0	0	0	0	27	27	19	0	19	46	
05:45 PM	0	0	0	0	19	19	17	0	17	36	
Total	0	0	0	0	117	117	98	0	98	215	
Grand Total	22	2	24	2	661	663	681	19	700	1387	
Apprch %	91.7	8.3		0.3	99.7		97.3	2.7			
Total %	1.6	0.1	1.7	0.1	47.7	47.8	49.1	1.4	50.5		
Unshifted	2	2	4	1	605	606	626	0	626	1236	
% Unshifted	9.1	100	16.7	50	91.5	91.4	91.9	0	89.4	89.1	
Heavy Construction Vehicles	20	0	20	1	56	57	55	19	74	151	
% Heavy Construction Vehicles	90.9	0	83.3	50	8.5	8.6	8.1	100	10.6	10.9	

Shropshire Associates LLC

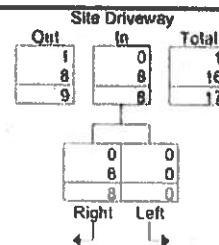
277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Site Driveway

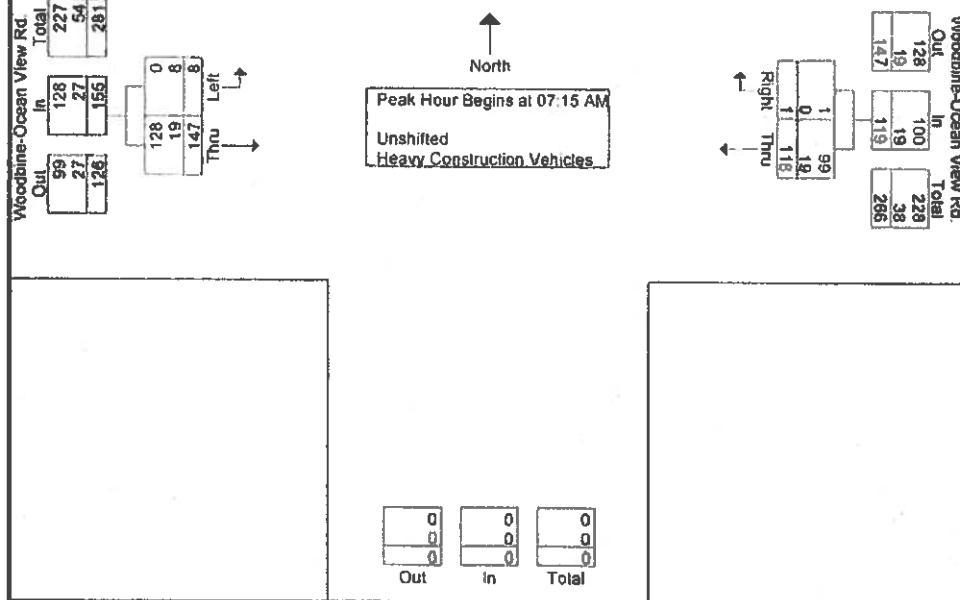
E/W Route: Woodbine-Ocean View Rd.
Dennis Township/Cape May County/NJ
Tues/Cloudy to Rain/EM/D4-3142

File Name : 21243002
Site Code : 21243002
Start Date : 10/12/2021
Page No : 2

Start Time	Site Driveway Southbound			Woodbine-Ocean View Rd. Westbound			Woodbine-Ocean View Rd. Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak I of I										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	2	0	2	0	27	27	36	3	39	68
07:30 AM	4	0	4	1	27	28	36	4	40	72
07:45 AM	2	0	2	0	25	25	36	0	36	63
08:00 AM	0	0	0	0	39	39	39	1	40	79
Total Volume	8	0	8	1	118	119	147	8	155	282
% App. Total	100	0	0	0.8	99.2	94.8	5.2			
PLIF	.500	.000	.500	250	.756	.763	942	.500	.969	.892
Unshifted	0	0	0	1	99	100	128	0	128	228
% Unshifted	0	0	0	100	83.9	84.0	87.1	0	82.6	80.9
Heavy Construction Vehicles	8	0	8	0	19	19	19	8	27	54
% Heavy Construction Vehicles	100	0	100	0	16.1	16.0	12.9	100	17.4	19.1



Peak Hour Data



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: Site Driveway

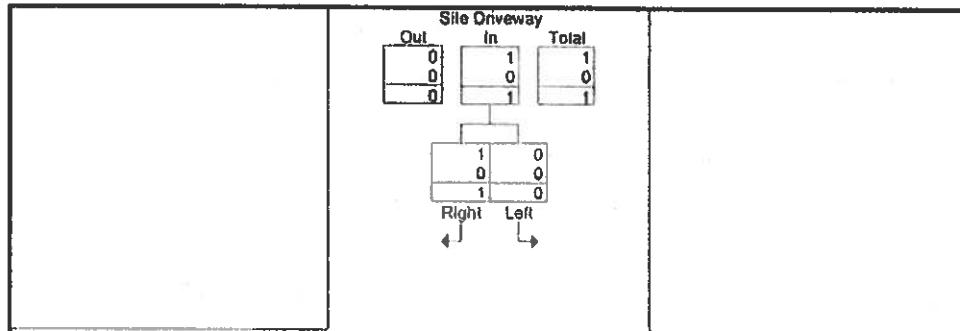
E/W Route: Woodbine-Ocean View Rd.

Dennis Township/Cape May County/NJ

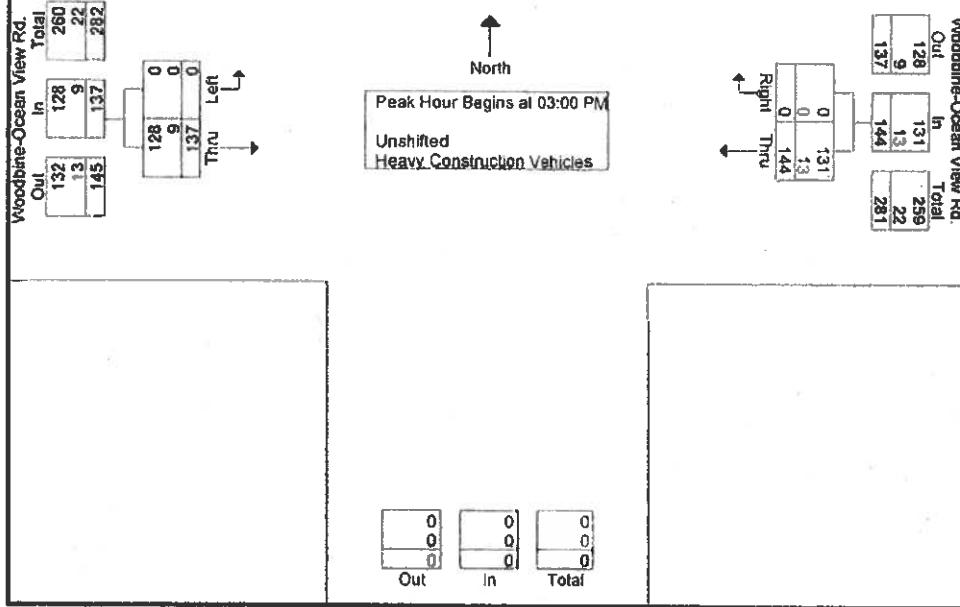
Tues/Cloudy to Rain/EM/D4-3142

File Name : 21243002
Site Code : 21243002
Start Date : 10/12/2021
Page No : 3

Start Time	Site Driveway Southbound			Woodbine-Ocean View Rd. Westbound			Woodbine-Ocean View Rd. Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	0	37	37	31	0	31	68
03:15 PM	0	0	0	0	39	39	28	0	28	67
03:30 PM	1	0	1	0	30	30	37	0	37	68
03:45 PM	0	0	0	0	38	38	41	0	41	79
Total Volume	1	0	1	0	144	144	137	0	137	282
% App. Total	100	0	0	0	100	100	100	0	100	282
PHF	.250	.000	.250	.000	.923	.923	.835	.000	.835	.892
Unshifted	1	0	1	0	131	131	128	0	128	260
% Unshifted	100	0	100	0	91.0	91.0	93.4	0	93.4	92.2
Heavy Construction Vehicles	0	0	0	0	13	13	9	0	9	22
% Heavy Construction Vehicles	0	0	0	0	9.0	9.0	6.6	0	6.6	7.8



Peak Hour Data



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: King's Highway
E/W Route: Woodbine-Ocean View Rd.
Dennis Township/Cape May County/NJ
Tues/Cloudy to Rain/RA/D4-3730

File Name : 21243001
Site Code : 21243001
Start Date : 10/12/2021
Page No : 1

Groups Printed- Unshifted - Heavy Construction Vehicles

Start Time	Woodbine-Ocean View Rd. Westbound			King's Highway Northbound			Woodbine-Ocean View Rd. Eastbound			Int. Total
	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	
06:30 AM	23	0	23	0	14	14	14	21	35	72
06:45 AM	22	0	22	1	12	13	7	21	28	63
Total	45	0	45	1	26	27	21	42	63	135
07:00 AM	29	0	29	0	9	9	16	26	42	80
07:15 AM	27	0	27	3	7	10	13	43	56	93
07:30 AM	32	0	32	1	7	8	14	37	51	91
07:45 AM	25	0	25	5	15	20	13	40	53	98
Total	113	0	113	9	38	47	56	146	202	362
08:00 AM	27	2	29	2	7	9	13	32	45	83
08:15 AM	30	0	30	0	9	9	12	36	48	87
08:30 AM	20	0	20	5	3	8	12	34	46	74
08:45 AM	24	0	24	1	8	9	8	27	35	68
Total	101	2	103	8	27	35	45	129	174	312
*** BREAK ***										
03:00 PM	37	0	37	0	24	24	7	29	36	97
03:15 PM	37	1	38	0	11	11	17	31	48	97
03:30 PM	32	0	32	1	25	26	20	35	55	113
03:45 PM	32	3	35	1	11	12	15	35	50	97
Total	138	4	142	2	71	73	59	130	189	404
04:00 PM	21	2	23	3	17	20	17	23	40	83
04:15 PM	39	1	40	0	11	11	18	33	51	102
04:30 PM	34	2	36	1	13	14	15	33	48	98
04:45 PM	34	6	40	3	24	27	19	22	41	108
Total	128	11	139	7	65	72	69	111	180	391
05:00 PM	36	4	40	3	23	26	7	26	33	99
05:15 PM	34	1	35	2	12	14	15	22	37	86
05:30 PM	29	0	29	3	9	12	10	19	29	70
05:45 PM	18	1	19	2	15	17	4	17	21	57
Total	117	6	123	10	59	69	36	84	120	312
Grand Total	642	23	665	37	286	323	286	642	928	1916
Apprch %	96.5	3.5		11.5	88.5		30.8	69.2		
Total %	33.5	1.2	34.7	1.9	14.9	16.9	14.9	33.5	48.4	
Unshifted	558	22	580	33	243	276	245	555	800	1656
% Unshifted	86.9	95.7	87.2	89.2	85	85.4	85.7	86.4	86.2	86.4
Heavy Construction Vehicles	84	1	85	4	43	47	41	87	128	260
% Heavy Construction Vehicles	13.1	4.3	12.8	10.8	15	14.6	14.3	13.6	13.8	13.6

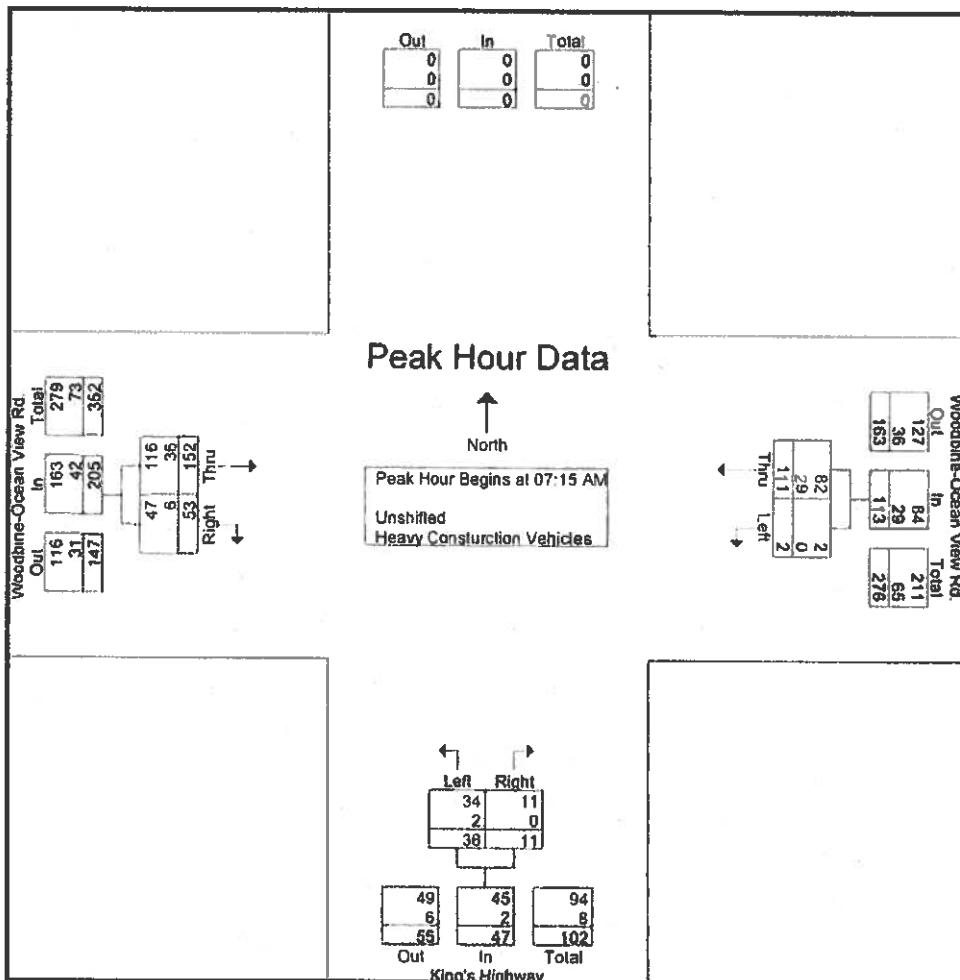
Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: King's Highway
E/W Route: Woodbine-Ocean View Rd.
Dennis Township/Cape May County/NJ
Tues/Cloudy to Rain/RA/D4-3730

File Name : 21243001
Site Code : 21243001
Start Date : 10/12/2021
Page No : 2

Start Time	Woodbine-Ocean View Rd. Westbound			King's Highway Northbound			Woodbine-Ocean View Rd. Eastbound			
	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	27	0	27	3	7	10	13	43	56	93
07:30 AM	32	0	32	1	7	8	14	37	51	91
07:45 AM	25	0	25	5	15	20	13	40	53	98
08:00 AM	27	2	29	2	7	9	13	32	45	83
Total Volume	111	2	113	11	36	47	53	152	205	365
% App. Total	98.2	1.8		23.4	76.6		25.9	74.1		
PHF	.867	.250	.883	.550	.600	.588	.946	.884	.915	.931
Unshifted	82	2	84	11	34	45	47	116	163	292
% Unshifted	73.9	100	74.3	100	94.4	95.7	88.7	76.3	79.5	80.0
Heavy Construction Vehicles	29	0	29	0	2	2	6	36	42	73
% Heavy Construction Vehicles	26.1	0	25.7	0	5.6	4.3	11.3	23.7	20.5	20.0



Shropshire Associates LLC

277 Whitehorse Pike, Suite 203
Atco, NJ 08004

N/S Route: King's Highway

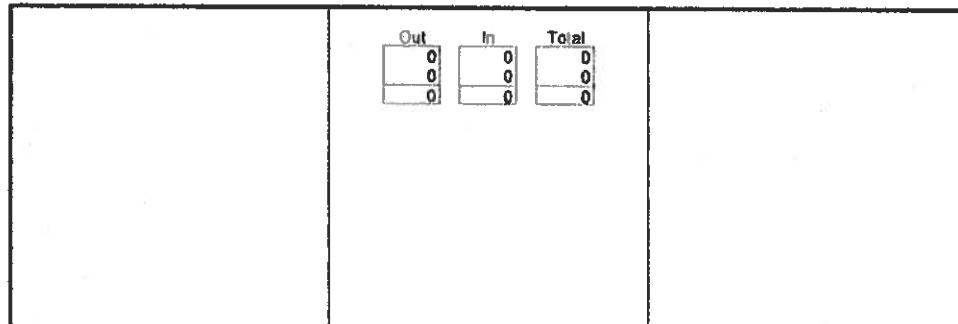
E/W Route: Woodbine-Ocean View Rd.

Dennis Township/Cape May County/NJ

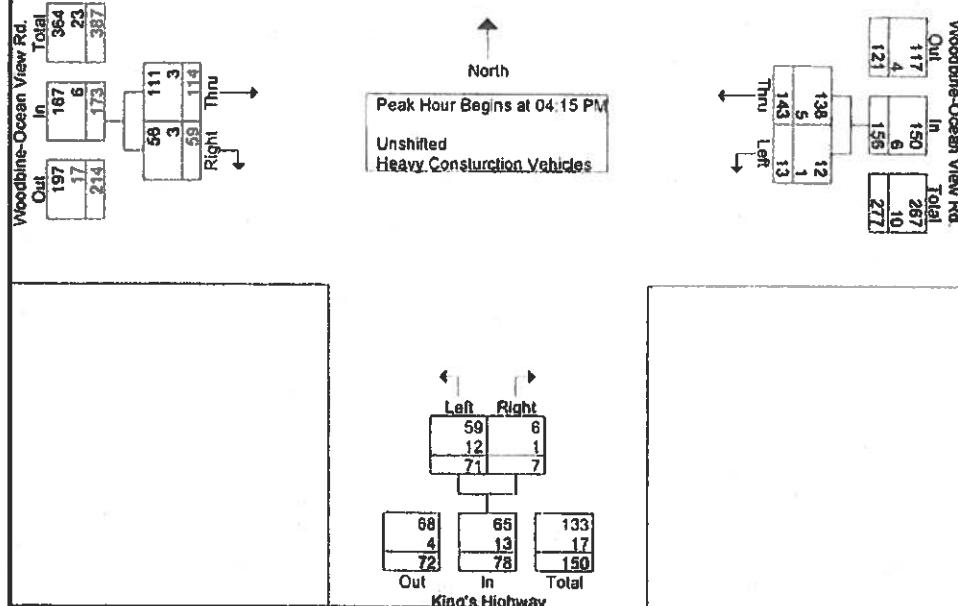
Tues/Cloudy to Rain/RA/D4-3730

File Name : 21243001
Site Code : 21243001
Start Date : 10/12/2021
Page No : 3

Start Time	Woodbine-Ocean View Rd. Westbound			King's Highway Northbound			Woodbine-Ocean View Rd. Eastbound			Int. Total
	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	39	1	40	0	11	11	18	33	51	102
04:30 PM	34	2	36	1	13	14	15	33	48	98
04:45 PM	34	6	40	3	24	27	19	22	41	108
05:00 PM	36	4	40	3	23	26	7	26	33	99
Total Volume	143	13	156	7	71	78	59	114	173	407
% App. Total	91.7	8.3		9	91		34.1	65.9		
PHF	.917	.542	.975	.583	.740	722	.776	.864	.848	.942
Unshifted	138	12	150	6	59	65	56	111	167	382
% Unshifted	96.5	92.3	96.2	85.7	83.1	83.3	94.9	97.4	96.5	93.9
Heavy Construction Vehicles	5	1	6	1	12	13	3	3	6	25
% Heavy Construction Vehicles	3.5	7.7	3.8	14.3	16.9	16.7	5.1	2.6	3.5	6.1

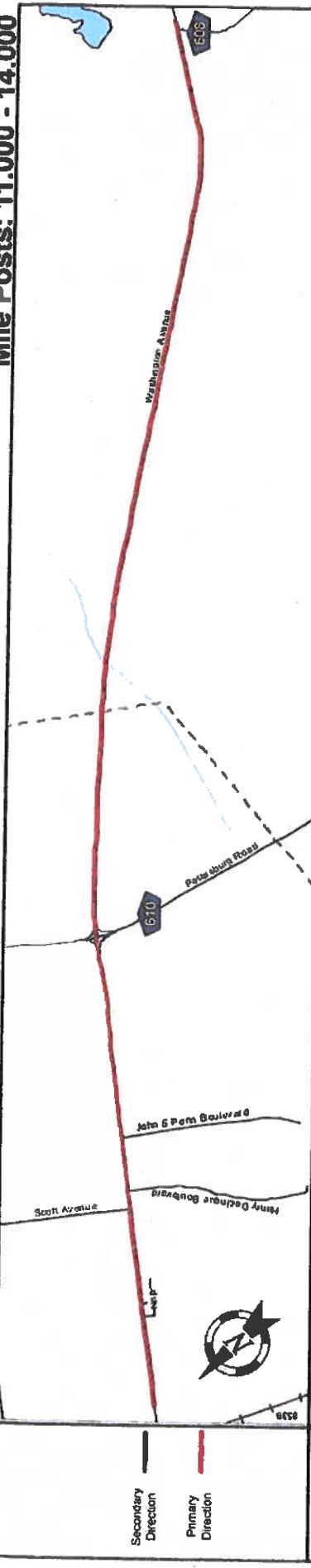


Peak Hour Data



ROUTE 550 (West to East)

Mile Posts: 11,900 - 14,000



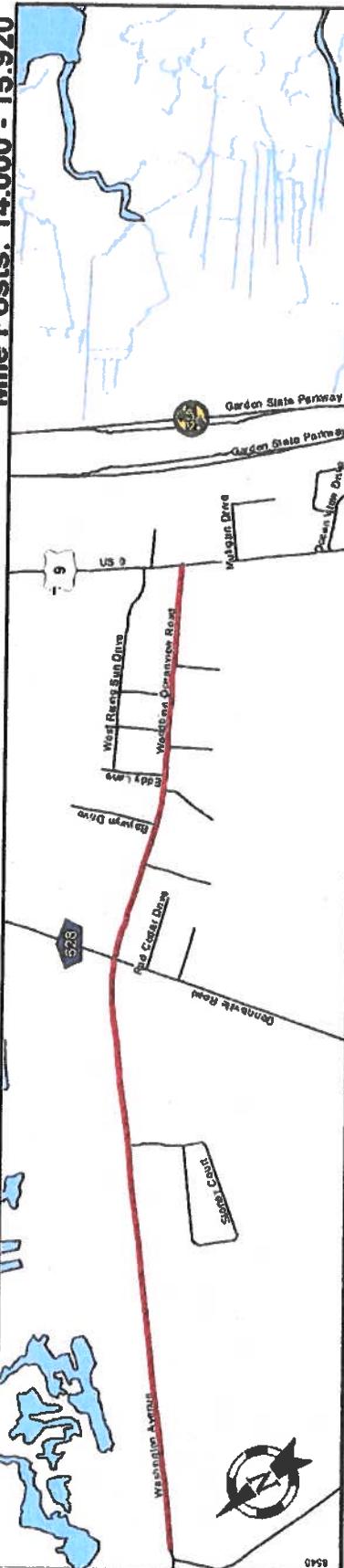
This map shows a section of road from Dennisville to Petersburg Road. The primary direction is indicated by a red line. Secondary directions are shown as dashed lines. The map includes labels for Dennisville (2.01), Petersburg Rd (6.10), Woodbine Boro (Cape May Co.), Henry Decinque Blvd (11.46), John S. Penn Blvd (11.55), Scott Ave (11.42), and NNP (11.718). A scale bar indicates distances in miles.

Speed Limit	Street Name	Secondary Direction	Primary Direction
Interstate Route	22		
US Route	33		
NJ Route Road	189		
Interchange Number	2		
Grade			
Separated Interchange			
Traffic Signal			
Traffic Monitoring Sites			
Road Underpass			
Road Overpass			

Street Name	Washington Avenue		
Jurisdiction	County		
Functional Class	Rural Major Collector	Urban Major Collector	
Federal Aid - NHS Sys	STP		
Control Section			
Speed Limit	50		
Number of Lanes	2		
Med. Type	None		
Med. Width	0		
Pavement	28		
Shoulder	4		
Traffic Volume	8		
Traffic Sta ID			
Structure No.			
Enlarged Views			

ROUTE 550 (West to East)

Mile Posts: 14,000 - 15,920



Page Created June, 2015

Units in miles

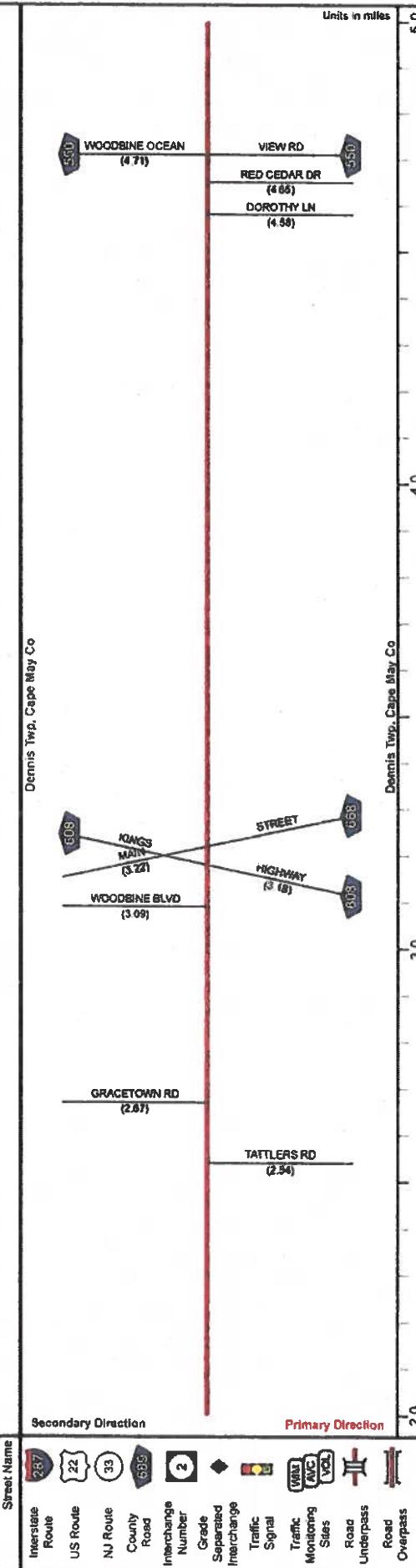
Pavement	Shoulder	Number of Lanes	Speed Limit	Street Name	Secondary Direction	Primary Direction	Street Name	Jurisdiction	Functional Class	Federal Aid - N.H.S. Sy	Control Section	Speed Limit	Number of Lanes	Med. Type	Med. Width	Pavement	Shoulder	Traffic Volume	Traffic Sta. ID	Structure No.	Enlarged Views					
Interstate Route	287	22	33	County Road	33	Interchange Number	2	Grade Separated Interchange	2	Traffic Signal	W&H	Traffic Monitoring Sites	ARC VOL	Road Underpass	Road Overpass	Washington Avenue	Dennis Twp., Cape May Co	Urban Major Collector	STP	50	2	None	0	26	8-4214	
US Route				Interchange		Number		Interchange								Woodbine Oceanview Road	County			40						
NJ Route				Grade				Interchange																		
County Road				Separated																						
Interchange				Interchange																						
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
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Interstate Route				Interchange				Interchange																		
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Interstate Route				Interchange				Interchange																		
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NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange				Interchange																		
US Route				Interchange				Interchange																		
NJ Route				Interchange				Interchange																		
County Road				Interchange				Interchange																		
Interchange				Interchange				Interchange																		
Interstate Route				Interchange																						

CAPE MAY COUNTY 628 (South to North)

Mile Posts: 2,000 - 5,000

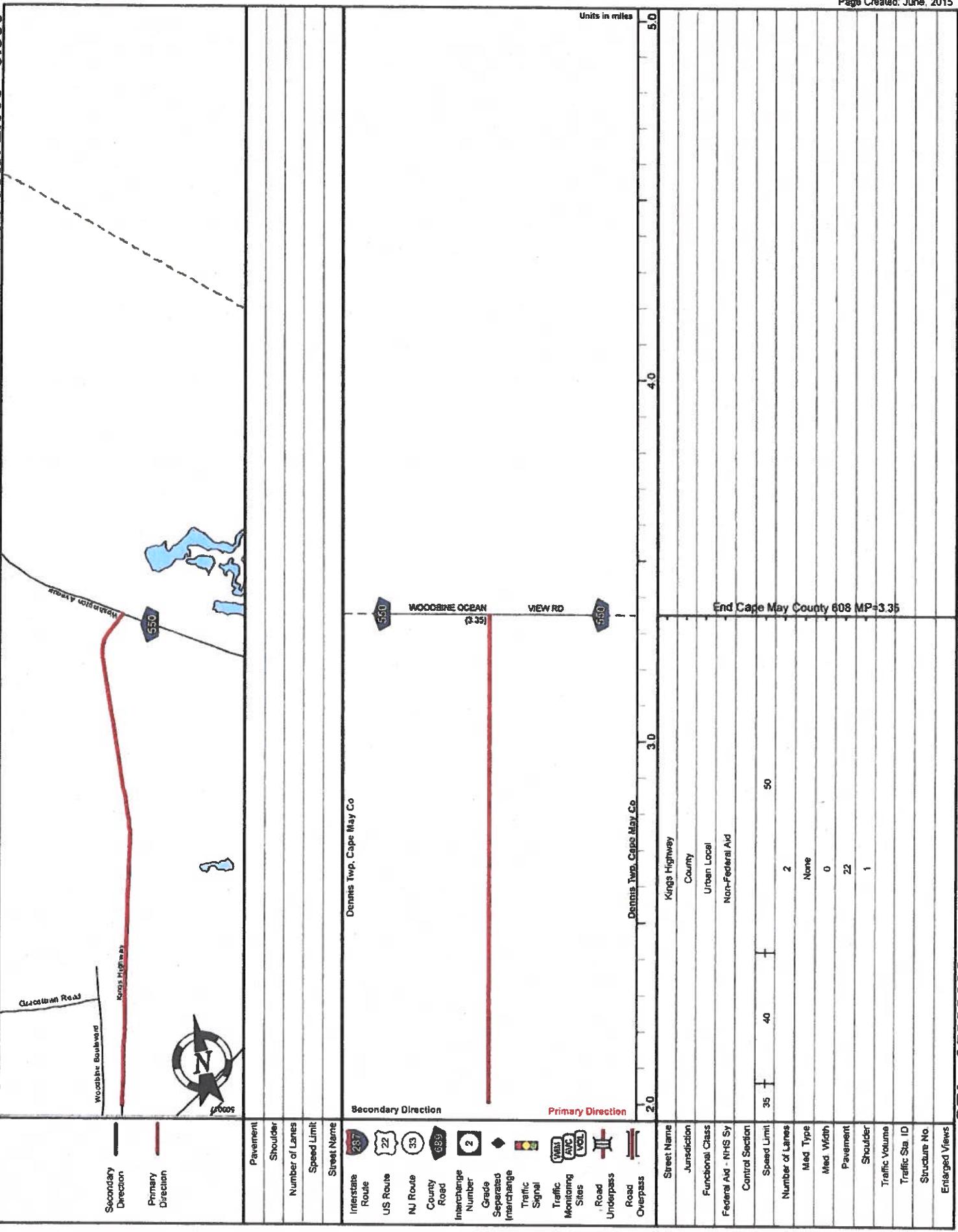


Pavement	Shoulder	Number of Lanes	Speed Limit



Street Name	Denniville Road				
Jurisdiction	County				
Functional Class	Urban Major Collector				
Federal Aid - NHS Sy	STP				
Control Section					
Speed Limit	50	+	40	+	35
Number of Lanes	2				
Med Type	None				
Med Width	0				
Pavement	22				
Shoulder	6	+	6	+	6
Traffic Volume	1,943 (2012)				
Traffic Sta. ID	0940302				
Structure No.	110525				
Enlarged Views					

Date last inventoried: July 2011

CAPE MAY COUNTY 608 (South to North)**Mile Posts: 2.000 - 3.350****SRI = 05000608**

Date last inventoried: July 2011

Lanes, Volumes, Timings
5: Corsons Tavern Road & Woodbine Ocean View Road

Existing AM

11/01/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	46	10	27	42	40	8	95	17	34	116	3
Future Volume (vph)	4	46	10	27	42	40	8	95	17	34	116	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.973			0.943			0.979			0.991	
Flt Protected		0.993			0.987			0.996			0.988	
Satd. Flow (prot)	0	1800	0	0	1768	0	0	1618	0	0	1542	0
Flt Permitted		0.928			0.882			0.970			0.893	
Satd. Flow (perm)	0	1682	0	0	1580	0	0	1576	0	0	1394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		*1			*15			*3			9	
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		3053			374			382			174	
Travel Time (s)		41.6			5.1			5.8			2.6	
Peak Hour Factor	0.33	0.77	0.56	0.68	0.88	0.62	0.67	0.82	0.70	0.77	0.94	0.25
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	0%	19%	0%	0%	30%	0%
Adj. Flow (vph)	12	60	18	40	48	65	12	116	24	44	123	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	0	0	153	0	0	152	0	0	179	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type							Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases		6			2			4			8	
Detector Phase		6	6		2	2		4	4		8	8
Switch Phase												

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

Existing AM

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%		45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)	16.0			16.0			24.0			24.0		
Actuated g/C Ratio	0.38			0.38			0.57			0.57		
v/c Ratio	0.14			0.25			0.17			0.22		
Control Delay	9.2			9.5			11.2			11.5		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	9.2			9.5			11.2			11.5		
LOS	A			A			B			B		
Approach Delay	9.2			9.5			11.2			11.5		
Approach LOS	A			A			B			B		

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay: 10.5

Intersection LOS: B

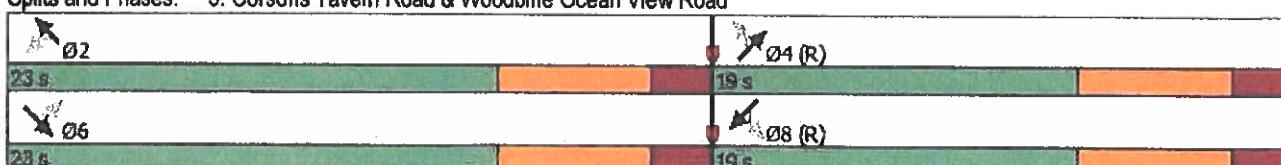
Intersection Capacity Utilization 39.8%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



Intersection

Int Delay, s/veh 2.1

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑		←	↑		
Traffic Vol, veh/h	152	53	2	111	36	11
Future Vol, veh/h	152	53	2	111	36	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	95	25	87	60	55
Heavy Vehicles, %	24	11	0	26	6	0
Mvmt Flow	173	56	8	128	60	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	229	0	345
Stage 1	-	-	-	201	-
Stage 2	-	-	-	144	-
Critical Hdwy	-	-	4.1	-	6.46
Critical Hdwy Stg 1	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.2	-	3.554
Pot Cap-1 Maneuver	-	-	1351	-	845
Stage 1	-	-	-	823	-
Stage 2	-	-	-	873	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1351	-	845
Mov Cap-2 Maneuver	-	-	-	640	-
Stage 1	-	-	-	823	-
Stage 2	-	-	-	868	-

Approach	EB	WB	NE
HCM Control Delay, s	0	0.5	11
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	681	-	-	1351	-
HCM Lane V/C Ratio	0.117	-	-	0.006	-
HCM Control Delay (s)	11	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %ile Q(veh)	0.4	-	-	0	-

HCM 2010 TWSC
8: Woodbine Ocean View Road & Site Driveway

Existing AM
11/01/2021

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EST	WBT	WBR	SBL	SBR
Lane Configurations	4	1	1	1	1	1
Traffic Vol, veh/h	8	147	118	1	0	8
Future Vol, veh/h	8	147	118	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	94	76	25	25	50
Heavy Vehicles, %	100	13	16	0	100	0
Mvmt Flow	16	156	155	4	0	16

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	159	0	-
Stage 1	-	-	157
Stage 2	-	-	188
Critical Hdwy	5.1	-	7.4 6.2
Critical Hdwy Stg 1	-	-	6.4
Critical Hdwy Stg 2	-	-	6.4
Follow-up Hdwy	3.1	-	4.4 3.3
Pot Cap-1 Maneuver	992	-	493 894
Stage 1	-	-	680
Stage 2	-	-	656
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	992	-	484 894
Mov Cap-2 Maneuver	-	-	484
Stage 1	-	-	668
Stage 2	-	-	656

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EST	WBT	WBR	SBL	SBR
Capacity (veh/h)	992	-	-	-	894	
HCM Lane V/C Ratio	0.016	-	-	-	0.018	
HCM Control Delay (s)	8.7	0	-	-	9.1	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

Existing PM

11/01/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	68	14	16	56	43	19	109	32	51	87	13
Future Volume (vph)	3	68	14	16	56	43	19	109	32	51	87	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.945			0.972			0.986	
Frt Protected		0.996			0.990			0.992			0.983	
Satd. Flow (prot)	0	1843	0	0	1778	0	0	1809	0	0	1831	0
Frt Permitted		0.965			0.914			0.909			0.807	
Satd. Flow (perm)	0	1786	0	0	1641	0	0	1658	0	0	1504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		*2			*10			*7			*2	
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		3053			374			382			174	
Travel Time (s)		41.6			5.1			5.8			2.6	
Peak Hour Factor	0.38	0.94	0.75	0.50	0.88	0.64	0.59	0.88	0.78	0.64	0.68	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	8	72	19	32	64	67	32	124	41	80	128	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	163	0	0	197	0	0	232	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type							Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

Existing PM

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%		45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)	16.0			16.0				18.0			18.0	
Actuated g/C Ratio	0.38			0.38				0.43			0.43	
v/c Ratio	0.15			0.26				0.28			0.36	
Control Delay	9.1			9.7				13.0			14.4	
Queue Delay	0.0			0.0				0.0			0.0	
Total Delay	9.1			9.7				13.0			14.4	
LOS	A			A				B			B	
Approach Delay	9.1			9.7				13.0			14.4	
Approach LOS	A			A				B			B	

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%). Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 12.1

Intersection LOS: B

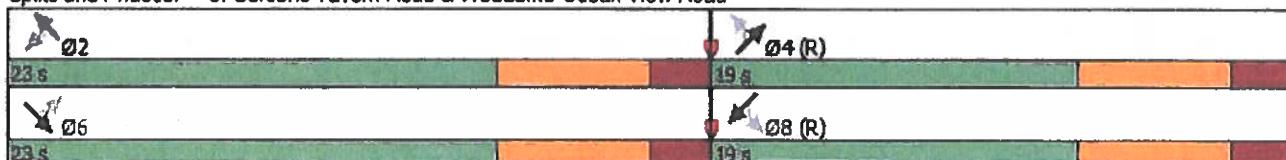
Intersection Capacity Utilization 42.9%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



HCM 6th TWSC
3: Kings Highway & Woodbine Ocean View Road

Existing PM

11/01/2021

Intersection						
Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	1	2	1	2	1	1
Traffic Vol, veh/h	114	59	13	143	71	7
Future Vol, veh/h	114	59	13	143	71	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	78	54	92	74	58
Heavy Vehicles, %	3	6	8	3	17	14
Mvmt Flow	133	76	24	155	96	12
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	209	0	374	171
Stage 1	-	-	-	-	171	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	-	-	4.18	-	6.57	6.34
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.272	-	3.653	3.426
Pot Cap-1 Maneuver	-	-	1327	-	598	843
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	797	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1327	-	586	843
Mov Cap-2 Maneuver	-	-	-	-	586	-
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	781	-
Approach	EB	WB	NE			
HCM Control Delay, s	0	1	12.2			
HCM LOS			B			
Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	607	-	-	1327	-	
HCM Lane V/C Ratio	0.178	-	-	0.018	-	
HCM Control Delay (s)	12.2	-	-	7.8	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-	

HCM 6th TWSC
8: Woodbine Ocean View Road & Site Driveway

Existing PM
11/01/2021

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	137	144	0	0	1
Future Vol, veh/h	0	137	144	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	83	92	25	25	25
Heavy Vehicles, %	0	7	9	0	0	0
Mvmt Flow	0	165	157	0	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	157	0	-
Stage 1	-	-	157
Stage 2	-	-	165
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1435	-	676
Stage 1	-	-	876
Stage 2	-	-	869
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1435	-	676
Mov Cap-2 Maneuver	-	-	676
Stage 1	-	-	876
Stage 2	-	-	869

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9
HCM LOS	-	-	A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	1435	-	-	-	894	
HCM Lane V/C Ratio	-	-	-	-	0.004	
HCM Control Delay (s)	0	-	-	-	9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

No-Build AM

11/01/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	4	47	10	28	43	41	8	98	18	35	120	3
Future Volume (vph)	4	47	10	28	43	41	8	98	18	35	120	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.973			0.943			0.978			0.991	
Flt Protected		0.993			0.987			0.996			0.988	
Satd. Flow (prot)	0	1800	0	0	1768	0	0	1617	0	0	1541	0
Flt Permitted		0.928			0.881			0.971			0.892	
Satd. Flow (perm)	0	1682	0	0	1578	0	0	1577	0	0	1391	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		*1			*15			*3			8	
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		3053			374			382			174	
Travel Time (s)		41.6			5.1			5.8			2.6	
Peak Hour Factor	0.33	0.77	0.56	0.68	0.88	0.62	0.67	0.82	0.70	0.77	0.94	0.25
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	0%	19%	0%	0%	30%	0%
Adj. Flow (vph)	12	61	18	41	49	66	12	120	26	45	128	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	0	0	156	0	0	158	0	0	185	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases		6			2			4			8	
Detector Phase		6	6		2	2		4	4		8	8
Switch Phase												

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

No-Build AM

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%		45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0			0.0			0.0			0.0		
Total Lost Time (s)	7.0			7.0			7.0			7.0		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effect Green (s)	16.0			16.0			24.0			24.0		
Actuated g/C Ratio	0.38			0.38			0.57			0.57		
v/c Ratio	0.14			0.26			0.18			0.23		
Control Delay	9.2			9.5			11.2			11.6		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	9.2			9.5			11.2			11.6		
LOS	A			A			B			B		
Approach Delay	9.2			9.5			11.2			11.6		
Approach LOS	A			A			B			B		

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 10.6

Intersection LOS: B

Intersection Capacity Utilization 40.1%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



Intersection

Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NEL	NBR
Lane Configurations	↑		↓	↔		
Traffic Vol, veh/h	157	55	2	114	37	11
Future Vol, veh/h	157	55	2	114	37	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	95	25	87	60	55
Heavy Vehicles, %	24	11	0	26	6	0
Mvmt Flow	178	58	8	131	62	20

Major/Major	Major1	Major2	Minor1	Minor2	Minor3	Minor4
Conflicting Flow All	0	0	236	0	354	207
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	147	-
Critical Hdwy	-	-	4.1	-	6.46	6.2
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.2	-	3.554	3.3
Pot Cap-1 Maneuver	-	-	1343	-	636	839
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1343	-	632	839
Mov Cap-2 Maneuver	-	-	-	-	632	-
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	866	-

Approach	EB	WB	NE
HCM Control Delay, s	0	0.4	11.1
HCM LOS		B	

Minor Lane/Major Min1	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	673	-	-	1343	-
HCM Lane V/C Ratio	0.121	-	-	0.006	-
HCM Control Delay (s)	11.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

HCM 2010 TWSC
8: Woodbine Ocean View Road & Site Driveway

No-Build AM

11/01/2021

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	151	122	1	0	8
Future Vol, veh/h	8	151	122	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	94	76	25	25	50
Heavy Vehicles, %	100	13	16	0	100	0
Mvmt Flow	16	161	161	4	0	16

Major/Minor	Major 1	Major 2	Minor 2		
Conflicting Flow All	165	0	-	0	356 163
Stage 1	-	-	-	-	163 -
Stage 2	-	-	-	-	193 -
Critical Hdwy	5.1	-	-	-	7.4 6.2
Critical Hdwy Stg 1	-	-	-	-	6.4 -
Critical Hdwy Stg 2	-	-	-	-	6.4 -
Follow-up Hdwy	3.1	-	-	-	4.4 3.3
Pot Cap-1 Maneuver	986	-	-	-	485 887
Stage 1	-	-	-	-	675 -
Stage 2	-	-	-	-	652 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	986	-	-	-	476 887
Mov Cap-2 Maneuver	-	-	-	-	476 -
Stage 1	-	-	-	-	663 -
Stage 2	-	-	-	-	652 -

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	986	-	-	-	887
HCM Lane V/C Ratio	0.016	-	-	-	0.018
HCM Control Delay (s)	8.7	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %ile Q(veh)	0	-	-	-	0.1

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

No-Build PM

11/01/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	70	14	16	58	44	20	112	33	53	90	13
Future Volume (vph)	3	70	14	16	58	44	20	112	33	53	90	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.944			0.972			0.986	
Fit Protected		0.996			0.991			0.992			0.983	
Satd. Flow (prot)	0	1845	0	0	1777	0	0	1809	0	0	1831	0
Fit Permitted		0.965			0.915			0.904			0.804	
Satd. Flow (perm)	0	1788	0	0	1641	0	0	1649	0	0	1498	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		*2			*10			*7			*2	
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		3053			374			382			174	
Travel Time (s)		41.6			5.1			5.8			2.6	
Peak Hour Factor	0.38	0.94	0.75	0.50	0.88	0.64	0.59	0.88	0.78	0.64	0.68	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	8	74	19	32	66	69	34	127	42	83	132	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	167	0	0	203	0	0	239	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type							Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings

5: Corsons Tavern Road & Woodbine Ocean View Road

No-Build PM

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%		45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		7.0			7.0			7.0			7.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effect Green (s)	16.0			16.0			18.0			18.0		
Actuated g/C Ratio	0.38			0.38			0.43			0.43		
v/c Ratio	0.15			0.26			0.29			0.37		
Control Delay	9.2			9.8			13.1			14.6		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	9.2			9.8			13.1			14.6		
LOS	A			A			B			B		
Approach Delay	9.2			9.8			13.1			14.6		
Approach LOS	A			A			B			B		

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 12.3

Intersection LOS: B

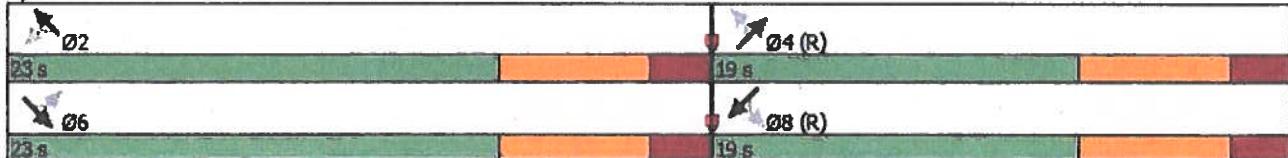
Intersection Capacity Utilization 43.4%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EER	WBL	WBT	NEL	NER
Lane Configurations	↑		↖	↘		
Traffic Vol, veh/h	117	61	13	147	73	7
Future Vol, veh/h	117	61	13	147	73	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	78	54	92	74	58
Heavy Vehicles, %	3	6	8	3	17	14
Mvmt Flow	136	78	24	160	99	12
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	214	0	383	175
Stage 1	-	-	-	-	175	-
Stage 2	-	-	-	-	208	-
Critical Hdwy	-	-	4.18	-	6.57	6.34
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.272	-	3.653	3.426
Pot Cap-1 Maneuver	-	-	1321	-	591	838
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1321	-	579	838
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	776	-
Approach	EB	WB	NE			
HCM Control Delay, s	0	1	12.4			
HCM LOS			B			
Minor Lane/Major Mvmt	NELn1	EBT	EER	WBL	WBT	
Capacity (veh/h)	599	-	-	1321	-	
HCM Lane V/C Ratio	0.185	-	-	0.018	-	
HCM Control Delay (s)	12.4	-	-	7.8	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Traffic Vol, veh/h	0	141	148	0	0	1
Future Vol, veh/h	0	141	148	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	83	92	25	25	25
Heavy Vehicles, %	0	7	9	0	0	0
Mvmt Flow	0	170	161	0	0	4
Major/Minor	Major1	Major2	Minor1	Minor2		
Conflicting Flow All	161	0	-	0	331	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	170	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1430	-	-	-	668	889
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	865	-
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	1430	-	-	-	668	889
Mov Cap-2 Maneuver	-	-	-	-	668	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	865	-
Approach	EB	NB	SB			
HCM Control Delay, s	0	0	9.1			
HCM LOS			A			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBL	SBR
Capacity (veh/h)	1430	-	-	-	889	
HCM Lane V/C Ratio	-	-	-	-	0.004	
HCM Control Delay (s)	0	-	-	-	9.1	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Lanes, Volumes, Timings
5: Corsons Tavern Road & Woodbine Ocean View Road

Build AM
11/01/2021

Lane Group	SEL	SET	SER	NVL	PNV	NVR	NBL	NET	NER	SVL	SVT	SWE
Lane Configurations												
Traffic Volume (vph)	4	53	10	28	49	41	8	98	18	35	120	3
Future Volume (vph)	4	53	10	28	49	41	8	98	18	35	120	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975				0.945			0.978		0.991	
Fit Protected			0.994			0.988			0.996		0.988	
Satd. Flow (prot)	0	1809	0	0	1774	0	0	1617	0	0	1541	0
Fit Permitted			0.945			0.887			0.967		0.882	
Satd. Flow (perm)	0	1719	0	0	1593	0	0	1570	0	0	1375	0
Right Turn on Red			Yes			Yes			Yes		Yes	
Satd. Flow (RTOR)		*1			*15				*3		8	
Link Speed (mph)		50			50			45		45		
Link Distance (ft)		3053			374			382		174		
Travel Time (s)		41.6			5.1			5.8		2.6		
Peak Hour Factor	0.33	0.77	0.56	0.68	0.88	0.62	0.67	0.82	0.70	0.77	0.94	0.25
Heavy Vehicles (%)	0%	0%	10%	0%	0%	0%	0%	19%	0%	0%	30%	0%
Adj. Flow (vph)	12	69	18	41	56	66	12	120	26	45	128	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	163	0	0	158	0	0	185	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94		94		
Detector 2 Size(ft)								6		6		
Detector 2 Type							Cl+Ex		Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0		0.0		
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings

Build AM

5: Corsons Tavern Road & Woodbine Ocean View Road

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0	12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0	19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0	19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%	45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0	12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0		0.0	
Total Lost Time (s)		7.0			7.0			7.0		7.0	
Lead/Lag											
Lead-Lag Optimize?											
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min	C-Min	
Act Effect Green (s)		16.0			16.0			18.0		18.0	
Actuated g/C Ratio	0.38				0.38			0.43		0.43	
v/c Ratio	0.15				0.26			0.23		0.31	
Control Delay	9.3				9.6			13.0		13.7	
Queue Delay		0.0			0.0			0.0		0.0	
Total Delay	9.3				9.6			13.0		13.7	
LOS	A				A			B		B	
Approach Delay	9.3				9.6			13.0		13.7	
Approach LOS	A				A			B		B	

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

Intersection Signal Delay: 11.7

Intersection LOS: B

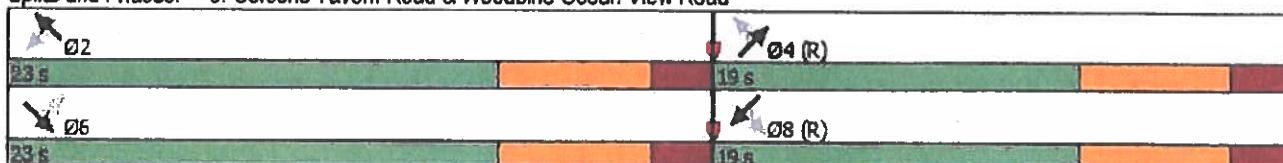
Intersection Capacity Utilization 40.1%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑		↓	↔		
Traffic Vol, veh/h	164	55	2	121	37	11
Future Vol, veh/h	164	55	2	121	37	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	95	25	87	60	55
Heavy Vehicles, %	24	11	0	26	6	0
Mvmt Flow	186	58	8	139	62	20
Major/Minor	Major	Minor 2	Minor 1			
Conflicting Flow All	0	0	244	0	370	215
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	155	-
Critical Hdwy	-	-	4.1	-	6.46	6.2
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.2	-	3.554	3.3
Pot Cap-1 Maneuver	-	-	1334	-	623	830
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	-	-	1334	-	619	830
Mov Cap-2 Maneuver	-	-	-	-	619	-
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	859	-
Approach	EB	WB	NE			
HCM Control Delay, s	0	0.4	11.2			
HCM LOS			B			
Minor Lane/Major Mvmt	NELint	EBT	EBR	WBL	WBT	
Capacity (veh/h)	660	-	-	1334	-	
HCM Lane V/C Ratio	0.124	-	-	0.006	-	
HCM Control Delay (s)	11.2	-	-	7.7	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.4	-	-	0	-	

HCM 6th TWSC
8: Woodbine Ocean View Road & Site Driveway

Build AM
11/01/2021

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	151	122	7	6	15
Future Vol, veh/h	15	151	122	7	6	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	94	76	25	25	50
Heavy Vehicles, %	100	13	16	50	100	50
Mvmt Flow	30	161	161	28	24	30

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	189	0	-	0	396 175
Stage 1	-	-	-	-	175 -
Stage 2	-	-	-	-	221 -
Critical Hdwy	5.1	-	-	-	7.4 6.7
Critical Hdwy Sig 1	-	-	-	-	6.4 -
Critical Hdwy Sig 2	-	-	-	-	6.4 -
Follow-up Hdwy	3.1	-	-	-	4.4 3.75
Pot Cap-1 Maneuver	963	-	-	-	457 758
Stage 1	-	-	-	-	666 -
Stage 2	-	-	-	-	630 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	963	-	-	-	441 758
Mov Cap-2 Maneuver	-	-	-	-	441 -
Stage 1	-	-	-	-	643 -
Stage 2	-	-	-	-	630 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	963	-	-	-	574
HCM Lane V/C Ratio	0.031	-	-	-	0.094
HCM Control Delay (s)	8.9	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %ile Q(veh)	0.1	-	-	-	0.3

Lanes, Volumes, Timings
3: Kings Highway & Woodbine Ocean View Road

Build PM
11/01/2021



Lane Group	EBT	EBR	WBL	WBT	NBL	NER
Lane Configurations	↑		↖	↙	↘	
Traffic Volume (vph)	119	61	13	151	73	7
Future Volume (vph)	119	61	13	151	73	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.951				0.985	
Flt Protected				0.994	0.957	
Satd. Flow (prot)	1736	0	0	1822	1535	0
Flt Permitted				0.994	0.957	
Satd. Flow (perm)	1736	0	0	1822	1535	0
Link Speed (mph)	50			50	50	
Link Distance (ft)	302			3071	185	
Travel Time (s)	4.1			41.9	2.5	
Peak Hour Factor	0.86	0.78	0.54	0.92	0.74	0.58
Heavy Vehicles (%)	3%	6%	8%	3%	17%	14%
Adj. Flow (vph)	138	78	24	164	99	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	216	0	0	188	111	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.8%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

Build PM

5: Corsons Tavern Road & Woodbine Ocean View Road

11/01/2021

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	3	73	14	16	60	44	20	112	33	53	90	13
Future Volume (vph)	3	73	14	16	60	44	20	112	33	53	90	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976			0.945			0.972			0.986	
Flt Protected		0.996			0.991			0.992			0.983	
Satd. Flow (prot)	0	1847	0	0	1779	0	0	1809	0	0	1831	0
Flt Permitted		0.966			0.915			0.904			0.804	
Satd. Flow (perm)	0	1791	0	0	1643	0	0	1649	0	0	1498	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		*2			*10			*7			*2	
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		3053			374			382			174	
Travel Time (s)		41.6			5.1			5.8			2.6	
Peak Hour Factor	0.38	0.94	0.75	0.50	0.88	0.64	0.59	0.88	0.78	0.64	0.68	0.55
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	8	78	19	32	68	69	34	127	42	83	132	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	169	0	0	203	0	0	239	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	0		1	0		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	0		20	0		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type							Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Perm	NA										
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	6	6		2	2		4	4		8	8	
Switch Phase												

Lanes, Volumes, Timings

Build PM

5: Corsons Tavern Road & Woodbine Ocean View Road

11/01/2021



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (s)	23.0	23.0		23.0	23.0		19.0	19.0		19.0	19.0	
Total Split (%)	54.8%	54.8%		54.8%	54.8%		45.2%	45.2%		45.2%	45.2%	
Maximum Green (s)	16.0	16.0		16.0	16.0		12.0	12.0		12.0	12.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0			0.0			0.0			0.0		
Total Lost Time (s)	7.0			7.0			7.0			7.0		
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)	16.0			16.0			18.0			18.0		
Actuated g/C Ratio	0.38			0.38			0.43			0.43		
v/c Ratio	0.15			0.27			0.29			0.37		
Control Delay	9.2			9.8			13.1			14.6		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	9.2			9.8			13.1			14.6		
LOS	A			A			B			B		
Approach Delay	9.2			9.8			13.1			14.6		
Approach LOS	A			A			B			B		

Intersection Summary

Area Type: Other

Cycle Length: 42

Actuated Cycle Length: 42

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWTL, Start of Green, Master Intersection

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 12.2

Intersection LOS: B

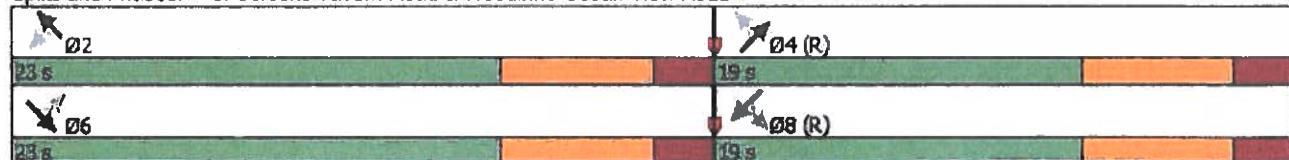
Intersection Capacity Utilization 43.4%

ICU Level of Service A

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 5: Corsons Tavern Road & Woodbine Ocean View Road



Lanes, Volumes, Timings
8: Woodbine Ocean View Road & Site Driveway

Build PM
11/01/2021



Lane Group	EBL	EST	WBT	WBR	SBL	SBR
Lane Configurations	4	1	1	1	1	1
Traffic Volume (vph)	2	141	148	2	3	5
Future Volume (vph)	2	141	148	2	3	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.916	
Fit Protected		0.998			0.982	
Satd. Flow (prot)	0	1741	1702	0	1139	0
Fit Permitted		0.998			0.982	
Satd. Flow (perm)	0	1741	1702	0	1139	0
Link Speed (mph)		50	50		25	
Link Distance (ft)		3071	3053		164	
Travel Time (s)		41.9	41.6		4.5	
Peak Hour Factor	0.25	0.83	0.92	0.25	0.25	0.25
Heavy Vehicles (%)	50%	7%	9%	50%	50%	50%
Adj. Flow (vph)	8	170	161	8	12	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	178	169	0	32	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:

Other

Control Type: Unsignalized

Intersection Capacity Utilization 19.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	119	61	13	151	73	7
Future Vol, veh/h	119	61	13	151	73	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	78	54	92	74	58
Heavy Vehicles, %	3	6	8	3	17	14
Mvmt Flow	138	78	24	164	99	12

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	216	0	389	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	-	-	4.18	-	6.57	6.34
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	-	-	2.272	-	3.653	3.426
Pot Cap-1 Maneuver	-	-	1319	-	586	836
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1319	-	574	836
Mov Cap-2 Maneuver	-	-	-	-	574	-
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	773	-

Approach	EB	WB	NE			
HCM Control Delay, s	0	1	12.4			
HCM LOS			B			

Minor Lane/Major Mvmt	NELin1	EBT	EBR	WB	WBT	
Capacity (veh/h)	594	-	-	1319	-	
HCM Lane V/C Ratio	0.186	-	-	0.018	-	
HCM Control Delay (s)	12.4	-	-	7.8	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-	

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	▼		
Traffic Vol, veh/h	2	141	148	2	3	5
Future Vol, veh/h	2	141	148	2	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	25	83	92	25	25	25
Heavy Vehicles, %	50	7	9	50	50	50
Mvmt Flow	8	170	161	8	12	20

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	169	0	-
Stage 1	-	-	165
Stage 2	-	-	186
Critical Hdwy	4.6	-	6.9 6.7
Critical Hdwy Stg 1	-	-	5.9
Critical Hdwy Stg 2	-	-	5.9
Follow-up Hdwy	2.65	-	3.95 3.75
Pot Cap-1 Maneuver	1164	-	560 769
Stage 1	-	-	760
Stage 2	-	-	743
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1164	-	556 769
Mov Cap-2 Maneuver	-	-	556
Stage 1	-	-	754
Stage 2	-	-	743

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1164	-	-	-	672
HCM Lane V/C Ratio	0.007	-	-	-	0.048
HCM Control Delay (s)	8.1	0	-	-	10.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1