

Traffic Engineering, Transportation Planning & Design

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David R. Shropshire, PE, PP  
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Randal C. Barranger, PE  
Nathan B. Mosley, PE, CME

October 17, 2019

Mr. Alex Markowits  
Spring Hills Cherry Hill, LLC  
515 Plainfield Avenue  
Suite 200  
Edison, NJ 08817

(via e-mail: alexm@spring-hills.com)

Re: **Traffic Engineering Assessment  
Spring Hills Expansion – Cherry Hill  
1450 East Marlton Pike  
Cherry Hill Township, Camden County, New Jersey  
SA Project No. 19155**

Dear Mr. Markowits:

At your request, Shropshire Associates, LLC has prepared a Traffic Engineering Assessment report to evaluate the impact of the traffic to be generated by the proposed expansion of the existing Spring Hills assisted living facility located in the northwest corner of the Route 70/Frontage Road signalized intersection in Cherry Hill Township, Camden County, NJ. The existing assisted living facility has access provided via a shared driveway with the adjacent residential towers facility to Frontage Road, and a right-in/right-out only driveway along westbound Route 70.

The proposal is for the expansion of the existing assisted living facility to add a 64-person Alzheimer/Memory Care facility. Access will continue to be provided via the existing shared driveway to Frontage Road and right-in/right-out only driveway along westbound Route 70.

## **Existing Conditions**

A field reconnaissance was conducted to determine the features of the adjacent roadway network within the study area. A description of the roadways and intersection that comprise the study area for this report is provided below.

Along the site's frontage, **Route 70** is a four-lane median-divided roadway that is classified as an Urban Principal Arterial and under the jurisdiction of the NJDOT. Route 70 has a posted speed limit of 45 MPH and an approximate cartway width of 36' in the westbound direction, containing two (2) 12' travel lanes and an existing shoulder area along the site's frontage. For the purpose of this study, Route 70 is assumed to extend in a general east-west direction.

In the vicinity of the site, **Frontage Road** is a local roadway and is under the jurisdiction of Cherry Hill Township. Frontage Road has an approximate cartway width of 26'. Frontage Road has a posted speed limit of 40 MPH. For the purpose of this study, Frontage Road is assumed to extend in a general north-south direction.



The **Frontage Road/Shared Driveway** intersection is stop-controlled along the eastbound site driveway approach. The northbound Frontage Road approach consists of a shared through/left-turn lane. The southbound Frontage Road approach consists of a shared through/right-turn lane. The eastbound site driveway approach consists of a shared lane for left-turn and right-turn movements.

The **Route 70/Site Driveway** intersection is stop-controlled along the southbound site driveway approach. The southbound approach consists of a single lane providing for all permitted movements, while the westbound Route 70 approach consists of a dedicated through lane and shared through/right-turn lane.

### **Traffic Count Data**

In September and October 2019, manual turning movement counts (MTMC) were conducted at existing site driveway locations along Route 70 and Frontage Road. This data was analyzed to determine the peak hour volumes along the adjacent roadway network that coincide with the peak times of the proposed development and the existing roadway network. These peak times typically occur during the weekday AM (7:00 to 9:00 AM) weekday PM (4:00 to 6:00 PM) peak periods. The existing AM and PM peak hour volumes for the site driveway are illustrated on the attached Figure 1.

In addition, peak hour traffic count data was obtained from the New Jersey Department of Transportation (NJDOT) for the existing Route 70/Frontage Road/Covered Bridge Road signalized intersection in the vicinity of the site. The existing AM and PM peak hour volumes at this location are shown in Figure 1.

### **Future Conditions**

As indicated above, the proposal is for the expansion of the existing Spring Hills assisted living facility to include a new 64-person Alzheimer/memory care facility. The traffic resulting from the proposed development will not affect the adjacent roadway network until 2021, when the development is expected to be fully built-out and occupied. It can be expected that the traffic volumes along the adjacent roadway network will increase because of other developments around the site and general area traffic growth.

A 2.00% and 1.00% annual traffic growth is projected along Route 70 and Frontage Road, respectively, near the site based on the *Annual Background Growth Table* prepared by the NJDOT. By applying the applicable annual growth rates to the existing roadway volumes, the 2021 No-Build volumes were estimated and are indicated on Figure 2.

### ***Trip Generation***

In order to determine the amount of traffic to be generated by the proposed development, typically trip generation rates from the Institute of Transportation Engineers (ITE) are utilized. However, as peak hour data at the existing Spring Hills facility was collected as part of this assessment, a trip generation analysis was done of the current facility to project the anticipated peak hour traffic to be generated by the proposed expansion.

The existing 150-bed Spring Hills assisted living facility AM and PM peak hour site traffic based upon the collected MTMC data shown in Figure 1 and the breakdown of the Frontage



Road driveway volume between the traffic for the adjacent residential site and the existing assisted living facility is shown in Table 1, with the collected data attached for your review..

<b>Table 1</b>			
<b>Trip Generation – Spring Hills (150 beds)</b>			
Peak Hour	In	Out	Total
AM	16	13	29
PM	12	30	42

Based upon the data shown in Table 1 and the existing facility being 150 beds, a trip generation rate was then determined for the existing facility during the AM and PM peak hours. The trip generation rates were calculated as follows:

- AM peak hour = 29 total trips per 150 beds = 0.19 trips per bed
- PM peak hour = 42 total trips per 150 beds = 0.28 trips per bed

The above calculated trip generation rates were applied to the proposed 64-bed expansion, with the anticipated site traffic shown in Table 2.

<b>Table 2</b>			
<b>Trip Generation – Springs Hills Expansion (64 beds)</b>			
Peak Hour	In	Out	Total
AM	7	5	12
PM	5	13	18

The additional peak hour site traffic to be generated by the proposed Spring Hills expansion must then be distributed to the adjacent roadway network in a manner in which we can reasonably expect the patrons/employees to travel. The new site traffic was assigned to the roadway network based on the existing flow of traffic along the adjacent roadway (Figure 3) and is shown in Figure 4.

The site traffic (Figure 4) was then added to the No-Build volumes to project the Build volumes, which are illustrated on the attached Figure 5.

***Trip Generation Comparison***

For comparison purposes, a second trip generation analysis was done based upon data provided by the Institute of Transportation Engineers (ITE). ITE has compiled data from thousands of studies for various land uses, independent variables and study periods, and published the results in *Trip Generation, 10<sup>th</sup> Edition*. The proposed Spring Hills expansion is most similar to ITE Land Use 254: Assisted Living. Table 3 shows the trip generation for the proposed expansion based on the ITE trip generation rates, with the ITE worksheets attached for your review.



<b>Table 3</b>			
<b>ITE Trip Generation – Assisted Living</b>			
<b>(64 beds)</b>			
Peak Hour	In	Out	Total
AM	8	4	12
PM	6	11	17

As shown in Tables 2 and 3, the ITE trip generation rates and the trip generation rates developed based upon the peak hour site traffic of the existing Spring Hills facility are nearly identical. Based upon the ITE trip generation rates, the proposed 64-bed expansion would generate a total of 12 trips during the AM peak hour and a total of 17 trips during the PM peak hour. This matches the trip generate rates of the existing facility during the AM peak hour and is one (1) trip less during the PM peak hour.

Therefore, for the purpose of this study and in order to provide for a “worst-case” scenario, the trip generation analysis based upon the rates of the existing Spring Hills facility was utilized.

**Operational Analysis**

In order to measure the quality of the traffic flow for the adjacent roadways and intersections, capacity analyses for the study intersections have been completed 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 determination for the Level of Service for an unsignalized intersection is based upon 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 signalized and unsignalized intersections is summarized below in Table 4.

<b>Table 4</b>	
<b>Level of Service Criteria</b>	
Level of Service	Unsignalized Delay (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50



The existing and future operating conditions at the site driveway locations along Frontage Road and Route 70 were evaluated using the above-described methodology and the latest Synchro computer simulation modeling software. The existing and future levels of service are illustrated on Figures 6, 7, and 8; with the detailed printouts and capacity analyses worksheets attached for your review. A detailed description of the driveways' operating conditions is provided below.

### ***Frontage Road and Site Driveway Intersection***

Under existing conditions, the stop-controlled eastbound site driveway approach currently operates at a LOS B during the AM peak hour and LOS A during the PM peak hour. The northbound Frontage Road conflicting left-turn movements into the driveway currently operate at a LOS A during both the AM and PM peak hours.

Under the future No-Build and Build scenarios, all individual stop-controlled and conflicting left-turn movements at the shared driveway location along Frontage Road will continue to operate at existing levels of service during the weekday AM and weekday PM peak hours. The traffic resulting from the proposed Spring Hills expansion will cause no changes in the future levels of service at this study location.

### ***Route 70 and Site Driveway Intersection***

Under existing conditions, the outbound stop-controlled site driveway right-turn movements currently operates at a LOS D during the AM peak hour and LOS C during the PM peak hour.

In the future No-Build scenario, the outbound stop-controlled site driveway right-turn movements will operate at a LOS E during the AM peak hour and LOS C during the PM peak hour.

Under the future Build conditions, the traffic resulting from the proposed Spring Hills expansion will cause minimal changes in the outbound stop-controlled site driveway right-turn movements. These outbound movements will operate at a LOS E during the AM peak hour and LOS D during the PM peak hour. Maximum queues for the outbound movements at the site driveway will be one (1) vehicle during both the AM and PM peak hours.

Final approval of this driveway location is required from the NJDOT.

### ***Route 70 and Frontage Road/Covered Bridge Road Intersection***

Under the future Build scenario conditions, the traffic resulting from the proposed Spring Hills expansion will add a total of ten (10) trips during the weekday AM peak hour and a total of 13 trips during the weekday PM peak hour. This traffic will account for approximately 0.2% of the total future peak hour volumes at this study location during the AM and PM peak hours.

## **Conclusion**

Based on the results presented in this traffic engineering assessment report, the traffic resulting from the proposed 64-room Alzheimer/memory care expansion of the existing Spring Hills facility will have a minimal impact on the adjacent roadway network based upon the following conclusions.



- Based on the calculated trip generation rates of the existing 150-bed facility, the proposed 64-room expansion will generate approximately 12 total trips during the AM peak hour and 18 total trips during the PM peak hour. When compared to the ITE trip generation rates, the peak hour traffic is identical during the AM peak hour and has one (1) more trip during the PM peak hour.
- Access to the proposed Spring Hills expansion will continue to be provided via the existing right-in/right-out only driveway along westbound Route 70, and the existing shared driveway location on Frontage Road.
- The traffic resulting from the proposed Spring Hills expansion will account for approximately 0.2% of the future Build traffic volumes at the Route 70/Frontage Road/Covered Bridge Road intersection during both the AM and PM peak hours.
- Under the future Build scenario, the southbound stop-controlled site driveway right-turn movements to Route 70 will operate at a LOS E during the AM peak hour and LOS D during the PM peak hour. Maximum queues will be one (1) vehicle during both the AM and PM peak hours.
- Under the future Build scenario, all individual movements at the existing shared driveway location on Frontage Road will continue to operate at existing levels of service during the AM and PM peak hours.

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

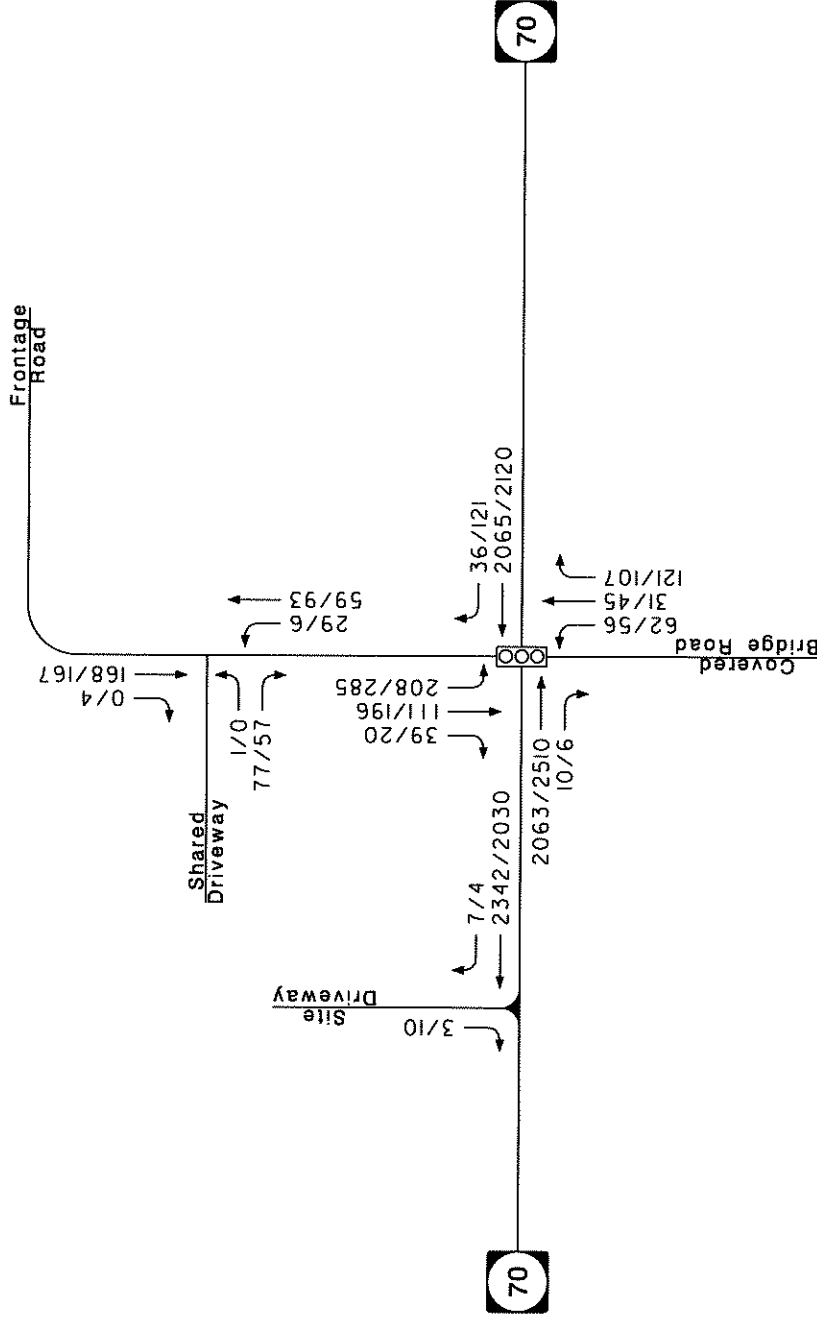
Sincerely,  
**Shropshire Associates LLC**

A handwritten signature in black ink, appearing to read 'Nathan B. Mosley', written over the typed name.

Nathan B. Mosley, P.E., C.M.E.  
Professional Engineer  
N.J. License No. #48698  
NBM/jab  
Attachments

cc: Bill Burris  
Sophia Furriss  
Melissa Alfano

(3 copies via Pickup and email: burris@beachhaven.com)  
(via email: sophia@beachhaven.com)  
(via email: malfano@spring-hills.net)



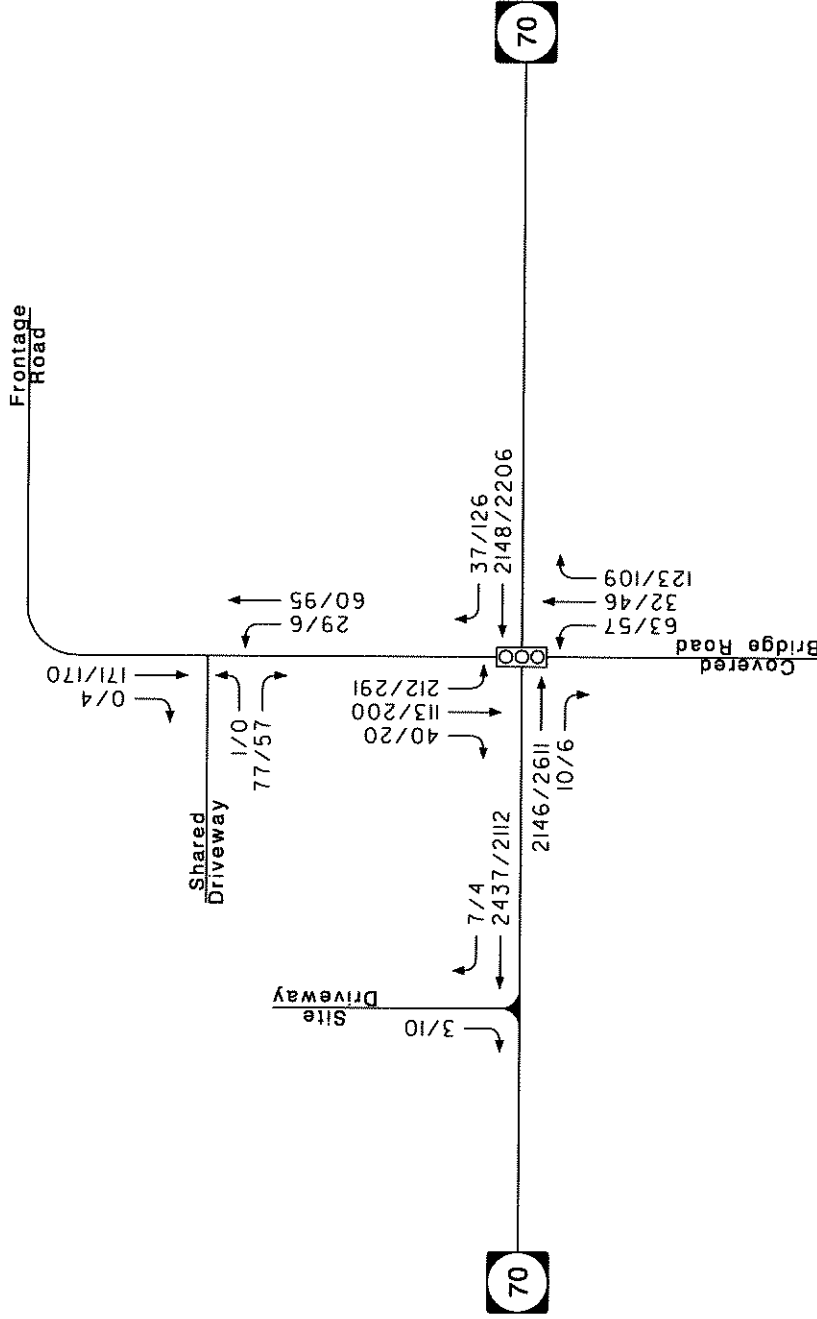
## Spring Hills Expansion

Cherry Hill Township, Camden County, NJ  
 October 2019

TRAFFIC SIGNAL  
 AM/PM PEAK HOUR

SA Project No. 19155

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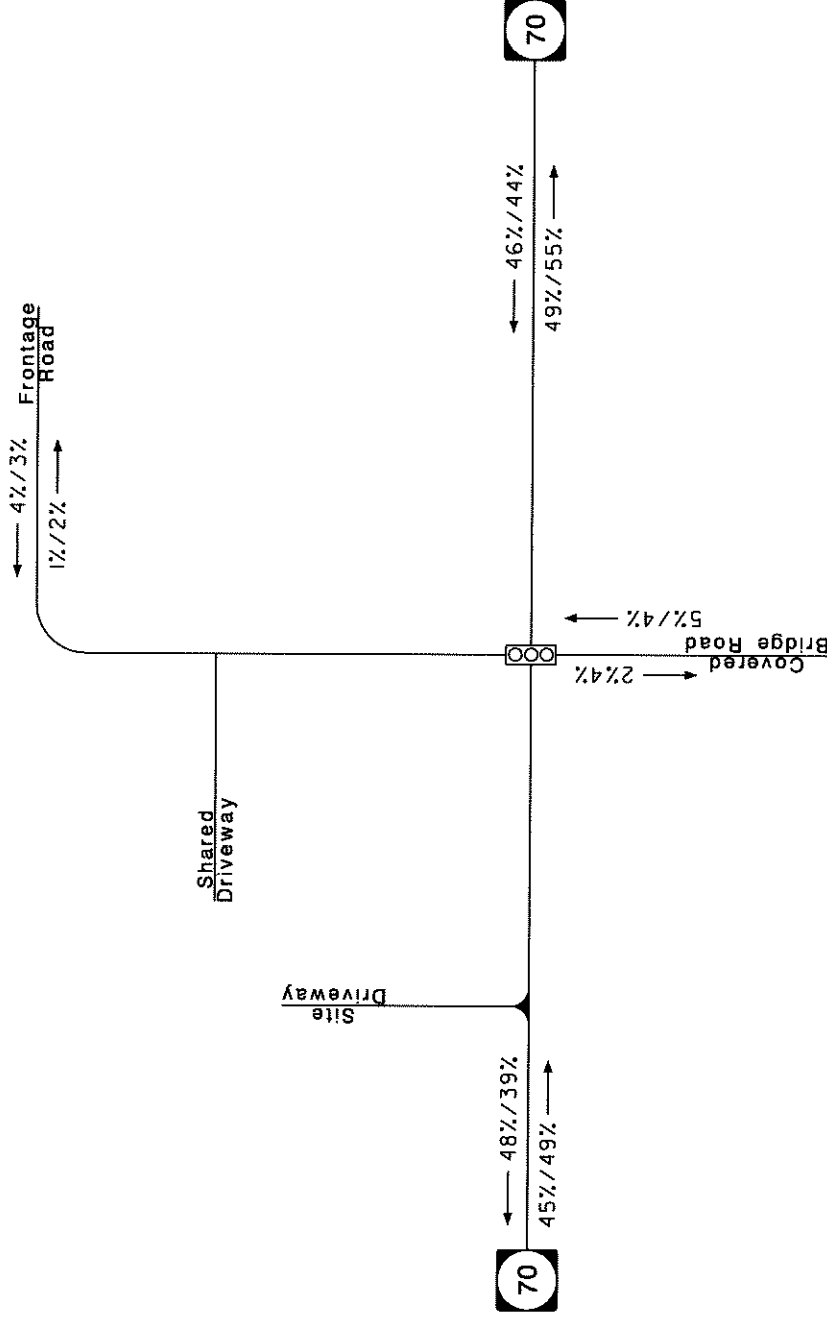
## Spring Hills Expansion

Cherry Hill Township, Camden County, NJ  
 October 2019

TRAFFIC SIGNAL  
 AM/PM PEAK HOUR  
 SA Project No. 19155

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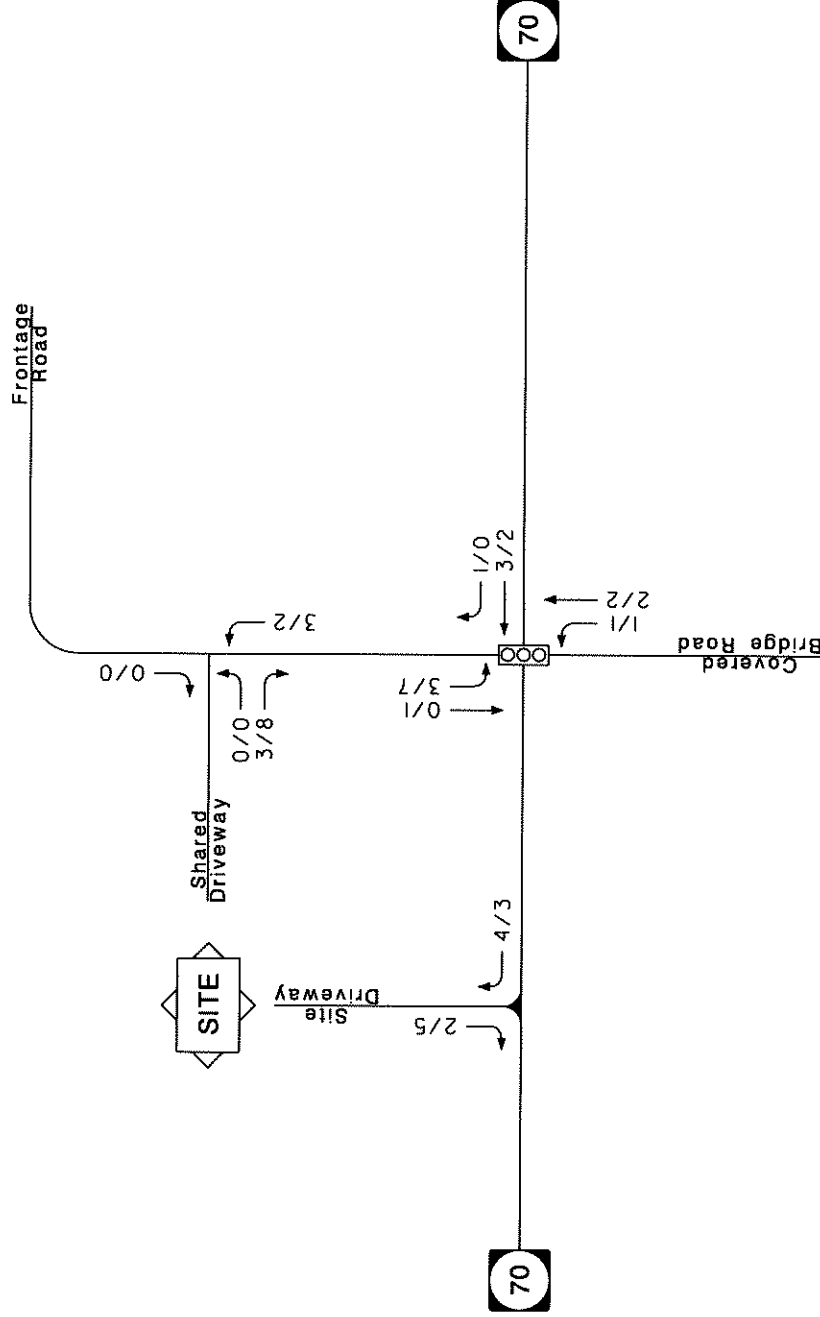
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Cherry Hill Township, Camden County, NJ  
 October 2019

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## Spring Hills Expansion

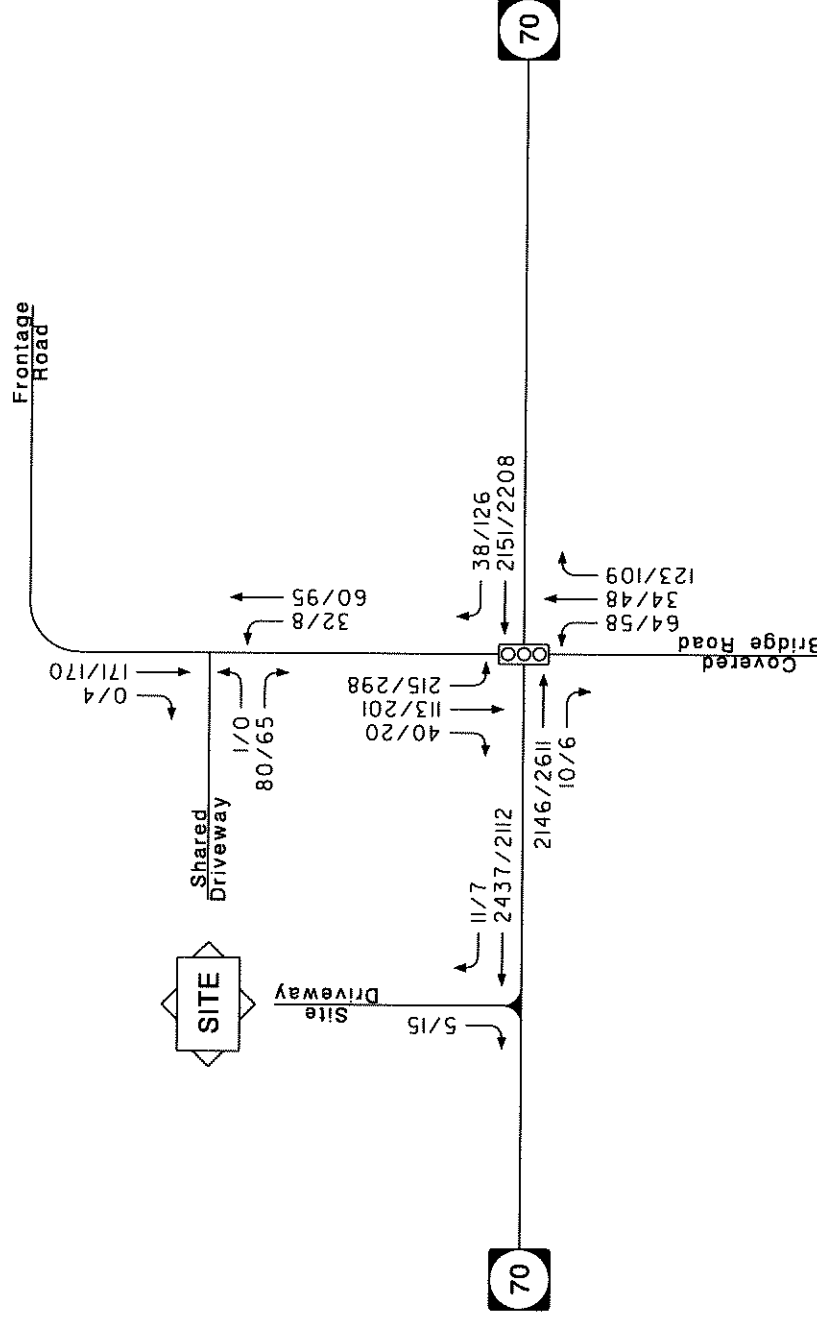
Cherry Hill Township, Camden County, NJ  
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 TRAFFIC SIGNAL

 AM/PM PEAK HOUR

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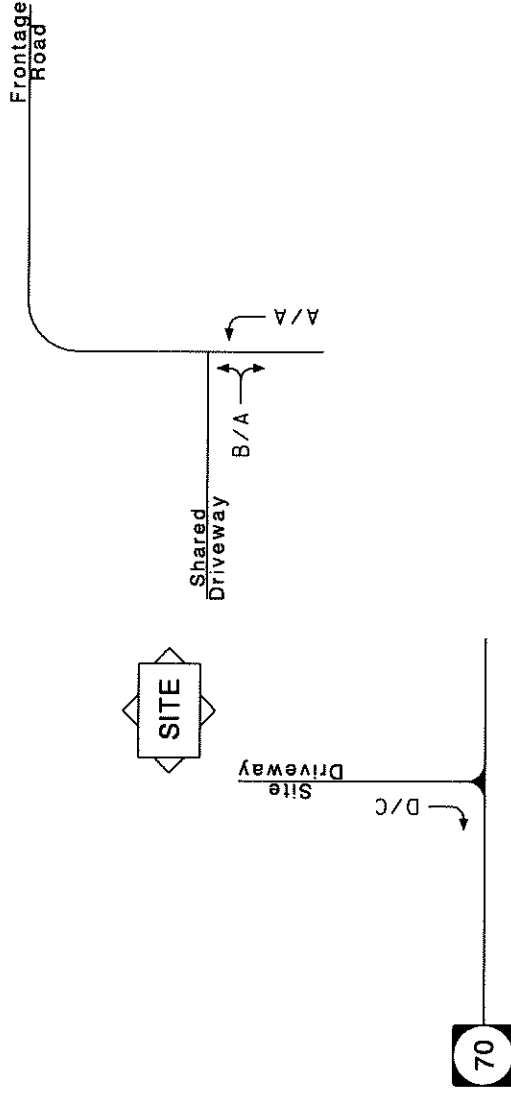
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Cherry Hill Township, Camden County, NJ  
 October 2019

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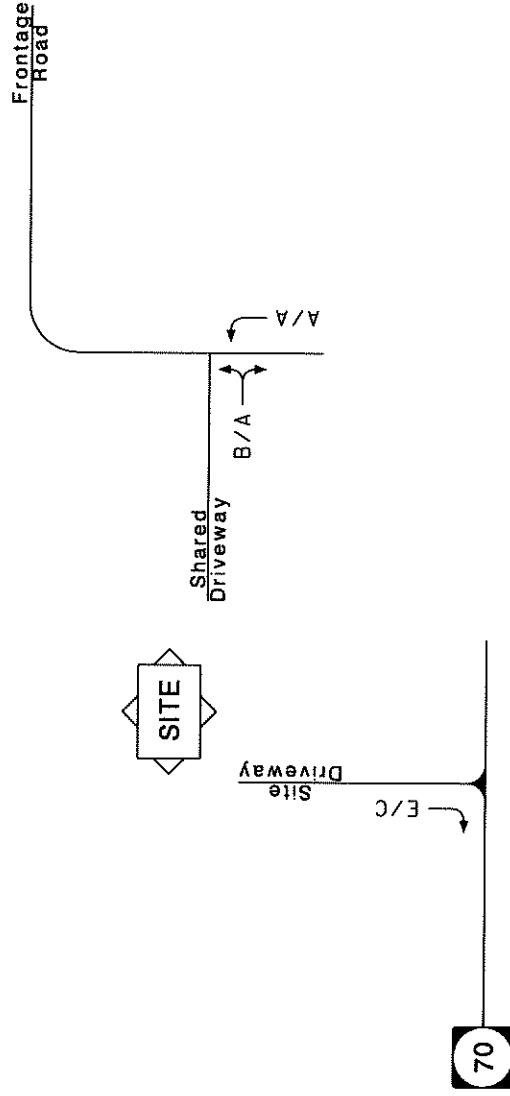


### Spring Hills Expansion

Cherry Hill Township, Camden County, NJ  
October 2019

 TRAFFIC SIGNAL  
 AM/PM PEAK HOUR

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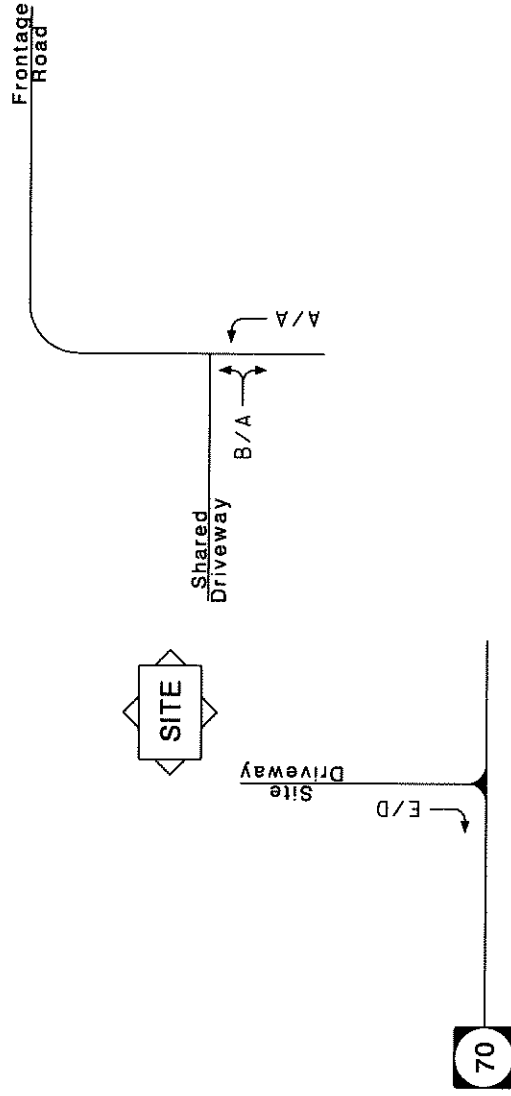


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## Spring Hills Expansion

Cherry Hill Township, Camden County, NJ  
 October 2019

 TRAFFIC SIGNAL  
 AM/PM PEAK HOUR

SA Project No. 19155

# Shropshire Associates LLC

277 Whitehorse Pike, Suite 203

Atco, NJ 08004

N/S Route: Spring Hills Driveway  
 E/W Route: Route 70  
 Cherry Hill Twp/Camden County/NJ  
 Tuesday/am-rain pm-clear/PA/2585

File Name : 19155002  
 Site Code : 19155002  
 Start Date : 10/8/2019  
 Page No : 1

Groups Printed- Unshifted

Start Time	Spring Hills Driveway		Route 70			
	Southbound		Westbound			
	Right	App. Total	Right	Thru	App. Total	Int. Total
07:00 AM	1	1	2	507	509	510
07:15 AM	2	2	2	562	564	566
07:30 AM	0	0	1	684	685	685
07:45 AM	0	0	2	589	591	591
Total	3	3	7	2342	2349	2352
08:00 AM	0	0	1	560	561	561
08:15 AM	1	1	2	568	570	571
08:30 AM	0	0	2	453	455	455
08:45 AM	0	0	1	462	463	463
Total	1	1	6	2043	2049	2050
*** BREAK ***						
04:00 PM	3	3	2	496	498	501
04:15 PM	6	6	2	487	489	495
04:30 PM	0	0	0	523	523	523
04:45 PM	1	1	0	524	524	525
Total	10	10	4	2030	2034	2044
05:00 PM	1	1	0	515	515	516
05:15 PM	0	0	0	490	490	490
05:30 PM	1	1	0	420	420	421
05:45 PM	1	1	1	523	524	525
Total	3	3	1	1948	1949	1952
Grand Total	17	17	18	8363	8381	8398
Apprch %	100		0.2	99.8		
Total %	0.2	0.2	0.2	99.6	99.8	

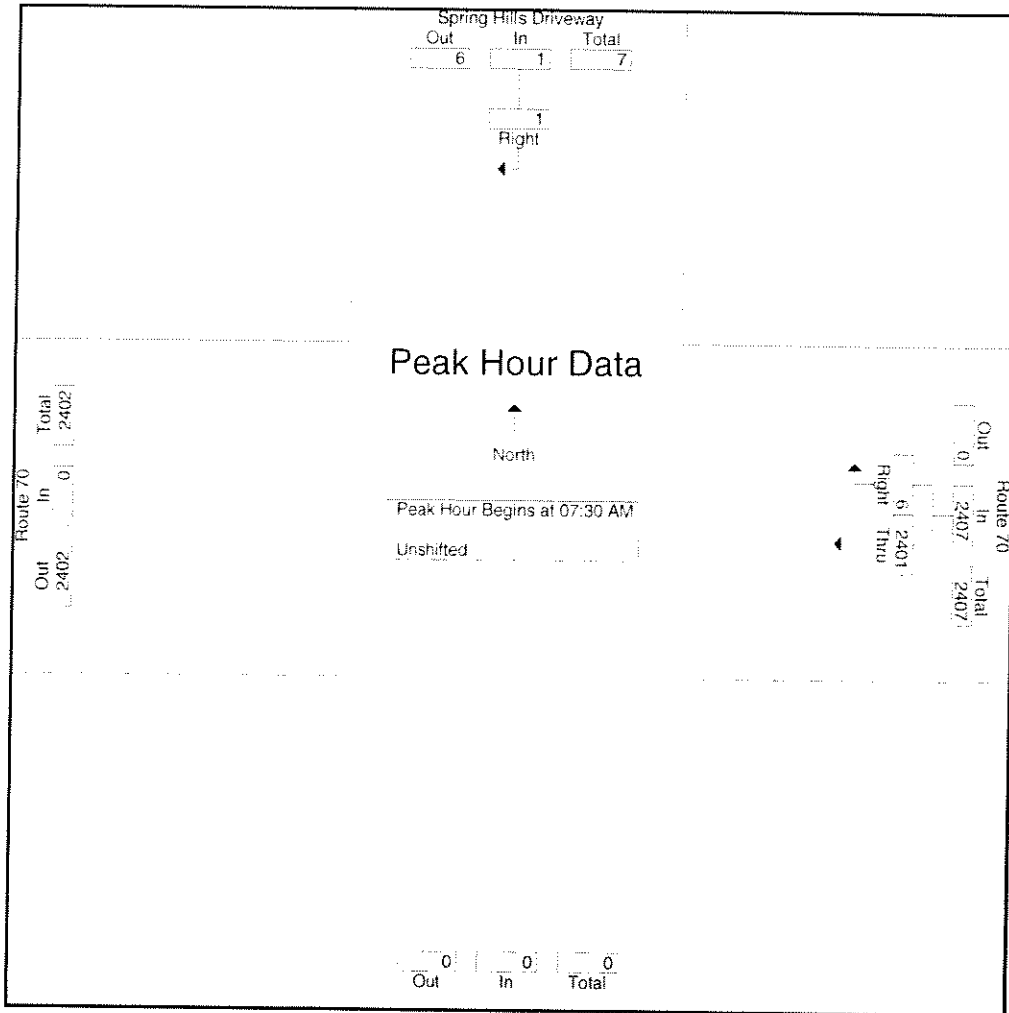
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277 Whitehorse Pike, Suite 203  
Atco, NJ 08004

N/S Route: Spring Hills Driveway  
E/W Route: Route 70  
Cherry Hill Twp/Camden County/NJ  
Tuesday/am-rain pm-clear/PA/2585

File Name : 19155002  
Site Code : 19155002  
Start Date : 10/8/2019  
Page No : 2

Start Time	Spring Hills Driveway Southbound		Route 70 Westbound		App. Total	Int. Total
	Right	App. Total	Right	Thru		
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1						
Peak Hour for Entire Intersection Begins at 07:30 AM						
07:30 AM	0	0	1	684	685	685
07:45 AM	0	0	2	589	591	591
08:00 AM	0	0	1	560	561	561
08:15 AM	1	1	2	568	570	571
Total Volume	1	1	6	2401	2407	2408
% App. Total	100		0.2	99.8		
PHF	.250	.250	.750	.878	.878	.879





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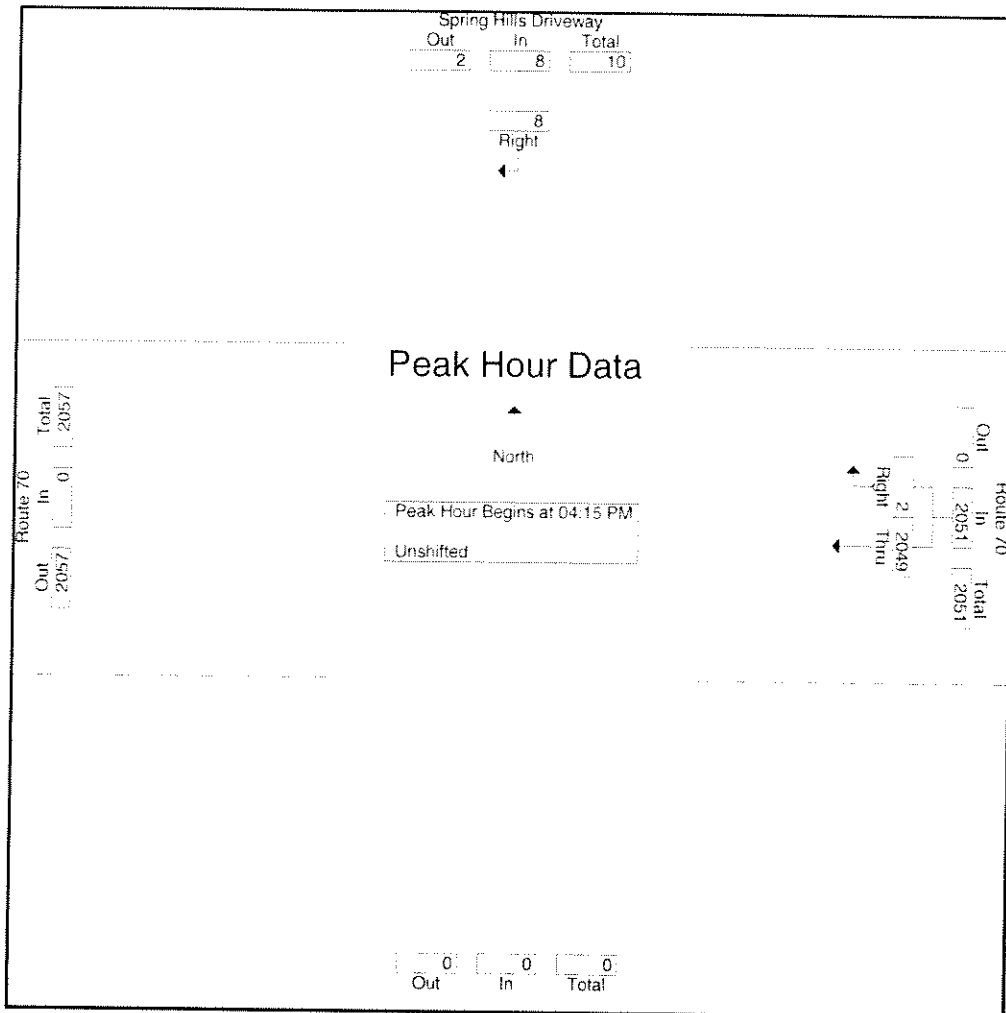
277 Whitehorse Pike, Suite 203

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File Name : 19155002  
 Site Code : 19155002  
 Start Date : 10/8/2019  
 Page No : 3

Start Time	Spring Hills Driveway Southbound		Route 70 Westbound			Int. Total
	Right	App. Total	Right	Thru	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1						
Peak Hour for Entire Intersection Begins at 04:15 PM						
04:15 PM	6	6	2	487	489	495
04:30 PM	0	0	0	523	523	523
04:45 PM	1	1	0	524	524	525
05:00 PM	1	1	0	515	515	516
Total Volume	8	8	2	2049	2051	2059
% App. Total	100		0.1	99.9		
PHF	.333	.333	.250	.978	.979	.980



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N/S Route: Spring Hills Parking Driveway  
E/W Route: Frontage Road  
Cherry Hill Twp/Camden County/NJ  
Wednesday/clear/PA/5142

File Name : 19155001  
Site Code : 19155001  
Start Date : 9/18/2019  
Page No : 1

Groups Printed- Unshifted

Start Time	Spring Hills Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
07:00 AM	3	0	3	0	40	40	17	7	24	67
07:15 AM	4	0	4	0	37	37	13	1	14	55
07:30 AM	1	0	1	0	39	39	20	1	21	61
07:45 AM	2	0	2	0	52	52	9	0	9	63
Total	10	0	10	0	168	168	59	9	68	246
08:00 AM	0	0	0	0	37	37	11	0	11	48
08:15 AM	1	1	2	0	36	36	14	1	15	53
08:30 AM	2	0	2	0	42	42	19	3	22	66
08:45 AM	0	0	0	2	41	43	17	3	20	63
Total	3	1	4	2	156	158	61	7	68	230
*** BREAK ***										
04:00 PM	6	0	6	1	39	40	17	2	19	65
04:15 PM	5	0	5	0	46	46	28	1	29	80
04:30 PM	4	0	4	1	42	43	30	2	32	79
04:45 PM	5	0	5	0	40	40	18	1	19	64
Total	20	0	20	2	167	169	93	6	99	288
05:00 PM	2	1	3	0	30	30	25	2	27	60
05:15 PM	5	2	7	3	46	49	40	2	42	98
05:30 PM	0	1	1	0	37	37	32	1	33	71
05:45 PM	1	0	1	0	34	34	18	2	20	55
Total	8	4	12	3	147	150	115	7	122	284
Grand Total	41	5	46	7	638	645	328	29	357	1048
Apprch %	89.1	10.9		1.1	98.9		91.9	8.1		
Total %	3.9	0.5	4.4	0.7	60.9	61.5	31.3	2.8	34.1	

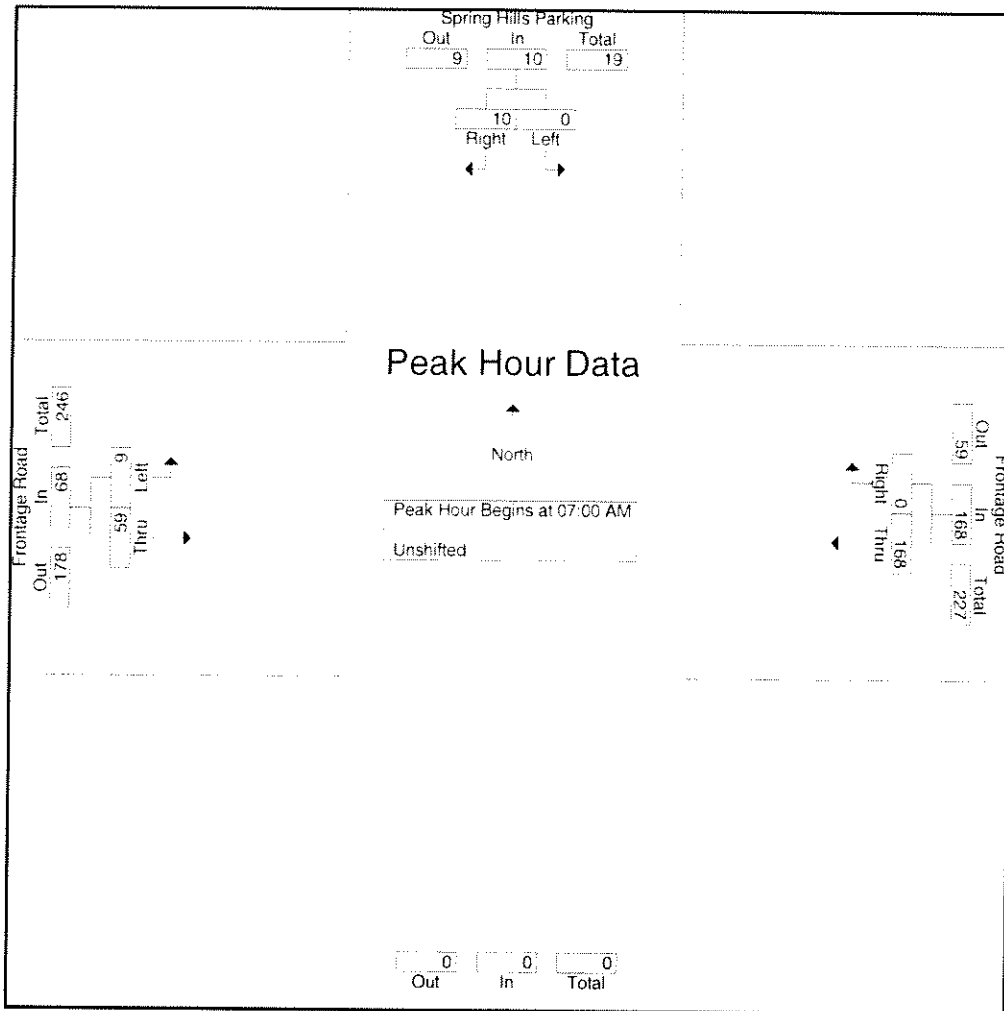
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Cherry Hill Twp/Camden County/NJ  
Wednesday/clear/PA/5142

File Name : 19155001  
Site Code : 19155001  
Start Date : 9/18/2019  
Page No : 2

Start Time	Spring Hills Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	3	0	3	0	40	40	17	7	24	67
07:15 AM	4	0	4	0	37	37	13	1	14	55
07:30 AM	1	0	1	0	39	39	20	1	21	61
07:45 AM	2	0	2	0	52	52	9	0	9	63
Total Volume	10	0	10	0	168	168	59	9	68	246
% App. Total	100	0		0	100		86.8	13.2		
PHF	.625	.000	.625	.000	.808	.808	.738	.321	.708	.918



# Shropshire Associates LLC

277 Whitehorse Pike, Suite 203

Atco, NJ 08004

N/S Route: Spring Hills Parking Driveway

E/W Route: Frontage Road

Cherry Hill Twp/Camden County/NJ

Wednesday/clear/PA/5142

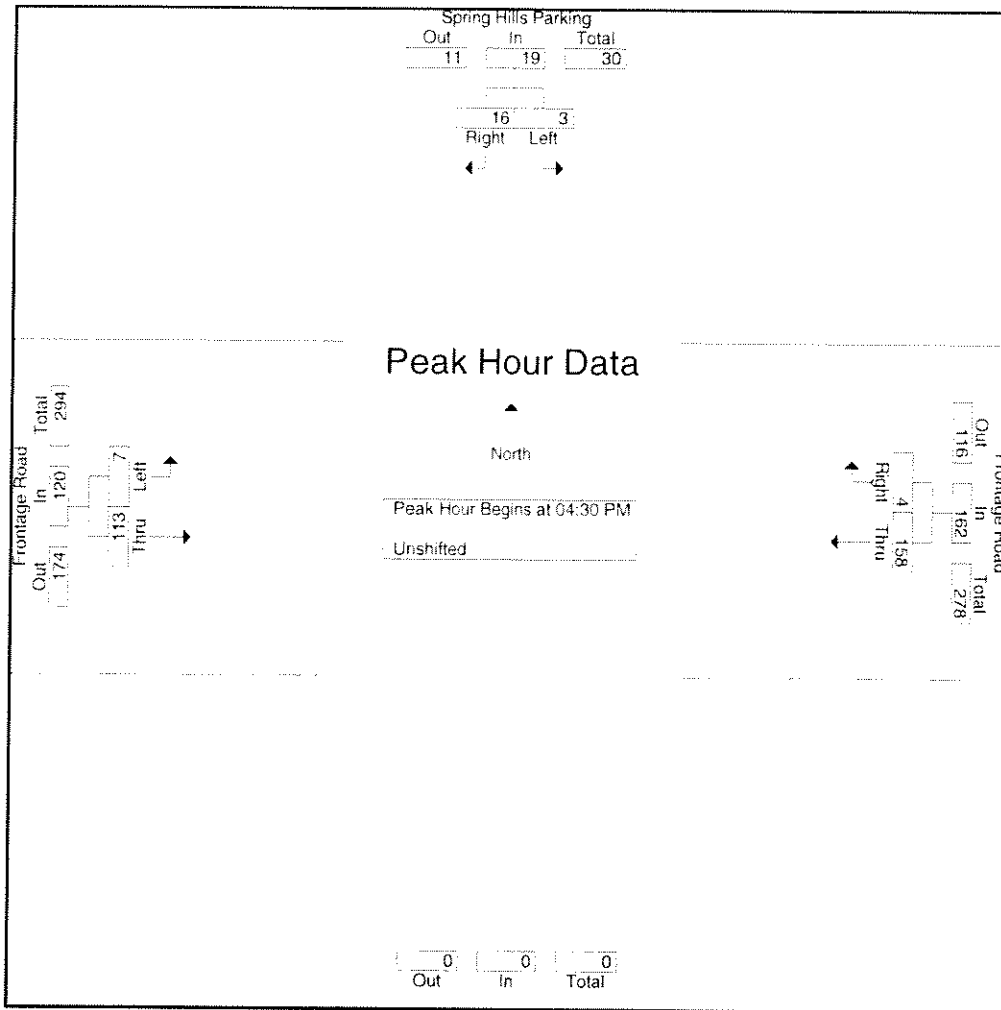
File Name : 19155001

Site Code : 19155001

Start Date : 9/18/2019

Page No : 3

Start Time	Spring Hills Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	4	0	4	1	42	43	30	2	32	79
04:45 PM	5	0	5	0	40	40	18	1	19	64
05:00 PM	2	1	3	0	30	30	25	2	27	60
05:15 PM	5	2	7	3	46	49	40	2	42	98
Total Volume	16	3	19	4	158	162	113	7	120	301
% App. Total	84.2	15.8		2.5	97.5		94.2	5.8		
PHF	.800	.375	.679	.333	.859	.827	.706	.875	.714	.768



# Shropshire Associates LLC

277 Whitehorse Pike, Suite 203  
Atco, NJ 08004

N/S Route: High Rise Parking Driveway  
E/W Route: Frontage Road  
Cherry Hill Twp/Camden County/NJ  
Wednesday/clear/PA/5142

File Name : 19155001mod1  
Site Code : 19155001  
Start Date : 9/18/2019  
Page No : 1

Groups Printed- Bank 1

Start Time	High Rise Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
07:00 AM	15	0	15	0	0	0	0	6	6	21
07:15 AM	12	0	12	0	0	0	0	6	6	18
07:30 AM	25	1	26	0	0	0	0	4	4	30
07:45 AM	15	0	15	0	0	0	0	4	4	19
Total	67	1	68	0	0	0	0	20	20	88
08:00 AM	14	0	14	0	0	0	0	7	7	21
08:15 AM	23	0	23	0	0	0	0	3	3	26
08:30 AM	19	0	19	1	0	1	0	10	10	30
08:45 AM	13	0	13	0	0	0	0	8	8	21
Total	69	0	69	1	0	1	0	28	28	98
*** BREAK ***										
04:00 PM	8	0	8	1	0	1	0	10	10	19
04:15 PM	6	0	6	0	0	0	0	12	12	18
04:30 PM	9	0	9	1	0	1	0	10	10	20
04:45 PM	14	0	14	0	0	0	0	13	13	27
Total	37	0	37	2	0	2	0	45	45	84
05:00 PM	7	0	7	0	0	0	0	15	15	22
05:15 PM	3	0	3	1	0	1	0	17	17	21
05:30 PM	5	0	5	1	3	4	0	26	26	35
05:45 PM	11	0	11	0	0	0	0	15	15	26
Total	26	0	26	2	3	5	0	73	73	104
Grand Total	199	1	200	5	3	8	0	166	166	374
Apprch %	99.5	0.5		62.5	37.5		0	100		
Total %	53.2	0.3	53.5	1.3	0.8	2.1	0	44.4	44.4	

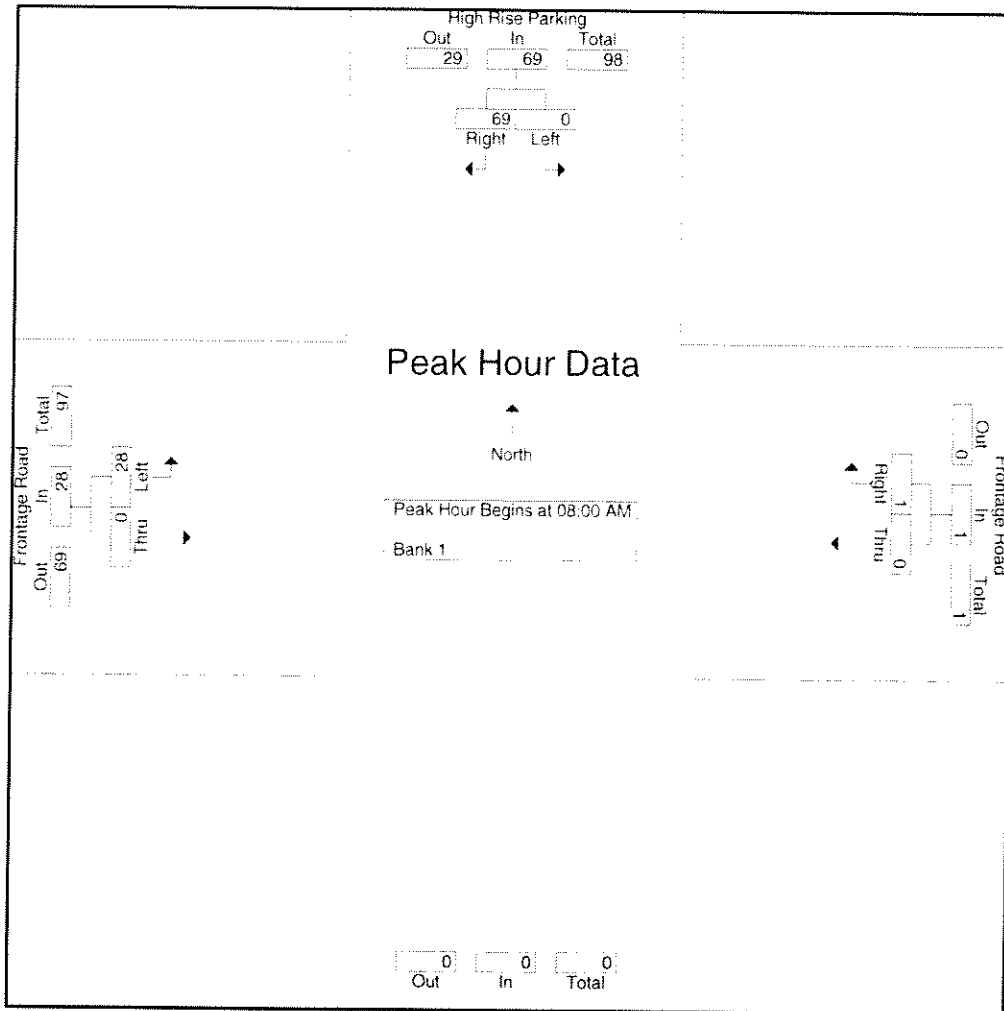
# Shropshire Associates LLC

277 Whitehorse Pike, Suite 203  
Atco, NJ 08004

N/S Route: High Rise Parking Driveway  
E/W Route: Frontage Road  
Cherry Hill Twp/Camden County/NJ  
Wednesday/clear/PA/5142

File Name : 19155001mod1  
Site Code : 19155001  
Start Date : 9/18/2019  
Page No : 2

Start Time	High Rise Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	14	0	14	0	0	0	0	7	7	21
08:15 AM	23	0	23	0	0	0	0	3	3	26
08:30 AM	19	0	19	1	0	1	0	10	10	30
08:45 AM	13	0	13	0	0	0	0	8	8	21
Total Volume	69	0	69	1	0	1	0	28	28	98
% App. Total	100	0		100	0		0	100		
PHF	.750	.000	.750	.250	.000	.250	.000	.700	.700	.817



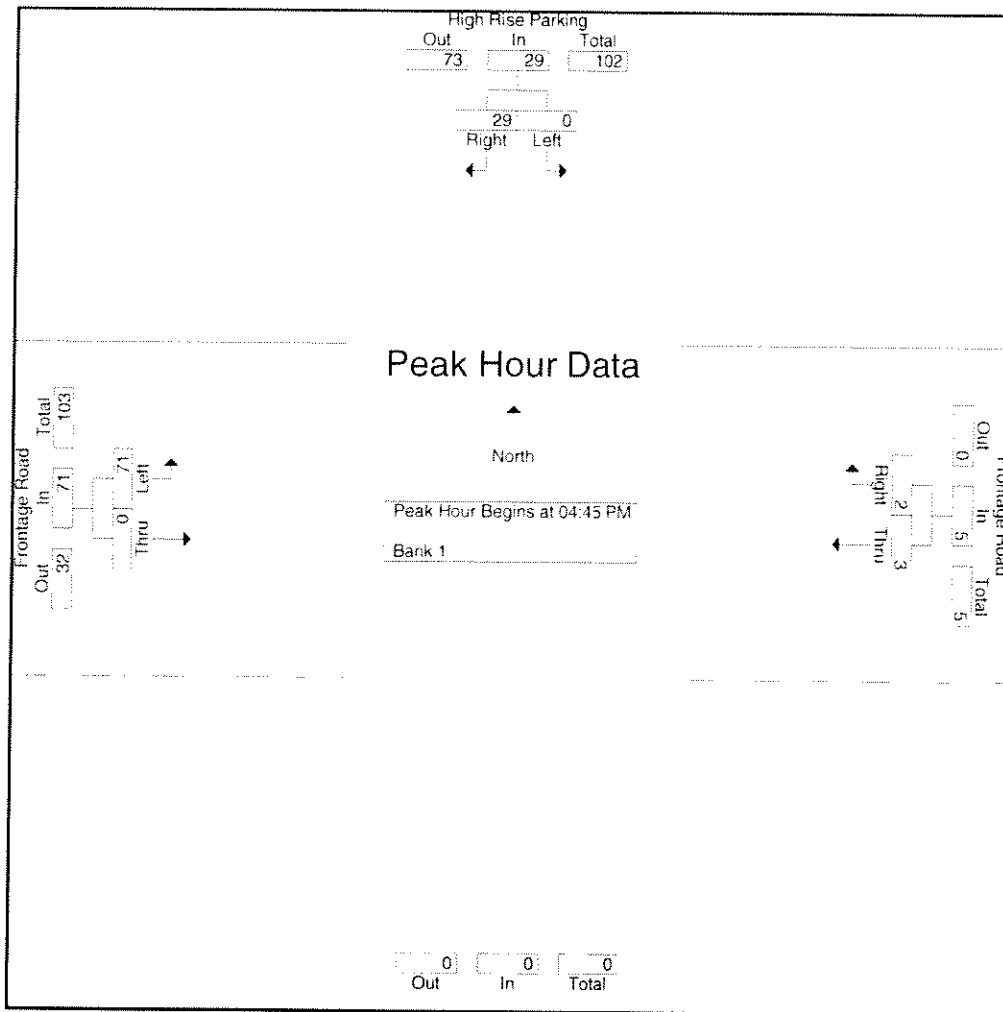
# Shropshire Associates LLC

277 Whitehorse Pike, Suite 203  
Atco, NJ 08004

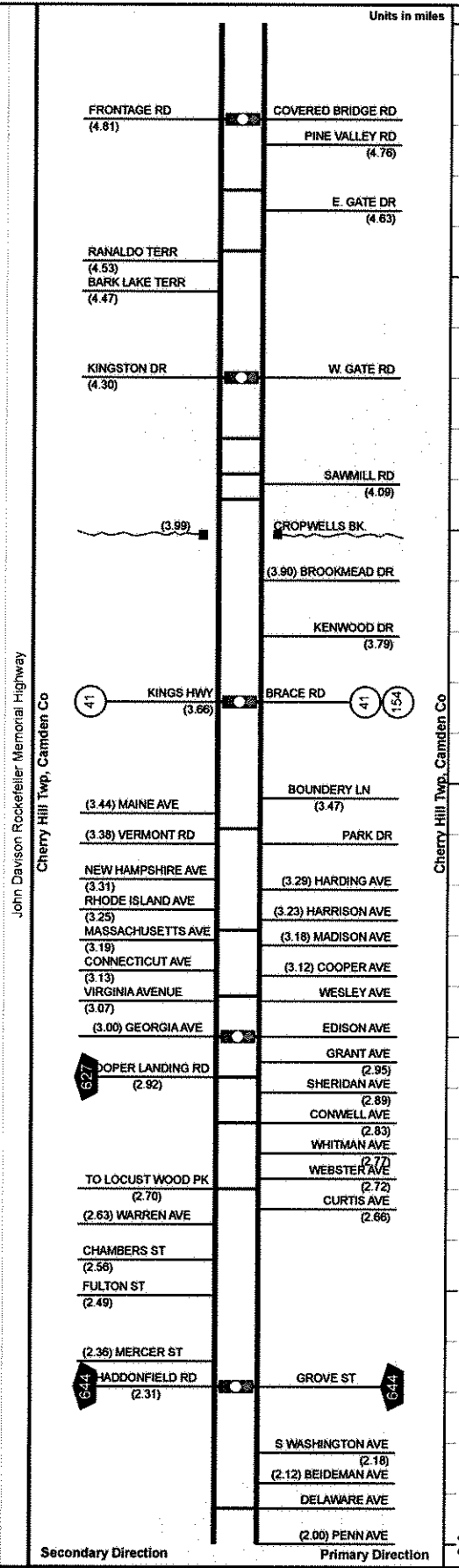
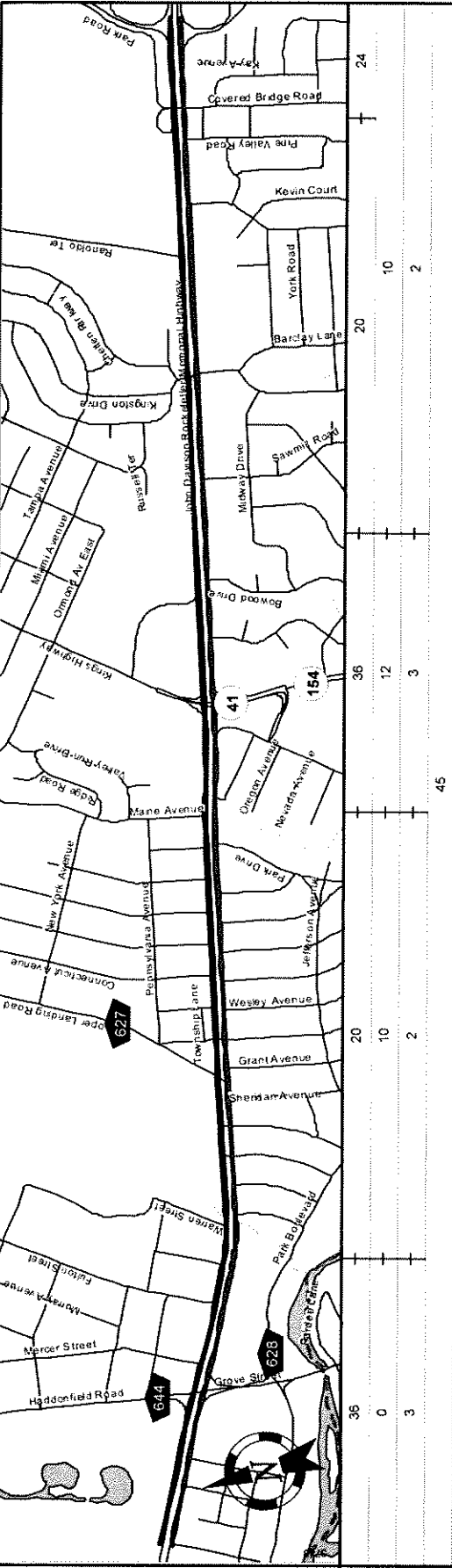
N/S Route: High Rise Parking Driveway  
E/W Route: Frontage Road  
Cherry Hill Twp/Camden County/NJ  
Wednesday/clear/PA/5142

File Name : 19155001mod1  
Site Code : 19155001  
Start Date : 9/18/2019  
Page No : 3

Start Time	High Rise Parking Southbound			Frontage Road Westbound			Frontage Road Eastbound			Int. Total
	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	14	0	14	0	0	0	0	13	13	27
05:00 PM	7	0	7	0	0	0	0	15	15	22
05:15 PM	3	0	3	1	0	1	0	17	17	21
05:30 PM	5	0	5	1	3	4	0	26	26	35
Total Volume	29	0	29	2	3	5	0	71	71	105
% App. Total	100	0		40	60		0	100		
PHF	.518	.000	.518	.500	.250	.313	.000	.683	.683	.750



MILE 0.000 1.000 2.000 3.000 4.000 5.000



Secondary Direction		Primary Direction		Units in miles	
FRONTAGE RD (4.81)	COVERED BRIDGE RD	FRONTAGE RD (4.81)	COVERED BRIDGE RD	2.0	5.0
RAHALDO TERR (4.63)	PINE VALLEY RD (4.76)	RAHALDO TERR (4.63)	PINE VALLEY RD (4.76)	3.0	4.0
BARK LAKE TERR (4.47)	E. GATE DR (4.63)	BARK LAKE TERR (4.47)	E. GATE DR (4.63)	4.0	3.0
KINGSTON DR (4.30)	W. GATE RD	KINGSTON DR (4.30)	W. GATE RD	4.5	2.5
(3.99)	SAWMILL RD (4.09)	(3.99)	SAWMILL RD (4.09)	4.0	3.0
(3.90) BROOKMEAD DR	CROPWELLS BK.	(3.90) BROOKMEAD DR	CROPWELLS BK.	3.5	3.5
KENWOOD DR (3.79)	BRACE RD	KENWOOD DR (3.79)	BRACE RD	3.0	4.0
(3.44) MAINE AVE	BOUNDARY LN (3.47)	(3.44) MAINE AVE	BOUNDARY LN (3.47)	2.5	4.5
(3.38) VERMONT RD	PARK DR	(3.38) VERMONT RD	PARK DR	2.0	5.0
NEW HAMPSHIRE AVE (3.31)	(3.29) HARDING AVE	NEW HAMPSHIRE AVE (3.31)	(3.29) HARDING AVE	1.5	5.0
RHODE ISLAND AVE (3.25)	(3.23) HARRISON AVE	RHODE ISLAND AVE (3.25)	(3.23) HARRISON AVE	1.0	5.0
MASSACHUSETTS AVE (3.19)	(3.18) MADISON AVE	MASSACHUSETTS AVE (3.19)	(3.18) MADISON AVE	0.5	5.0
CONNECTICUT AVE (3.13)	(3.12) COOPER AVE	CONNECTICUT AVE (3.13)	(3.12) COOPER AVE	0.0	5.0
VIRGINIA AVENUE (3.07)	WESLEY AVE	VIRGINIA AVENUE (3.07)	WESLEY AVE	0.0	5.0
(3.00) GEORGIA AVE	EDISON AVE	(3.00) GEORGIA AVE	EDISON AVE	0.0	5.0
DOPER LANDING RD (2.92)	GRANT AVE (2.95)	DOPER LANDING RD (2.92)	GRANT AVE (2.95)	0.0	5.0
TO LOCUST WOOD PK (2.70)	SHERIDAN AVE (2.89)	TO LOCUST WOOD PK (2.70)	SHERIDAN AVE (2.89)	0.0	5.0
(2.63) WARREN AVE	CONWELL AVE (2.83)	(2.63) WARREN AVE	CONWELL AVE (2.83)	0.0	5.0
CHAMBERS ST (2.56)	WHITMAN AVE (2.77)	CHAMBERS ST (2.56)	WHITMAN AVE (2.77)	0.0	5.0
FULTON ST (2.49)	WEBSTER AVE (2.72)	FULTON ST (2.49)	WEBSTER AVE (2.72)	0.0	5.0
(2.36) MERCER ST	CURTIS AVE (2.66)	(2.36) MERCER ST	CURTIS AVE (2.66)	0.0	5.0
HADDONFIELD RD (2.31)	GROVE ST	HADDONFIELD RD (2.31)	GROVE ST	0.0	5.0
S WASHINGTON AVE (2.18)	DELAWARE AVE	S WASHINGTON AVE (2.18)	DELAWARE AVE	0.0	5.0
(2.12) BEIDEMAN AVE	PENN AVE (2.00)	(2.12) BEIDEMAN AVE	PENN AVE (2.00)	0.0	5.0
DELAWARE AVE		DELAWARE AVE		0.0	5.0
(2.00) PENN AVE		(2.00) PENN AVE		0.0	5.0

Street Name	Jurisdiction	Functional Class	Federal Aid - NHS Sy	Control Section	Speed Limit	Number of Lanes	Med Type	Med Width	Pavement	Shoulder	Traffic Volume	Traffic Sta ID	Structure No	Enlarged Views
John Davison Rockefeller Memorial Highway	N.J.DOT	Urban Principal Arterial	NHS	0413	45	3	Curbed	24	36	0	52530(2012)	7-4-28		041450



**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	2073	2342	7	0	3
Future Vol, veh/h	0	2073	2342	7	0	3
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	92	92	86	88	92	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2253	2723	8	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	137
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	32.9
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	137
HCM Lane V/C Ratio	-	-	-	0.058
HCM Control Delay (s)	-	-	-	32.9
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	0.2

**Intersection**

Int Delay, s/veh 4

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	29	59	168	0	1	77
Future Vol, veh/h	29	59	168	0	1	77
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	32	74	81	25	25	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	80	207	0	4	124

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	207	0	0
Stage 1	-	-	207
Stage 2	-	-	262
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1364	-	553
Stage 1	-	-	828
Stage 2	-	-	782
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1364	-	514
Mov Cap-2 Maneuver	-	-	514
Stage 1	-	-	770
Stage 2	-	-	782

Approach	NB	SB	SE
HCM Control Delay, s	4.2	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1364	-	817	-	-
HCM Lane V/C Ratio	0.066	-	0.157	-	-
HCM Control Delay (s)	7.8	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↓			↑
Traffic Vol, veh/h	0	2516	2030	4	0	10
Future Vol, veh/h	0	2516	2030	4	0	10
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	92	92	97	50	92	42
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2735	2093	8	0	24

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	223
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	23.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	223
HCM Lane V/C Ratio	-	-	-	0.107
HCM Control Delay (s)	-	-	-	23.1
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.4

**Intersection**

Int Delay, s/veh 1.9

**Movement** NBL NBT SBT SBR SEL SER

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	93	167	4	0	57
Future Vol, veh/h	6	93	167	4	0	57
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	75	78	90	50	25	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	119	186	8	0	69

**Major/Minor** Major1 Major2 Minor2

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	194	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1379	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1379	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** NB SB SE

HCM Control Delay, s 0.5 0 9.6  
HCM LOS A

**Minor Lane/Major Mvmt** NBL NBT SELn1 SBT SBR

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1379	-	852	-	-
HCM Lane V/C Ratio	0.006	-	0.081	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↓			↑
Traffic Vol, veh/h	0	2156	2437	7	0	3
Future Vol, veh/h	0	2156	2437	7	0	3
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	92	92	86	88	92	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2343	2834	8	0	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	126
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	35.5
HCM LOS			E

Minor Lane/Major Mvmt	EBT	WBT	WBR SBLn1
Capacity (veh/h)	-	-	126
HCM Lane V/C Ratio	-	-	0.063
HCM Control Delay (s)	-	-	35.5
HCM Lane LOS	-	-	E
HCM 95th %tile Q(veh)	-	-	0.2

**Intersection**

Int Delay, s/veh 4

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↕	↕		↕	↕
Traffic Vol, veh/h	29	60	171	0	1	77
Future Vol, veh/h	29	60	171	0	1	77
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	32	74	81	25	25	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	91	81	211	0	4	124

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	211	0	0	474	211
Stage 1	-	-	-	211	-
Stage 2	-	-	-	263	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	1360	-	-	549	829
Stage 1	-	-	-	824	-
Stage 2	-	-	-	781	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1360	-	-	511	829
Mov Cap-2 Maneuver	-	-	-	511	-
Stage 1	-	-	-	766	-
Stage 2	-	-	-	781	-

Approach	NB	SB	SE
HCM Control Delay, s	4.1	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1360	-	813	-	-
HCM Lane V/C Ratio	0.067	-	0.158	-	-
HCM Control Delay (s)	7.8	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

**Intersection**

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	2617	2112	4	0	10
Future Vol, veh/h	0	2617	2112	4	0	10
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	92	92	97	50	92	42
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2845	2177	8	0	24

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	209
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	24.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR SBLn1
Capacity (veh/h)	-	-	209
HCM Lane V/C Ratio	-	-	0.114
HCM Control Delay (s)	-	-	24.4
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.4

**Intersection**

Int Delay, s/veh 1.8

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	95	170	4	0	57
Future Vol, veh/h	6	95	170	4	0	57
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	75	78	90	50	25	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	122	189	8	0	69

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	197	0	0
Stage 1	-	-	193
Stage 2	-	-	138
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1376	-	664
Stage 1	-	-	840
Stage 2	-	-	889
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1376	-	660
Mov Cap-2 Maneuver	-	-	660
Stage 1	-	-	835
Stage 2	-	-	889

Approach	NB	SB	SE
HCM Control Delay, s	0.5	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1376	-	849	-	-
HCM Lane V/C Ratio	0.006	-	0.081	-	-
HCM Control Delay (s)	7.6	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↓			↑
Traffic Vol, veh/h	0	2156	2437	11	0	5
Future Vol, veh/h	0	2156	2437	11	0	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	92	92	86	88	92	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2343	2834	13	0	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	125
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	37.2
HCM LOS			E

Minor Lane/Major Mvmt	EBT	WBT	WBR SBLn1
Capacity (veh/h)	-	-	125
HCM Lane V/C Ratio	-	-	0.105
HCM Control Delay (s)	-	-	37.2
HCM Lane LOS	-	-	E
HCM 95th %tile Q(veh)	-	-	0.3

**Intersection**

Int Delay, s/veh	4.1					
<b>Movement</b>	<b>NBL</b>	<b>NBT</b>	<b>SBT</b>	<b>SBR</b>	<b>SEL</b>	<b>SER</b>
Lane Configurations		↕	↕		↕	↕
Traffic Vol, veh/h	32	60	171	0	1	80
Future Vol, veh/h	32	60	171	0	1	80
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	32	74	81	25	25	62
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	81	211	0	4	129

<b>Major/Minor</b>	<b>Major1</b>	<b>Major2</b>	<b>Minor2</b>		
Conflicting Flow All	211	0	-	0	492
Stage 1	-	-	-	-	211
Stage 2	-	-	-	-	281
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1360	-	-	-	536
Stage 1	-	-	-	-	824
Stage 2	-	-	-	-	767
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1360	-	-	-	495
Mov Cap-2 Maneuver	-	-	-	-	495
Stage 1	-	-	-	-	761
Stage 2	-	-	-	-	767

<b>Approach</b>	<b>NB</b>	<b>SB</b>	<b>SE</b>
HCM Control Delay, s	4.3	0	10.3
HCM LOS			B

<b>Minor Lane/Major Mvmt</b>	<b>NBL</b>	<b>NBT</b>	<b>SELn1</b>	<b>SBT</b>	<b>SBR</b>
Capacity (veh/h)	1360	-	813	-	-
HCM Lane V/C Ratio	0.074	-	0.164	-	-
HCM Control Delay (s)	7.9	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

**Intersection**

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	2617	2112	7	0	15
Future Vol, veh/h	0	2617	2112	7	0	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	92	92	97	50	92	42
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2845	2177	14	0	36

**Major/Minor**

	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.32
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	208
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach**

	EB	WB	SB
HCM Control Delay, s	0	0	25.9
HCM LOS			D

**Minor Lane/Major Mvmt**

	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	208
HCM Lane V/C Ratio	-	-	-	0.172
HCM Control Delay (s)	-	-	-	25.9
HCM Lane LOS	-	-	-	D
HCM 95th %tile Q(veh)	-	-	-	0.6

**Intersection**

Int Delay, s/veh	2.1					
<b>Movement</b>	<b>NBL</b>	<b>NBT</b>	<b>SBT</b>	<b>SBR</b>	<b>SEL</b>	<b>SER</b>
Lane Configurations		↕	↗		↖	
Traffic Vol, veh/h	8	95	170	4	0	65
Future Vol, veh/h	8	95	170	4	0	65
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	75	78	90	50	25	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	122	189	8	0	78

<b>Major/Minor</b>	<b>Major1</b>	<b>Major2</b>	<b>Minor2</b>		
Conflicting Flow All	197	0	-	0	337 193
Stage 1	-	-	-	-	193 -
Stage 2	-	-	-	-	144 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1376	-	-	-	658 849
Stage 1	-	-	-	-	840 -
Stage 2	-	-	-	-	883 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1376	-	-	-	652 849
Mov Cap-2 Maneuver	-	-	-	-	652 -
Stage 1	-	-	-	-	832 -
Stage 2	-	-	-	-	883 -

<b>Approach</b>	<b>NB</b>	<b>SB</b>	<b>SE</b>
HCM Control Delay, s	0.6	0	9.7
HCM LOS			A

<b>Minor Lane/Major Mvmt</b>	<b>NBL</b>	<b>NBT</b>	<b>SELn1</b>	<b>SBT</b>	<b>SBR</b>
Capacity (veh/h)	1376	-	849	-	-
HCM Lane V/C Ratio	0.008	-	0.092	-	-
HCM Control Delay (s)	7.6	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-