4/26/2023

Shore Vista

Traffic Operational Analysis

Prepared for:

The Town of Ocean View

By:

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A Kleinfelder Company

550 BAY RD DOVER, DE 19901

Updated to Include Summer Weekday and Saturday Analysis April 6, 2023 & Revised April 26, 2023

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Executive Summary

Description

DRB Group seeks to develop 104 -family townhouses on approximately 27.85± acre parcel currently zoned as R-3 (Residential). No change in zoning is anticipated by the developer at this time. The property is located on the west side of Woodland Avenue across from Mitchell Avenue. One full movement access point is proposed on Woodland Avenue which will become the fourth leg at the intersection of Woodland Avenue and Mitchell Avenue. Construction of the development is proposed to be completed in 2028.

Study Area

The facilities to be evaluated within the study limits are the Proposed Site Entrance intersection with Woodland Avenue and Mitchell Avenue and the existing intersections listed below:

1. Woodland Avenue @ Mitchell Avenue [Two-way stop controlled (TWSC) with stop sign on Mitchell Avenue]
2. Woodland Avenue @ Central Avenue (Sussex Road 084) [All-way stop control with stop sign on all approaches]
3. Woodland Avenue @ Muddy Neck Road / West Avenue (Sussex Road 361) [TWSC with stop sign on Woodland Avenue]

Crash Evaluation

Crash data for the three-year period from October 27, 2019, through October 27, 2022, was obtained from DelDOT for Woodland Avenue and the three existing study intersections. Seven (7) total crashes were reported. Majority of the reported crashes occurred during daylight conditions and under clear weather and dry road surface conditions. Six (6) out of the seven (7) reported crashes, approximately 85.7%, occurred under daylight (5 / 71.4%) and dark but lighted (1 / 14.3%) conditions. It appears therefore that lighting is not a problem associated with crashes within the study limits. Weather and surface conditions do not appear to be to be a problem either. “Driver Inattention, Distraction, or Fatigue” and “Other Improper Driving” were reported as the primary reason for majority (2 / 28.6% each) of the crashes. Together these two reasons accounted for four (4) out of the total of the seven (7) reported crashes i.e., approximately 57.2%. All the reasons attributed to the crashes are not susceptible to correction with physical improvements.

Field Safety Evaluation

All existing pavement markings, warning and regulatory signing within the study limits appear to be adequate and compliant for the most part, except the R1-3P “ALL Way” plaque is missing for the westbound Woodland Avenue Stop Sign.

Per DelDOT’s Intersection Sight Distance Worksheet, required sight distance for left-turn vehicles from the site entrance is 335 feet, and required sight distance for right-turn vehicles is 290 feet. Field measurements at the proposed sight entrance provided available sight distance of greater than 1,000 feet for left-turn vehicles from the proposed site entrance and approximately 435 feet for right-turn vehicles. Both are greater than the required.

Traffic Data

Manual vehicle turning movement counts (TMC) with separate counts of heavy vehicles were performed at the three (3) existing intersections identified above. The counts were collected on Tuesday October 18, 2022, from 7:00 AM to 9:00 AM to capture the morning peak hour, and from 3:00 PM to 6:00 PM to capture the evening peak hour.

Additionally, counts were performed for an additional three hours from 11:00 A.M. to 2:00 P.M. to ensure eight hours of data is available to perform a signal warrant analysis should the analysis indicate the need for a traffic signal.

A total growth factor of 1.16 (1.5% per annum) was applied to the 2022 traffic counts to obtain future 2032 traffic without the project. (FWOP). Trips were generated for the proposed site using ITE Trip Generation 11. These trips were distributed and assigned to the study area intersections. The assigned trip volumes for the subject site were then added to the 2032 FWOP volumes to obtain the future with project (FWP) volumes at the study intersections.

At the request of the Town of Oceanview, summer conditions analysis has been added on outside of the original scope. Summer weekday seasonal adjustment factors (SAF) were derived and applied to the non-summer turning movements to obtain summer weekday volumes. The same procedure described above has been followed for the derived summer volumes to obtain 2032 FWOP summer traffic and 2032 FWP summer traffic. At the intersection of Woodland Avenue and Mitchell Avenue / Proposed Site Entrance, Saturday TMC were performed on March 11, 2023. Summer Saturday seasonal adjustment factors (SAF) were derived and applied to the non-summer turning movements to obtain summer Saturday volumes. 2032 FWOP summer Saturday traffic and 2032 FWP summer Saturday traffic was also derived for this intersection with the same procedure already described for future traffic.

Capacity Analysis

Capacity analysis was completed for each of the three (3) intersections within the scope of work, using Highway Capacity Software HCS 2022 which utilizes the Highway Capacity Manual (HCM) methodology. The capacity analysis was performed for the A.M. and P.M. peak hours for the following scenarios. The analysis did not indicate a necessity for any improvements, therefore no 2032 full build with improvements scenario was necessary.

1. Existing (2022)
2. 2032 Future without the Project (FWOP)
3. 2032 Future with the Project (FWP)

In accordance with the Town of Ocean View's additional request, the same scenarios have also been analyzed for summer traffic, including for summer Saturday at the Woodland Avenue and Mitchell Avenue / Proposed Site Entrance intersection. Per the analysis all movements, approaches and intersection where applicable would operate at Level of Service (LOS) B or better for all three scenarios analyzed under non-summer traffic conditions. For summer traffic conditions, all movements, approaches and intersection where applicable would operate at Level of Service (LOS) C or better for all three scenarios as per the analysis. The Measures of Effectiveness (MOE) are provided in the tables that follow. The analysis did not show any unacceptable queuing at any of the intersections analyzed.

As shown in the **Table E1**, for the non-summer traffic conditions, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.5 seconds and no queue for the A.M. peak hour under FWP traffic conditions. For the P.M. peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.7 seconds and an insignificant queue length of 3 feet per the analysis.

For the summer weekday traffic conditions, as shown in **Table E2**, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.6 seconds and no queue for the A.M. peak hour under FWP traffic conditions. For the P.M. peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.8 seconds and a 95th percentile queue length of 3 feet per the analysis. As provided in **Table E3**, for the summer Saturday peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 8.0 seconds and no queue under FWP traffic conditions. No mitigation measures are therefore needed at the site entrance per the operational analysis.

Table E1: Non-Summer Measures of Effectiveness

Woodland Avenue at Site Entrance / Mitchell Avenue Non-Summer MOE

Control Type	Movement	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance													9.9	A	5	10.9	B	3
	SB L/R Mitchell Ave	8.9	A	0	9.4	A	0	9.0	A	0	9.6	A	0	9.1	A	0	9.8	A	0
	EBL Woodland Ave	7.4	A	0	7.6	A	0	7.5	A	0	7.6	A	0	7.5	A	0	7.6	A	0
	WBL Woodland Ave													7.5	A	0	7.7	A	3

Woodland Avenue at Muddy Neck Road / West Avenue Non-Summer MOE

Control Type	Movement	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NBL Muddy Neck Rd	7.6	A	5	7.8	A	8	7.7	A	5	8.0	A	8	7.7	A	5	8.0	A	10
	EB L/R Woodland Ave	9.8	A	10	10.6	B	15	10.2	B	13	11.3	B	20	10.5	B	15	11.6	B	23

Woodland Avenue at Central Avenue Non-Summer MOE

Control Type	Approach / Intersection	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
All-Way Stop	NB Central Ave Approach	9.9	A	45	9.7	A	38	11.0	B	58	10.7	B	50	11.3	B	60	11.1	B	53
	SB Central Ave Approach	8.6	A	13	9.3	A	23	8.9	A	15	10.0	A	30	9.1	A	15	10.2	B	30
	EB Woodland Ave Approach	8.0	A	3	8.3	A	5	8.2	A	3	8.7	A	5	8.4	A	5	8.9	A	8
	WB Woodland Ave Approach	9.0	A	15	9.6	A	20	9.4	A	18	10.4	B	28	9.8	A	23	10.7	B	30
	Intersection	9.4	A		9.5	A		10.1	B		10.3	B		10.4	B		10.6	B	

DelDOT's Auxiliary Lane worksheet was however completed to give further guidance in the event that the Town of Oceanview considers provision of auxiliary lanes preferable at this location.

To account for the highest expected summer roadway traffic, four months of summer average daily traffic (ADT) was factored into the annual average daily traffic (AADT) of 2,516 vehicles per day (VPD) obtained from the ATR. This yielded an adjusted higher AADT of 2,851 VPD. This higher AADT was used in the auxiliary lane analysis to account for the worst-case scenario. The Auxiliary Lane Worksheet also indicates that no westbound left-turn lane or bypass

lane is required on Woodland Avenue at the Site Entrance. The Auxiliary Lane Worksheet however indicates an eastbound 100-foot overall right-turn lane comprising 50 feet storage length and 50 feet taper may be needed.

Table E2: Summer Weekday Measures of Effectiveness

Woodland Avenue at Site Entrance / Mitchell Avenue Summer Weekday MOE

Control Type	Movement	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance													10.5	B	5	11.8	B	5
	SB L/R Mitchell Ave	9.2	A	0	9.7	A	0	9.3	A	0	10.0	B	0	9.4	A	0	10.3	B	0
	EBL Woodland Ave	7.5	A	0	7.7	A	0	7.6	A	0	7.8	A	0	7.6	A	0	7.8	A	0
	WBL Woodland Ave													7.6	A	0	7.8	A	3

Woodland Avenue at Muddy Neck Road / West Avenue Summer Weekday MOE

Control Type	Movement	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NBL Muddy Neck Rd	7.8	A	8	7.9	A	10	7.9	A	8	8.1	A	13	7.9	A	8	8.1	A	13
	EB L/R Woodland Ave	10.6	B	15	11.3	B	23	11.2	B	20	12.5	B	33	11.6	B	23	12.8	B	33

Woodland Avenue at Central Avenue Summer Weekday MOE

Control Type	Approach / Intersection	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
All-Way Stop	NB Central Ave Approach	13.2	B	88	12.0	B	65	17.0	C	133	14.8	B	95	18.0	C	140	15.6	C	100
	SB Central Ave Approach	9.5	A	18	10.7	B	35	10.2	B	25	12.2	B	50	10.5	B	25	12.6	B	53
	EB Woodland Ave Approach	8.6	A	5	9.0	A	8	9.1	A	5	9.7	A	8	9.4	A	8	10.1	B	10
	WB Woodland Ave Approach	10.2	B	23	11.1	B	33	11.2	B	30	12.6	B	45	11.8	B	38	13.2	B	50
	Intersection	11.2	B		11.3	B		14.2	B		13.3	B		14.8	B		13.8	B	

As provided in **Table E1** and **Table E2**, at the existing two-way stop-controlled intersection of Woodland Avenue and Muddy Neck Road / West Avenue, for both the non-summer and summer weekday traffic conditions, all relevant traffic movements would operate at LOS B or better for existing and both future conditions with no significant queuing. No mitigation measures are therefore needed.

Table E3: Summer Saturday Measures of Effectiveness

Woodland Avenue at Site Entrance / Mitchell Avenue Summer Saturday MOE										
Control Type	Movement	Existing Summer Saturday Peak Hour			Summer 2032 FWOP Saturday Peak Hour			Summer 2032 FWP Saturday Peak Hour		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance							14.2	B	5
	SB L/R Mitchell Ave	10.4	B	0	10.9	B	0	10.9	B	0
	EBL Woodland Ave	8.0	A	0	8.2	A	0	8.2	A	0
	WBL Woodland Ave							8.0	A	0

At the existing all-way stop controlled intersection of Woodland Avenue and Central Avenue, all approaches and the intersection as a whole would operate at LOS B or better with no significant queuing for existing and both future conditions for the non-summer traffic conditions, as shown in the **Table E1**. Under summer weekday traffic conditions without the development (2032 FWOP), as provided in **Table E2**, the northbound Central Avenue approach would operate at LOS C and B respectively for the A.M. and P.M. peak hours, still satisfactory, with respective average intersection delays of 17.0 and 14.8 seconds per vehicle (sec/veh). The 95th percentile queues would be 133 feet for the A.M. peak hour and 95 feet for the P.M. peak hour. The overall intersection would operate at LOS B for both the A.M. and P.M. peak hours with delays of 14.2 sec/veh and 13.3 sec/veh respectively.

As provided in **Table E2**, under summer build conditions, (Summer 2032 FWP), the northbound Central Avenue approach would continue to operate at satisfactory LOS C, for both the A.M. and P.M. peak hours with one second or less increases in average delays, 18.0 and 15.6 sec/veh respectively. Increase in 95th percentile queues as a result of the project are also not significant, 140 feet compared to 133 feet for the A.M. FWOP scenario, and 100 feet compared to 95 feet for the P.M. FWOP condition. The overall intersection will continue to operate at satisfactory LOS B with average delay of 14.8 seconds and 13.8 seconds respectively for the A.M. and P.M. peak hours, less than one second increase from 2032 FWOP scenario. No mitigation measures are therefore needed.

Conclusions and Recommendations

Safety:

1. The reasons attributed to the reported crashes within the three-year period reviewed are not susceptible to correction with physical improvements. The reasons are human behaviors, animal in roadway or unknown.

2. Majority of the reported crashes occurred during daylight conditions and under clear weather and dry road surface conditions. Six (6) out of the seven (7) reported crashes, approximately 85.7%, occurred under daylight (5 / 71.4%) and dark but lighted (1 / 14.3%) conditions. It appears therefore that lighting is not a problem associated with crashes within the study limits.

3. All existing pavement markings, warning and regulatory signing within the study limits appear to be adequate and compliant for the most part, except the R1-3P "ALL Way" plaque is missing for the westbound Woodland Avenue approach Stop Sign. It is therefore recommended that an R1-3P "ALL Way" plaque be installed beneath the Stop Sign for the westbound Woodland Avenue approach at the intersection with Central Avenue.

4. Per DelDOT's Intersection Sight Distance Worksheet, required sight distance for left-turn vehicles from the site entrance is 335 feet, and required sight distance for right-turn vehicles is 290 feet. Field measurements at the proposed sight entrance provided available sight distance of greater than 1,000 feet for left-turn vehicles from the proposed site entrance and approximately 435 feet for right-turn vehicles. Both are greater than the required. It appears therefore that available sight distance will be adequate for the proposed site entrance.

Traffic Operations:

1. At the Proposed Site Entrance intersection with Woodland Avenue, for the highest volume traffic conditions during summer, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.6 seconds and no queue for the weekday A.M. peak hour under FWP traffic conditions. For the P.M. weekday peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.8 seconds and a 95th percentile queue length of 3 feet. Under summer Saturday peak hour conditions, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 8.0 seconds and no queue. No mitigation measures are therefore needed at the site entrance per the operational analysis.

2. For additional guidance, DelDOT's Auxiliary Lane Worksheet was completed. The worksheet confirms that no left-turn lane or bypass lane is required on westbound Woodland Avenue at the Site Entrance. The worksheet however suggests a 100-foot overall right-turn lane comprising 50 feet storage and 50 feet taper length for eastbound Woodland Avenue at the Site Entrance.

3. At the existing two-way stop-controlled intersection of Woodland Avenue and Muddy Neck Road / West Avenue, for both the non-summer and summer traffic conditions, all relevant traffic movements would operate at satisfactory LOS B or better for existing and both future conditions with no significant queuing per the operational analysis. No mitigation improvements are therefore recommended at this intersection.

4. For both the non-summer and summer traffic conditions, at the existing intersection of all-way stop controlled intersection of Woodland Avenue and Central Avenue, all approaches and the intersection as a whole would operate at satisfactory LOS C or better with no unacceptable delays for existing and both future conditions and with no unacceptable queuing per the operational analysis. No mitigation improvements are therefore recommended at this intersection.

Site Information

- Developer(s): DRB Group; 10407 Plantation Road Unit 1, Rehoboth Beach, DE 19971
- Lot Location: Tax Parcel numbers 134-12.00-470.00 located on the west side of Woodland Avenue within The Town of Ocean View in Sussex County.
- Route of Access: One site access point is proposed on Woodland Avenue across from Mitchell Avenue.
- Size and Zoning: The site is approximately 27.85± acre parcel currently zoned as R-3 (Residential). The developer does not plan to rezone the land.
- The concept plan for the site is included in **Appendix A**.

Project Description

DRB Group seeks to develop 104 -family townhouses on approximately 27.85± acre parcel currently zoned as R-3 (Residential). No change in zoning is anticipated by the developer at this time. The property is located on the west side of Woodland Avenue across from Mitchell Avenue. **Figure 1** presents the site location map. One full movement access point is proposed on Woodland Avenue which will become the fourth leg at the intersection of Woodland Avenue and Mitchell Avenue. Construction of the development is proposed to be completed in 2028.

Study Area

The facilities to be evaluated within the study limits are the Proposed Site Entrance intersection with Woodland Avenue and Mitchell Avenue and the existing intersections listed below and numbered accordingly in Figure 1:

1. Woodland Avenue @ Mitchell Avenue [Two-way stop controlled (TWSC) with stop sign on Mitchell Avenue]
2. Woodland Avenue @ Central Avenue (Sussex Road 084) [All-way stop control (AWSC) with stop sign on all approaches]
3. Woodland Avenue @ Muddy Neck Road / West Avenue (Sussex Road 361) [TWSC with stop sign on Woodland Avenue]

All the roads within the study limits are two-lane roads. Woodland Avenue and Mitchell Avenue are municipal-maintained roads. Central Avenue and Muddy Neck Road / West Avenue are state-maintained roads. There are no exclusive turn lanes at any of the existing intersections. Woodland Avenue is an open section road with 9'to 10' lanes in each direction of travel and no shoulder. Centerline pavement exists on Woodland Avenue throughout the study limits, but edge line markings only exist along the east side along two horizontal curve sections. Concrete sidewalk exists on the east side of Woodland Avenue from Muddy Neck Road to the south side of Central Avenue, and on the west side north of Central Avenue.

Within the study limits, Woodland Avenue has a posted speed limit of 25 MPH, Central Avenue 30 MPH and Muddy Neck Road, 35 MPH.

Figure 1: Site Location Map

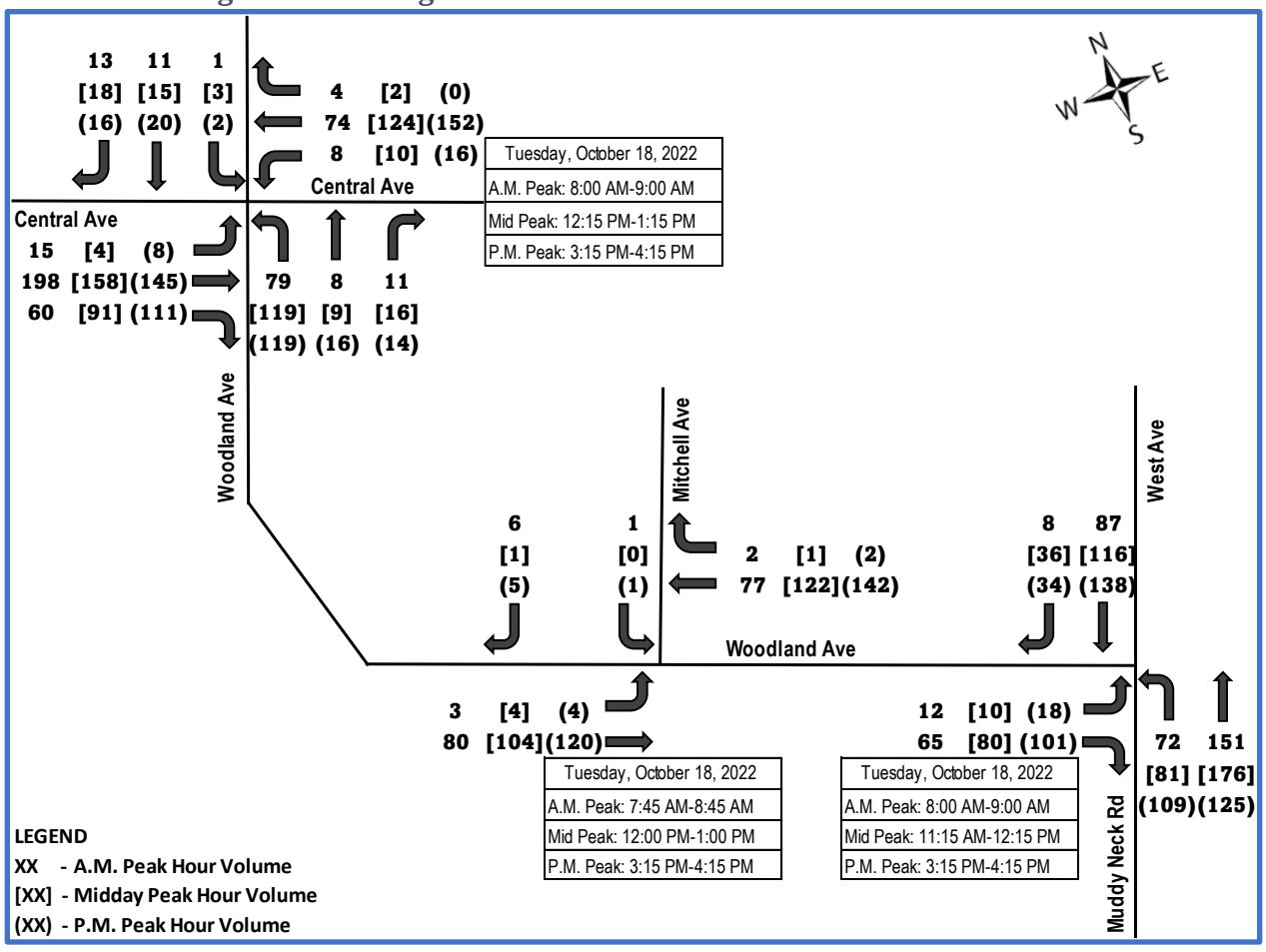
Existing Traffic and Transportation Conditions

Manual vehicle turning movement counts (TMC) with separate counts of heavy vehicles were performed at the three (3) existing intersections identified above. The counts were collected on Tuesday October 18, 2022, from 7:00 AM to 9:00 AM to capture the morning peak hour, and from 3:00 PM to 6:00 PM to capture the evening peak hour. Additionally, counts were performed for an additional three hours from 11:00 A.M. to 2:00 P.M. to ensure eight hours of data is available to perform a signal warrant analysis should the analysis indicate the need.

An automated Traffic Recorder (ATR) with pneumatic tubes was deployed on Woodland Avenue near the proposed site entrance location for the machine classification counts. The ATR counts are included in **Appendix B**

DelDOT Planning seasonal adjustment factor for the state-maintained roads of Central Avenue and Muddy Neck Road / West Avenue is 0.96. Application of this factor would have reduced the turning movement volumes for these roads. The counts were therefore not adjusted in order for the analysis to be more conservative. The combined vehicular volume counts are presented in a continuous flow diagram in **Figure 2** and the raw counts generated from the manual counters are included in **Appendix B**.

Figure 2: Existing Non-Summer Peak Hour Traffic Volumes

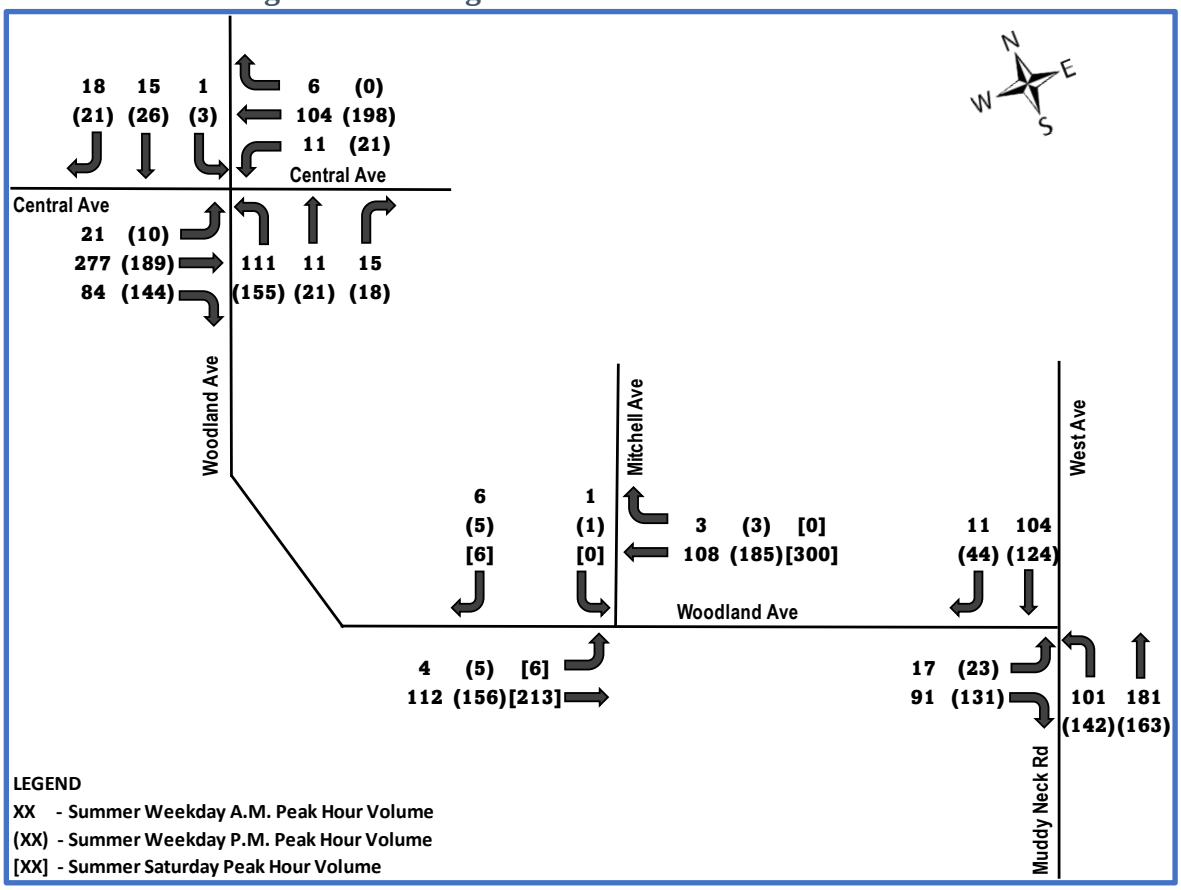


At the request of the Town of Oceanview, summer conditions analysis has been added on outside of the original scope. Summer seasonal adjustment factors (SAF) were derived to apply to the non-summer

weekday turning movements in **Figure 2** to obtain the summer weekday volumes presented in **Figure 3**. For Central Avenue, the summer SAF were derived from Century Engineering Summer data collected at the intersection of Central and Cedar Drive west of the study intersection of Woodland Avenue and Central Avenue. The SAF for Muddy Neck Road was obtained from Century Engineering ATR data south of the study intersection of Woodland Avenue and Muddy Neck Road. No summer data was available for Woodland Avenue. The higher SAF for Central Avenue was therefore conservatively applied to Woodland Avenue Traffic. The summer weekday seasonal adjustment factors are included in Appendix B.

At the intersection of Woodland Avenue and Mitchell Avenue / Proposed Site Entrance, Saturday TMC were performed on March 11, 2023. Summer Saturday SAF were derived from data provided by the Town of Ocean View from a radar speed limit sign on southbound Muddy Neck Road south of the intersection with Woodland Avenue. The summer Saturday SAF was applied to the non-summer Saturday turning movements to obtain the summer Saturday peak hour volumes also presented in **Figure 3**.

Figure 3: Existing Summer Peak Hour Traffic Volumes



Crash Data

Crash data for the three-year period from October 27, 2019, through October 27, 2022, was obtained from DelDOT for Woodland Avenue and the three existing study intersections. Seven (7) total crashes were reported. The Approximate crash locations, number, type and severity of crashes, are presented **Figure 4**.

Figure 4: Crash Map

Majority of the crashes within the study limits, four (4), approximately 57.1%, occurred at intersections; three (3), approximately 42.8% at the intersection of Woodland Avenue and Central Avenue and one (1), approximately 14.3% at the intersection of Woodland Avenue and Mitchell Avenue. No fatal crashes were reported. A summary of the crash statistics for each intersection are presented as follows.

All the crashes at the intersection of Woodland Avenue and Central Avenue were angle crashes. Two involved property damage only and one involved personal injury. The sole crash at the intersection of Woodland Avenue and Mitchell Avenue was a property damage only fixed object crash involving phone boxes at the intersection on either side of Woodland Avenue.

The three non-intersection crashes which occurred on Woodland Avenue were comprised of two property damage crashes and one personal injury crash. One of the property damage crashes was a fixed object crash involving a traffic sign support, and the other was a collision with an animal. The non-intersection injury crash involved collision with a mailbox.

Table 1: Lighting, Weather and Surface Conditions for Crashes

Lighting Conditions		
Description	# of Crashes	% of Total Crashes
Daylight	5	71.4%
Dark-Lighted	1	14.3%
Dark-Not Lighted	1	14.3%
Total	7	100.0%

Weather Conditons		
Description	No. of Crashes	% of Total Crashes
Clear	6	85.7%
Cloudy	0	0.0%
Rain	1	14.3%
Total	7	100.0%

Surface Conditions		
Description	No. of Crashes	% of Total Crashes
Dry	6	85.7%
Wet	1	14.3%
Total	7	100.0%

As shown in **Table 1**, majority of the reported crashes occurred during daylight conditions and under clear weather and dry road surface conditions. Six (6) out of the seven (7) reported crashes, approximately 85.7%, occurred under daylight (5 / 71.4%) and dark but lighted (1 / 14.3%) conditions. It appears therefore that lighting is not a problem associated with crashes within the study limits. Weather and surface conditions do not appear to be to be a problem either.

Table 2: Provided Reasons for Crashes

Primary Reason for Crash		
Description	No. of Crashes	% Crash
Animal in Roadway - Deer	1	14.3%
Failure to Yield Right of Way	1	14.3%
Driver Inattention, Distraction, or Fatigue	2	28.6%
Other Improper Driving	2	28.6%
Unknown	1	14.3%
Total	7	100.0%

The primary contributing factors for crashes within the study limits are summarized in **Table 2**. As provided in the table, "Driver Inattention, Distraction, or Fatigue" and "Other Improper Driving" were reported as the primary reason for majority (2 / 28.6% each) of the crashes. Together these two reasons accounted for four (4) out of the total of the seven (7) reported crashes i.e., approximately 57.2%. All the reasons attributed to the crashes are not susceptible to correction with physical improvements.

Figure 5: Annual Crashes

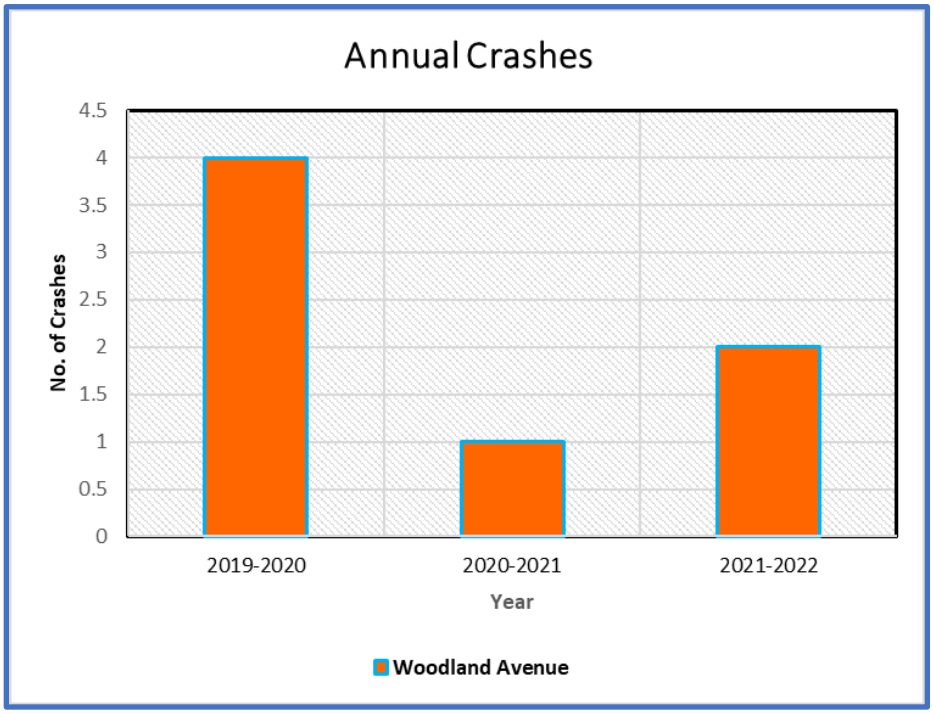


Figure 6: Crashes by Time of Day

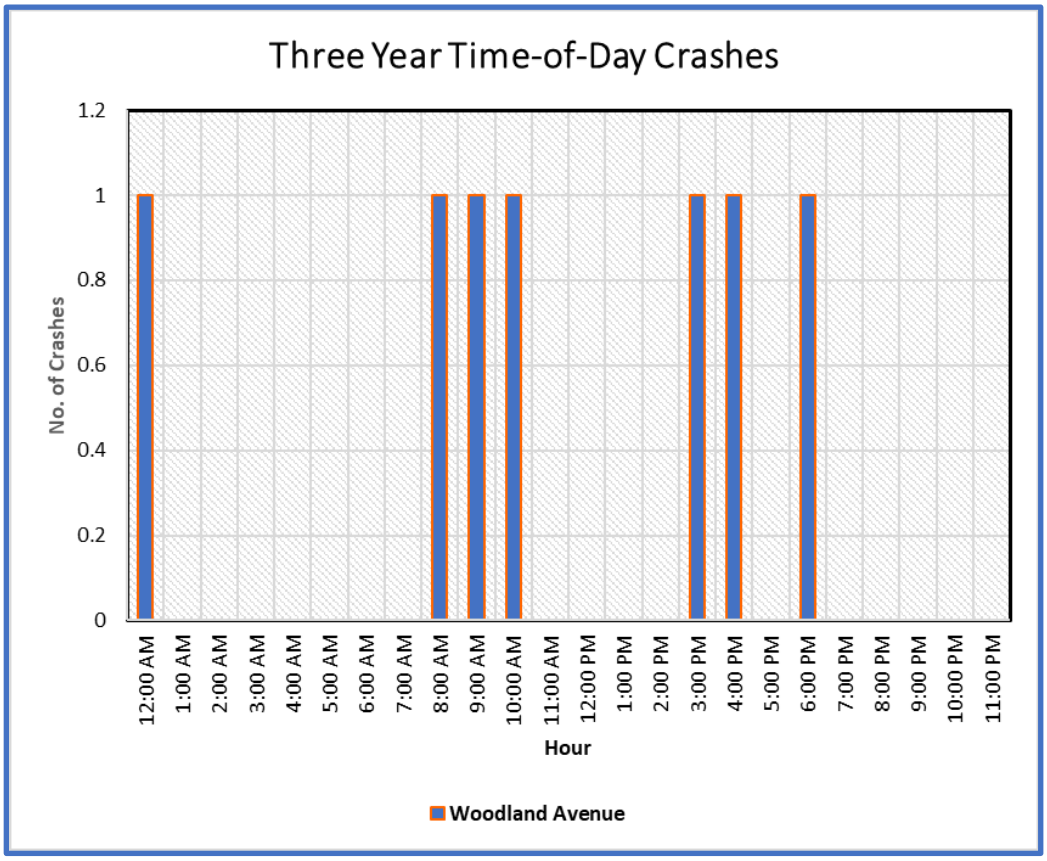


Figure 5 presents the number of crashes per each 12-month period. As shown more than half of the reported crashes for the three-year period (4 / 57.1%) occurred during the 12-month period from October 27, 2019, through October 27, 2020. Only one crash (14.3%) occurred during the 2020-2021, period. The remaining two reported crashes (28.6%) occurred during the 2021-2022 period. It reported crashes are therefore fewer for the most recent two years combined than for the 2019-2020 period, which is a good trend.

Figure 6 presents all three-year crashes by time of day. As shown, most of the crashes occurred during the day between 6:00 A.M. and 6:00 P.M., confirming that lighting does not appear to be a contributing for the reported crashes.

Field Safety Evaluation and Adequacy of Sight Distance

Field evaluation of Woodland Avenue between Muddy Neck Road and Central Avenue did not uncover any apparent safety issues. All the chevron signs in the curve appeared to be in place. All other roadway signing, and pavement markings also appeared to be adequate for the most part. At the all-way stop control (AWSC) intersection of Woodland Avenue and Central Avenue, the westbound Woodland Avenue stop sign is missing the R1-3P "ALL Way" plaque.

Required intersection sight distance for the proposed site entrance was computed using DelDOT's Intersection Sight Distance worksheet included in **Appendix C**. Per the worksheet, required sight distance for left-turn vehicles from the site entrance is 335 feet, and required sight distance for right-turn vehicles is 290 feet. Field measurements at the proposed sight entrance provided available sight distance of greater than 1,000 feet for left-turn vehicles from the proposed site entrance and approximately 435 feet for right-turn vehicles, both greater than the required. It appears therefore that sight distance will be adequate for the proposed site entrance.

Trip Generation

Trips were generated for the proposed site using ITE Trip Generation Manual 11th Edition. The trip generation formulas and ingress / egress distributions based on the Manual are presented in **Table 3**. The generated site trips are presented in **Table 4**.

Table 3: ITE 11th Edition Trip Generation Formulas and Distribution

ITE Land Use Code	ITE Land Use Description	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Weekday ADT		
		Formula/Rate	Ingress / Egress Distibution		Formula/Rate	Ingress / Egress Distibution		Formula/Rate	Ingress / Egress Distibution	
			IN	OUT		IN	OUT		IN	OUT
220	Multifamily Housing (Low-Rise)	A.M. Trips = 0.31 x (Units) + 22.85	24%	76%	P.M. Trips = 0.43 x (Units) + 20.55	63%	37%	Weekday Trips = 6.41 x (Units) + 75.31	50%	50%

ITE Land Use Code	ITE Land Use Description	Saturday Peak Hour		
		Formula/Rate	Ingress / Egress Distibution*	
			IN	OUT
220	Multifamily Housing (Low-Rise)	Sat Peak Trips = 0.41 x (Units)	51%	49%

Table 4: Shore Vista Trip Generation

ITE LUC	Units and Description	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Saturday Peak Hour			Weekday ADT		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
220	104 Multifamily (Low-Rise)	13	42	55	41	24	65	22	21	43	371	371	742

Site Trip Distribution and Trip Assignment

Trip distribution percentages for the subject site is presented in **Figure 7**. The distribution percentages were applied to the generated trips to obtain the assigned trip volumes the subject site at each applicable intersection. Trip assignment for the subject site is presented in **Figure 8**.

Future Traffic

The DelDOT Planning standard 10-year future traffic with 1.5% background growth per annum for determining future auxiliary lane needs was maintained.

1. Traffic Volume Projections

A total growth factor of 1.16 was therefore applied to the 2022 traffic non-summer counts to obtain 2032 FWOP traffic as presented in **Figure 9**. The assigned trip volumes for the subject site were then added to the 2032 FWOP volumes to obtain the FWP volumes at the study intersections as presented in **Figure 10**. Per the Town of Ocean View's additional request, the same procedure has been followed for the derived summer volumes to obtain the 2032 FWOP summer traffic presented in **Figure 11** and FWP summer traffic shown in **Figure 12**.

2. Traffic Analysis

In accordance with the scope of work, the scenarios to be analyzed are:

1. Existing year 2022 conditions without the development.
2. 10-Year projected year 2032 conditions with the development fully built.
3. 10-Year projected year 2032 conditions with the development fully built and any improvements deemed necessary to mitigate any adverse operational effects on Woodland Avenue if necessary.

Per the Town of Ocean View's additional request, the applicable scenarios have also been included for summer traffic analysis.

Figure 7: Trip Distribution

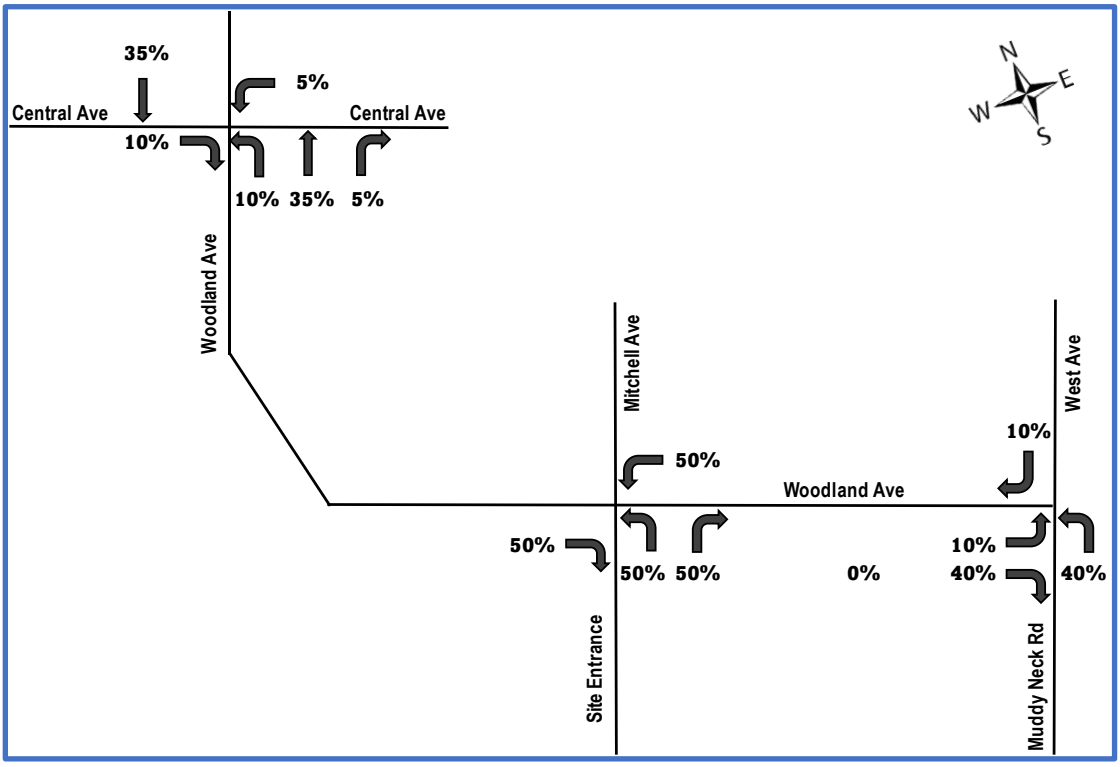


Figure 8: Trip Assignment

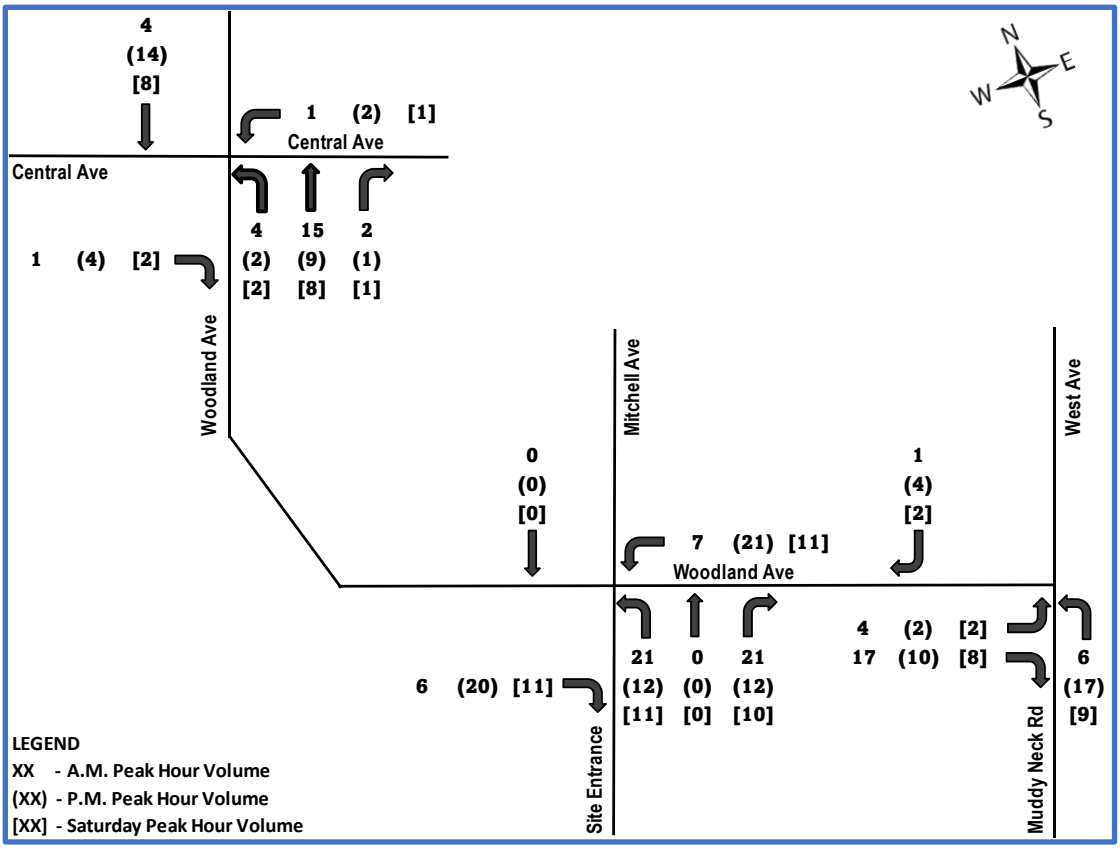


Figure 9: 2032 FWOP Non-Summer Traffic Volumes

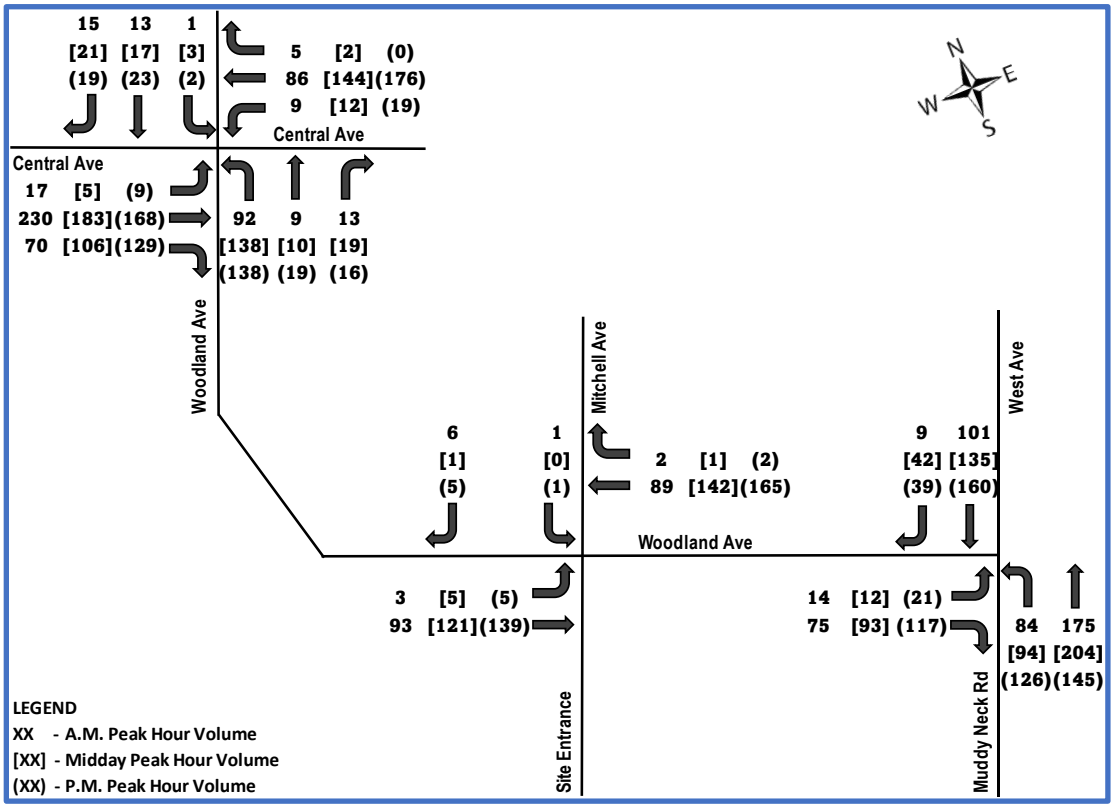


Figure 10: 2032 FWP Non-Summer Traffic Volumes

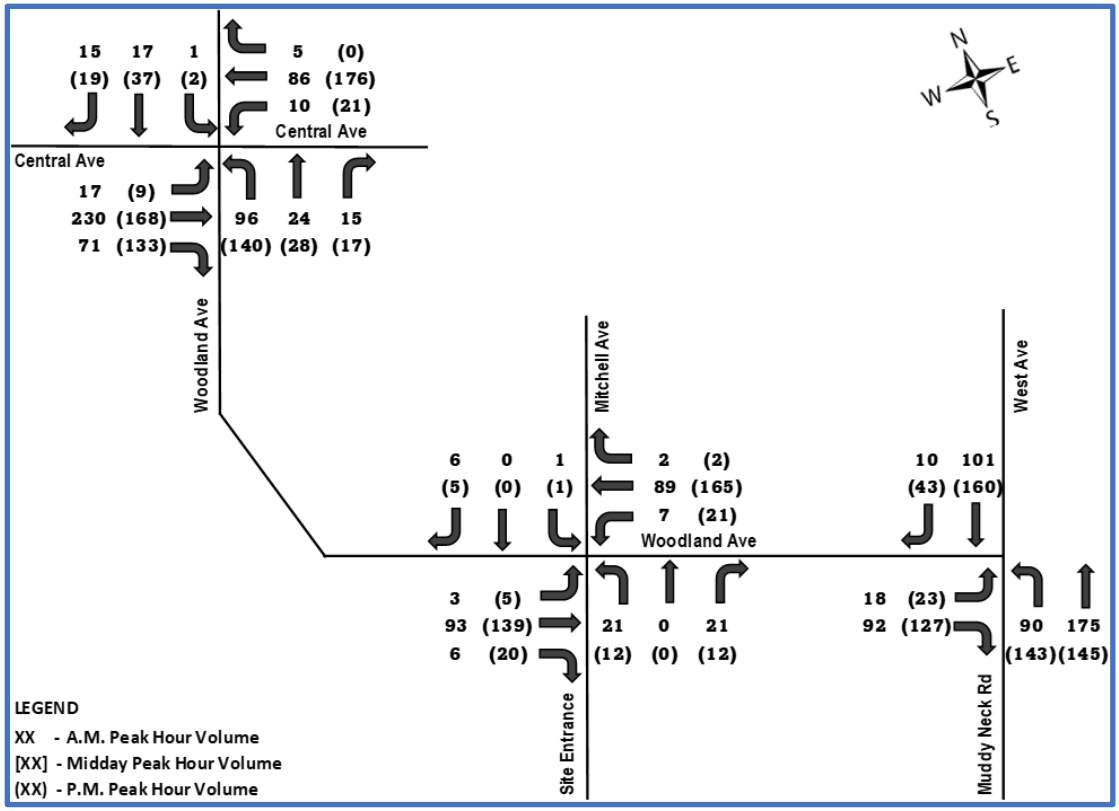


Figure 11: 2032 FWOP Summer Traffic Volumes

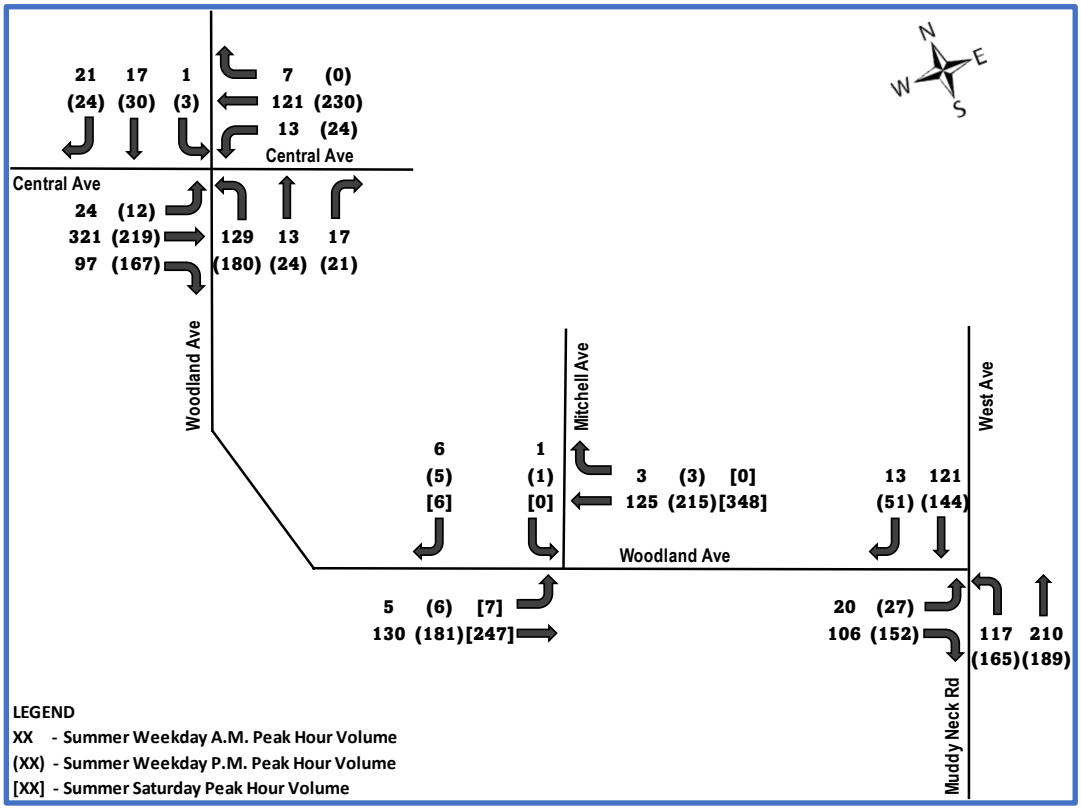
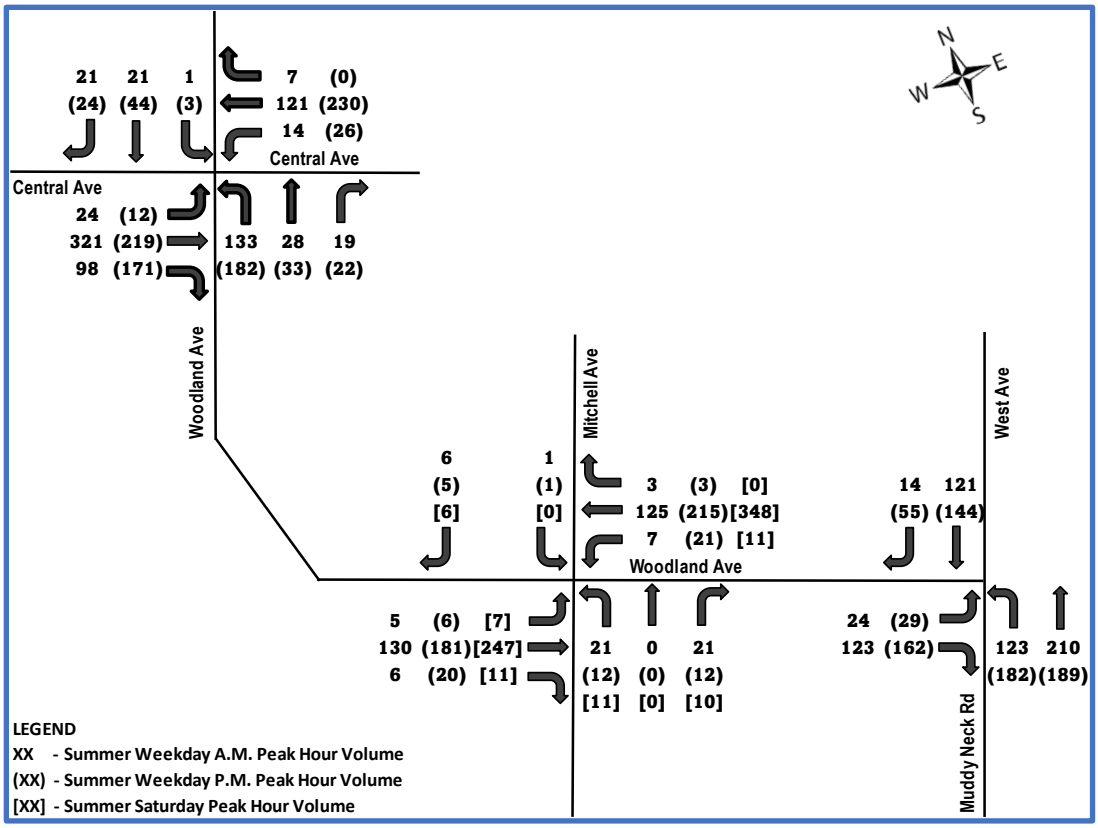


Figure 12: 2032 FWP Summer Traffic Volumes



Capacity Analysis

Capacity analysis was completed for each of the three (3) intersections within the scope of work, using Highway Capacity Software (HCS) 2022 which utilizes the Highway Capacity Manual (HCM) methodology. The capacity analysis was performed for the A.M. and P.M. peak hours for the following scenarios. In accordance with the Town of Ocean View's additional request, the same scenarios have also been analyzed for summer traffic. Additionally at the intersection of Woodland Avenue and the Proposed Site Entrance / Mitchell Avenue, summer Saturday peak hour was also analyzed.

1. Existing (2022)
2. 2032 Future without the Project (FWOP)
3. 2032 Future with the Project (FWP)

The analysis did not indicate a necessity for any improvements, therefore no 2032 full build with improvements scenario was necessary. The capacity analysis results for all locations evaluated are summarized in **Table 5** through **Table 11.** Copies of the HCS 2022 TWSC, and AWSC reports as applicable are included in **Appendix D**. It should be noted that major street approach and overall intersection LOS is not calculated per HCM methodology.

Table 5: Woodland Avenue at Site Entrance Measures of Effectiveness

Control Type	Movement	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance													9.9	A	5	10.9	B	3
	SB L/R Mitchell Ave	8.9	A	0	9.4	A	0	9.0	A	0	9.6	A	0	9.1	A	0	9.8	A	0
	EBL Woodland Ave	7.4	A	0	7.6	A	0	7.5	A	0	7.6	A	0	7.5	A	0	7.6	A	0
	WBL Woodland Ave													7.5	A	0	7.7	A	3

Table 6: Woodland Avenue at Muddy Neck Road Measures of Effectiveness

Control Type	Movement	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NBL Muddy Neck Rd	7.6	A	5	7.8	A	8	7.7	A	5	8.0	A	8	7.7	A	5	8.0	A	10
	EB L/R Woodland Ave	9.8	A	10	10.6	B	15	10.2	B	13	11.3	B	20	10.5	B	15	11.6	B	23

Table 7: Woodland Avenue at Central Avenue Measures of Effectiveness

Control Type	Approach / Intersection	2022 Existing						2032 Future Without Project (FWOP)						2032 Future With Project (FWP)					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
All-Way Stop	NB Central Ave Approach	9.9	A	45	9.7	A	38	11.0	B	58	10.7	B	50	11.3	B	60	11.1	B	53
	SB Central Ave Approach	8.6	A	13	9.3	A	23	8.9	A	15	10.0	A	30	9.1	A	15	10.2	B	30
	EB Woodland Ave Approach	8.0	A	3	8.3	A	5	8.2	A	3	8.7	A	5	8.4	A	5	8.9	A	8
	WB Woodland Ave Approach	9.0	A	15	9.6	A	20	9.4	A	18	10.4	B	28	9.8	A	23	10.7	B	30
	Intersection	9.4	A		9.5	A		10.1	B		10.3	B		10.4	B		10.6	B	

Table 8: Woodland Avenue at Site Entrance Summer Weekday Measures of Effectiveness

Control Type	Movement	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance													10.5	B	5	11.8	B	5
	SB L/R Mitchell Ave	9.2	A	0	9.7	A	0	9.3	A	0	10.0	B	0	9.4	A	0	10.3	B	0
	EBL Woodland Ave	7.5	A	0	7.7	A	0	7.6	A	0	7.8	A	0	7.6	A	0	7.8	A	0
	WBL Woodland Ave													7.6	A	0	7.8	A	3

Table 9: Woodland Avenue at Site Entrance Summer Saturday Measures of Effectiveness

Control Type	Movement	Existing Summer Saturday Peak			Summer 2032 FWOP Saturday			Summer 2032 FWP Saturday Peak		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NB L/R Site Entrance							14.2	B	5
	SB L/R Mitchell Ave	10.4	B	0	10.9	B	0	10.9	B	0
	EBL Woodland Ave	8.0	A	0	8.2	A	0	8.2	A	0
	WBL Woodland Ave							8.0	A	0

Table 10: Woodland Avenue at Muddy Neck Road Summer Weekday Measures of Effectiveness

Control Type	Movement	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
Two-Way Stop	NBL Muddy Neck Rd	7.8	A	8	7.9	A	10	7.9	A	8	8.1	A	13	7.9	A	8	8.1	A	13
	EB L/R Woodland Ave	10.6	B	15	11.3	B	23	11.2	B	20	12.5	B	33	11.6	B	23	12.8	B	33

Table 11: Woodland Avenue at Central Avenue Summer Weekday Measures of Effectiveness

Control Type	Approach / Intersection	Summer 2022						Summer 2032 FWOP						Summer 2032 FWP					
		AM			PM			AM			PM			AM			PM		
		Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)	Delay (Sec)	LOS	95th % Queue (ft)
All-Way Stop	NB Central Ave Approach	13.2	B	88	12.0	B	65	17.0	C	133	14.8	B	95	18.0	C	140	15.6	C	100
	SB Central Ave Approach	9.5	A	18	10.7	B	35	10.2	B	25	12.2	B	50	10.5	B	25	12.6	B	53
	EB Woodland Ave Approach	8.6	A	5	9.0	A	8	9.1	A	5	9.7	A	8	9.4	A	8	10.1	B	10
	WB Woodland Ave Approach	10.2	B	23	11.1	B	33	11.2	B	30	12.6	B	45	11.8	B	38	13.2	B	50
	Intersection	11.2	B		11.3	B		14.2	B		13.3	B		14.8	B		13.8	B	

As shown in **Table 5**, for the non-summer traffic conditions, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.5 seconds and no queue for the A.M. peak hour under FWP traffic conditions. For the P.M. peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.7 seconds and an insignificant queue length of 3 feet per the analysis.

For the summer weekday traffic conditions, as shown in **Table 8**, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.6 seconds and no queue for the A.M. peak hour under FWP traffic conditions. For the P.M. peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.8 seconds and a 95th percentile queue length of 3 feet.

As provided in **Table 9**, under summer Saturday traffic conditions, per the operational analysis, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 8.0 seconds and no queue for the peak hour under FWP traffic conditions.

No mitigation measures are therefore needed at the site entrance per the operational analysis. DelDOT's Auxiliary Lane worksheet was however completed to give further guidance in the event that the Town of Oceanview considers provision of auxiliary lanes preferable at this location.

To account for the highest expected summer roadway traffic, four months of summer average daily traffic (ADT) was factored into the annual average daily traffic (AADT) of 2,516 vehicles per day (VPD) obtained from the ATR. The highest SAF of 1.4, which is for the A.M. peak hour, was applied to four months of the year to obtain an adjusted AADT of 2,851 VPD. This higher AADT was used for the auxiliary lane computations. It should be noted that while DelDOT typically uses the P.M. peak hour when deriving AADT for situations where no AADT exists, the P.M. SAF of 1.3 would have resulted in a lower AADT. This analysis has therefore accounted for the worst-case scenario.

Even with this worst-case scenario, the Auxiliary Lane Worksheet also indicates that no westbound left-turn lane or bypass lane is required on Woodland Avenue at the Site Entrance. The Auxiliary Lane Worksheet however indicates an eastbound 100-foot overall right-turn lane comprising 50 feet storage length and 50 feet taper may be needed. The Auxiliary Lane Worksheets are included in **Appendix C**.

As provided in **Table 6** and **Table 9**, for both the non-summer and summer traffic conditions at the existing two-way stop-controlled intersection of Woodland Avenue and Muddy Neck Road / West Avenue, all relevant traffic movements would operate at LOS B or better for existing and both future conditions with no significant queuing. No mitigation measures are therefore needed.

At the existing all-way stop controlled intersection of Woodland Avenue and Central Avenue, as provided in **Table 7** for the non-summer traffic conditions, all approaches and the intersection as a whole would operate at LOS B or better with no significant queuing for existing and both future conditions. As shown in **Table 10**, under summer weekday traffic conditions without the development (2032 FWOP), the northbound Central Avenue approach would operate at LOS C and B respectively for the A.M. and P.M. peak hours, still satisfactory, with respective average intersection delays of 17.0 and 14.8 seconds per vehicle (sec/veh). The 95th percentile queues would be 133 feet for the A.M. peak hour and 95 feet for the P.M. peak hour. The overall intersection would operate at LOS B for both the A.M. and P.M. peak hours with delays of 14.2 sec/veh and 13.3 sec/veh respectively.

As provided in **Table 10**, under summer build conditions, (Summer 2032 FWP), the northbound Central Avenue approach would continue to operate at satisfactory at LOS C, for both the A.M. and P.M. peak hours with one second or less increases in average delays, 18.0 and 15.6 sec/veh respectively. Increase in

95th percentile queues as a result of the project are also not significant, 140 feet compared to 133 feet for the A.M. FWOP scenario, and 100 feet compared to 95 feet for the P.M. FWOP condition. The overall intersection will continue to operate at satisfactory LOS B with average delay of 14.8 seconds and 13.8 seconds respectively for the A.M. and P.M. peak hours, less than one second increase from 2032 FWOP scenario. No mitigation measures are therefore needed.

Conclusions and Recommendations

1. Safety

1. The reasons attributed to the reported crashes within the three-year period reviewed are not susceptible to correction with physical improvements. The reasons are human behaviors, animal in roadway or unknown.

2. Majority of the reported crashes occurred during daylight conditions and under clear weather and dry road surface conditions. Six (6) out of the seven (7) reported crashes, approximately 85.7%, occurred under daylight (5 / 71.4%) and dark but lighted (1 / 14.3%) conditions. It appears therefore that lighting is not a problem associated with crashes within the study limits.

3. All existing pavement markings, warning and regulatory signing within the study limits appear to be adequate and compliant for the most part, except the R1-3P "ALL Way" plaque is missing for the westbound Woodland Avenue Stop Sign. It is recommended that an R1-3P "ALL Way" plaque be installed beneath the Stop Sign for the westbound Woodland Avenue approach at the intersection with Central Avenue.

4. Per DelDOT's Intersection Sight Distance Worksheet, required sight distance for left-turn vehicles from the site entrance is 335 feet, and required sight distance for right-turn vehicles is 290 feet. Field measurements at the proposed sight entrance provided available sight distance of greater than 1,000 feet for left-turn vehicles from the proposed site entrance and approximately 435 feet for right-turn vehicles. Both are greater than the required. It appears therefore that available sight distance will be adequate for the proposed site entrance.

2. Traffic Operations

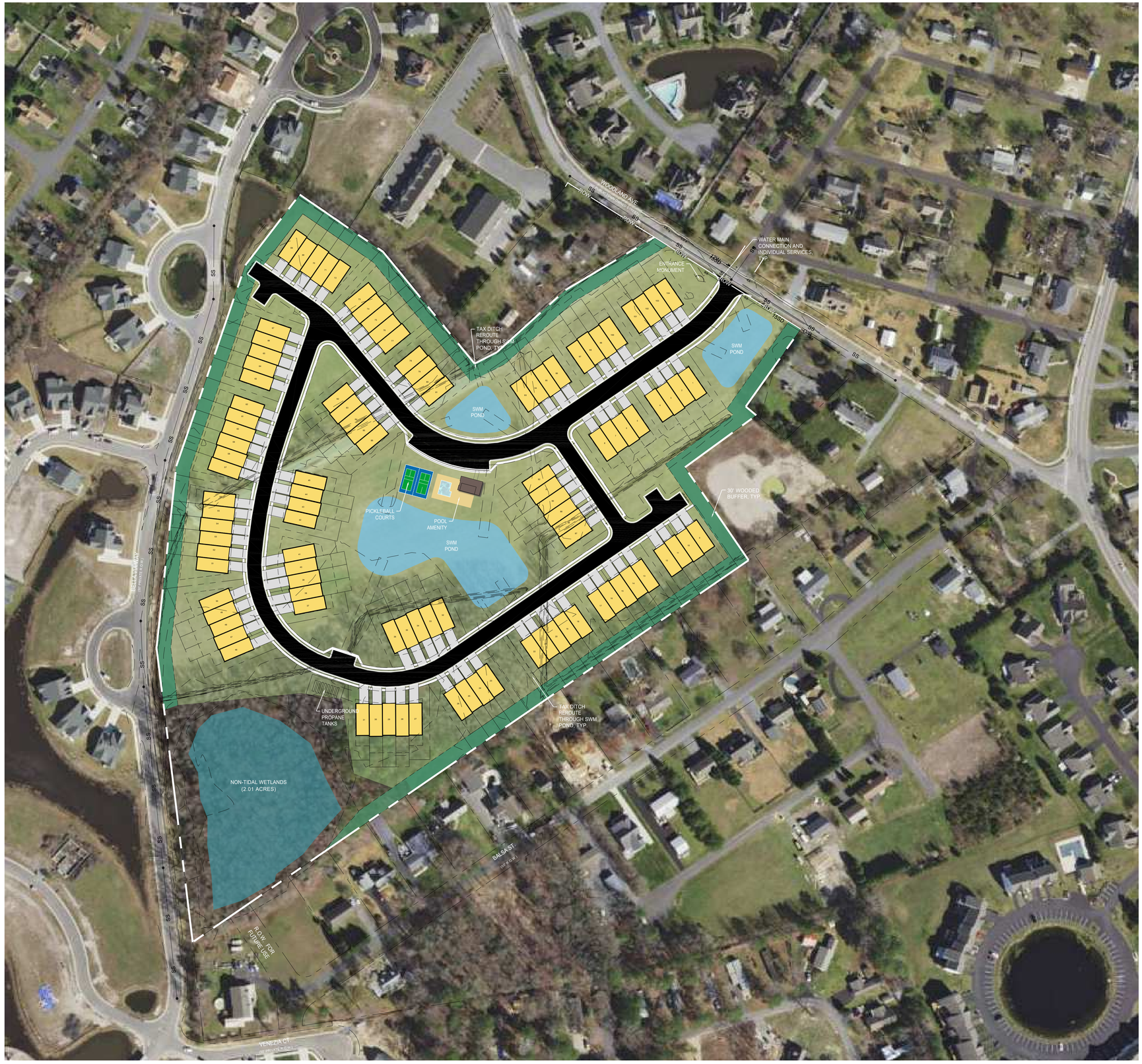
1. At the Proposed Site Entrance intersection with Woodland Avenue, under the highest volume traffic conditions, for summer weekdays, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.6 seconds and no queue for the A.M. peak hour under FWP traffic conditions. For the P.M. peak hour, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 7.8 seconds and a 95th percentile queue length of 3 feet. Under summer Saturday traffic conditions, per the operational analysis, westbound Woodland Avenue left turn would operate at satisfactory LOS A with delay of 8.0 seconds and no queue for the peak hour under FWP traffic conditions. No mitigation measures are therefore needed at the site entrance per the operational analysis.

2. For additional guidance, DelDOT's Auxiliary Lane Worksheet was completed. The worksheet confirms that no left-turn lane or bypass lane is required on westbound Woodland Avenue at the Site Entrance. The worksheet however suggests a 100-foot overall right-turn lane comprising 50 feet storage and 50 feet taper length for eastbound Woodland Avenue at the Site Entrance.

3. At the existing two-way stop-controlled intersection of Woodland Avenue and Muddy Neck Road / West Avenue, for both the non-summer and summer traffic conditions, all relevant traffic movements would operate at satisfactory LOS B or better for existing and both future conditions with no significant queuing per the operational analysis. No mitigation improvements are therefore recommended at this intersection.

4. For both the non-summer and summer traffic conditions, at the existing intersection of all-way stop controlled intersection of Woodland Avenue and Central Avenue, all approaches and the intersection as a whole would operate at satisfactory LOS C or better with no unacceptable delays for existing and both future conditions and with no unacceptable queuing per the operational analysis. No mitigation improvements are therefore recommended at this intersection.

Appendix A: Concept Plan



SITE DATA:

OWNER/APPLICANT:	DRB GROUP 19407 PLANTATION RD UNIT 1 REHOBOTH BEACH, DE 19971 PHONE 302-485-0550 X 3001 CONTACT: JOHN CIAVARRA, DIVISION MANAGER
CIVIL ENGINEER:	GEORGE, MILES & BUHR, LLC 206 WEST MAIN ST SALISBURY, MD 21801 PHONE: 410.742.3115 CONTACT: STEPHEN L. MARSH, P.E.
TAX MAP:	134-12.00-470.00
BOOK / PAGE:	5660/22
EXISTING ZONING:	TOWN OF OCEAN VIEW R-3
ANNEXATION ORDINANCE:	387
ANNEXATION PLAT:	BOOK 378 PAGE 34
TOTAL SITE AREA:	±27.85 ACRES
DNREC WETLANDS:	N/A
FEDERAL WETLANDS:	±2.01 ACRES
GROSS DEVELOPED AREA:	±11.63 ACRES
UNITS ALLOWED:	167 UNITS (6/ACRE)
UNITS PROPOSED:	104 UNITS (3.7/ACRE)
OPEN SPACE REQUIRED:	±8.35 ACRES (30%)
OPEN SPACE PROVIDED:	±16.22 ACRES (58%) NOTE: THIS ACREAGE MAY VARY AFTER FINAL SITE ENGINEERING
MIN. GREEN SPACE REQUIRED:	±13.92 ACRES (50%)
GREEN SPACE PROVIDED:	±17.94 ACRES (64%) NOTE: THIS ACREAGE MAY VARY AFTER FINAL SITE ENGINEERING
EXISTING WOODED AREA:	±8.53 ACRES
WOODED AREA TO REMAIN:	±4.59 ACRES NOTE: THIS ACREAGE MAY VARY AFTER FINAL SITE ENGINEERING
UNIT COUNT DWELLING UNITS PROPOSED: REQUIRED PARKING: (2/UNIT PLUS 10%) PROVIDED PARKING:	 104 229 229 (INCLUDES ON-STREET SPACES)
BUILDING SETBACKS FROM TRACT:	
FRONT:	30'
SIDE:	25'
REAR:	30'
BUILDING SETBACKS FROM LOT LINES:	
FRONT:	25'
SIDE:	0' INTERIOR; 15' END
REAR:	30'
BUILDING SEPARATION:	25'
MAX. LOT COVERAGE:	55%
MAX BUILDING HEIGHT:	42'
MIN. LIVABLE FLOOR AREA/D.U.:	1,500 SF.
AMENITIES:	POOL, CABANA, PICKLEBALL COURTS, GAMES LAWNS FOR ACTIVE AND PASSIVE RECREATION
FLOOD ZONE:	FLOOD INFORMATION: SPECIAL FLOOD HAZARD AREA ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER FEMA MAP 10005C0511K DATED MARCH 16, 2015.
SOURCE WATER PROTECTION:	THIS PARCEL IS NOT LOCATED IN A WELLHEAD PROTECTION AREA. THIS PARCEL IS LOCATED IN AN AREA OF "FAIR" GROUNDWATER RECHARGE POTENTIAL.
UTILITIES:	
CENTRAL WATER:	TOWN OF OCEAN VIEW
PUBLIC SEWER:	SUSSEX COUNTY

0 50 100 200 300

SCALE: 1" = 100'

PRINTS ISSUED FOR:
REVIEW

NO.	REVISIONS	DATE

GEORGE, MILES & BUHR, LLC
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SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

SHORE VISTA
OCEAN VIEW, DELAWARE

PRELIMINARY DEVELOPMENT PLAN RENDERING

SCALE	1" = 100'
DESIGN BY	RLM
DRAWN BY	RLM
CHECKED BY	
GMB FILE	210281
DATE	DEC 2022

SHEET NO.
PSP4.0

PLOT CODE
PEN-RED 008 INCHES (.19mm)
PEN-YELLOW 007 INCHES (.18mm)
PEN-GREEN 010 INCHES (.25mm)
PEN-BLUE 014 INCHES (.35mm)
PEN-MAGENTA 020 INCHES (.50mm)
PEN-WHITE 039 INCHES (1.00mm)

G:\Projects\2021\210281 Browning Farm Due Diligence\Drawings\Working Sets\Preliminary Site Plan\PSP4.0_1 PRELIMINARY DEVELOPMENT PLAN RENDERING.dwg, ----, Kaja Kelley

Appendix B: Traffic Counts

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/15/2022	NB

Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	8
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	4	1	0	2	0	0	0	0	0	0	0	0	7
06:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
07:00	0	36	8	0	1	0	0	0	0	0	0	0	0	45
08:00	0	43	8	0	1	0	0	0	0	0	0	0	0	52
09:00	1	73	11	0	1	0	0	1	0	0	0	0	0	87
10:00	0	90	13	1	1	0	0	0	0	0	0	0	0	105
11:00	2	80	14	1	2	0	0	1	0	0	0	0	0	100
12:00 PM	2	88	22	0	1	0	0	3	0	0	0	0	0	116
01:00	1	65	14	0	3	0	0	0	0	0	0	0	0	83
02:00	3	83	13	0	1	0	0	0	0	0	0	0	0	100
03:00	3	67	8	0	1	0	0	1	0	0	0	0	0	80
04:00	0	94	12	0	3	0	0	0	0	0	0	0	0	109
05:00	0	76	11	0	1	0	0	0	0	0	0	0	0	88
06:00	0	59	10	0	1	0	0	0	0	0	0	0	0	70
07:00	0	40	5	0	1	0	0	0	0	0	0	0	0	46
08:00	0	35	5	0	2	0	0	0	0	0	0	0	0	42
09:00	0	11	7	0	0	0	0	0	0	0	0	0	0	18
10:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
11:00	0	10	0	0	1	0	0	0	0	0	0	0	0	11
Total	12	991	164	2	24	0	0	6	0	0	0	0	0	1,199
Percent	1%	83%	14%	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	100%

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/16/2022	NB

Time	Motorcycle	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	8
01:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	4	3	0	0	0	0	0	0	0	0	0	0	7
06:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
07:00	0	25	5	0	0	0	0	0	0	0	0	0	0	30
08:00	0	59	4	0	1	0	0	0	0	0	0	0	0	64
09:00	0	54	8	0	1	0	0	0	0	0	0	0	0	63
10:00	0	76	15	0	2	0	0	0	0	0	0	0	0	93
11:00	0	106	18	0	2	0	0	0	0	0	0	0	0	126
12:00 PM	1	97	16	0	1	0	0	0	0	0	0	0	0	115
01:00	0	71	11	0	3	0	0	0	0	0	0	0	0	85
02:00	0	62	10	0	2	0	0	0	0	0	0	0	0	74
03:00	0	57	10	1	3	0	0	0	0	0	0	0	0	71
04:00	3	61	12	0	0	0	0	0	0	0	0	0	0	76
05:00	2	62	6	0	0	0	0	0	0	0	0	0	0	70
06:00	1	59	5	0	1	0	0	0	0	0	0	0	0	66
07:00	0	22	1	0	0	0	0	0	0	0	0	0	0	23
08:00	0	20	2	0	0	0	0	0	0	0	0	0	0	22
09:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
10:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
11:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Total	7	869	131	1	17	0	0	0	0	0	0	0	0	1,025
Percent	1%	85%	13%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/17/2022	NB

Time	Motorcycle	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
05:00	0	4	3	0	1	0	0	0	0	0	0	0	0	8
06:00	0	29	3	3	5	2	0	0	0	0	0	0	0	42
07:00	0	39	14	0	1	0	0	0	0	0	0	0	0	54
08:00	0	58	22	1	3	0	0	1	0	0	0	0	0	85
09:00	0	74	10	0	2	0	1	1	0	0	0	0	0	88
10:00	0	56	22	0	4	0	0	0	0	0	0	0	0	82
11:00	0	93	25	0	5	0	0	0	0	0	0	0	0	123
12:00 PM	0	94	13	0	1	0	0	0	0	0	0	0	0	108
01:00	4	93	26	0	2	0	0	1	0	0	0	0	0	126
02:00	0	100	20	1	3	0	0	0	0	0	0	0	0	124
03:00	1	84	23	2	3	0	0	0	0	0	0	0	0	113
04:00	0	84	23	0	6	0	0	0	0	0	0	0	0	113
05:00	0	78	17	0	1	0	0	0	0	0	0	0	0	96
06:00	2	57	12	0	3	0	0	0	0	0	0	0	0	74
07:00	0	38	2	1	1	0	0	0	0	0	0	0	0	42
08:00	0	16	6	0	0	0	0	0	0	0	0	0	0	22
09:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
10:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
11:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
Total	7	1,016	247	8	42	2	1	3	0	0	0	0	0	1,326
Percent	1%	77%	19%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/18/2022	NB

Time	Motorcycle	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
05:00	0	5	4	0	0	0	0	0	0	0	0	0	0	9
06:00	0	30	3	3	2	0	0	0	0	0	0	0	0	38
07:00	0	40	18	0	2	0	0	0	0	0	0	0	0	60
08:00	0	64	17	2	3	0	0	0	0	0	0	0	0	86
09:00	0	73	16	0	3	0	0	1	0	0	0	0	0	93
10:00	0	76	15	0	1	0	0	0	0	0	0	0	0	92
11:00	0	89	12	1	3	0	0	0	0	0	0	0	0	105
12:00 PM	1	101	19	0	3	1	0	0	0	0	0	0	0	125
01:00	0	75	13	0	4	1	0	0	0	0	0	0	0	93
02:00	1	110	23	1	3	0	0	0	0	0	0	0	0	138
03:00	0	93	30	2	2	1	0	0	0	0	0	0	0	128
04:00	1	94	14	0	0	0	0	0	0	0	0	0	0	109
05:00	0	85	13	0	1	0	0	0	0	0	0	0	0	99
06:00	1	42	9	0	1	0	0	0	0	0	0	0	0	53
07:00	0	26	2	0	1	0	0	0	0	0	0	0	0	29
08:00	0	24	3	0	3	0	0	0	0	0	0	0	0	30
09:00	1	14	0	0	0	0	0	0	0	0	0	0	0	15
10:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
11:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	5	1,064	216	9	32	3	0	1	0	0	0	0	0	1,330
Percent	0%	80%	16%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/19/2022	NB

Time	Motorcycle	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
05:00	0	4	5	0	0	0	0	0	0	0	0	0	0	9
06:00	0	23	6	3	1	0	0	0	0	0	0	0	0	33
07:00	0	40	6	0	0	0	0	1	0	0	0	0	0	47
08:00	0	72	14	2	1	1	0	0	0	0	0	0	0	90
09:00	0	79	16	0	2	0	0	1	0	0	0	0	0	98
10:00	0	80	17	0	5	2	0	0	0	0	0	0	0	104
11:00	0	88	20	1	4	1	0	1	0	0	0	0	0	115
12:00 PM	0	109	20	1	4	2	0	0	0	0	0	0	0	136
01:00	2	96	23	0	3	0	0	0	0	0	0	0	0	124
02:00	2	75	18	1	3	2	0	2	0	0	0	0	0	103
03:00	0	98	24	2	1	0	0	3	0	0	0	0	0	128
04:00	0	80	14	0	1	0	0	0	0	0	0	0	0	95
05:00	0	90	17	0	3	0	0	0	0	0	0	0	0	110
06:00	0	69	7	0	1	0	0	0	0	0	0	0	0	77
07:00	0	29	2	0	0	0	0	0	0	0	0	0	0	31
08:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
09:00	0	13	1	0	1	0	0	0	0	0	0	0	0	15
10:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
11:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
Total	4	1,095	215	10	31	8	0	8	0	0	0	0	0	1,371
Percent	0%	80%	16%	1%	2%	1%	0%	1%	0%	0%	0%	0%	0%	100%

Station: Wood
County: Sussex
Road: Woodland Avenue

START	10/20/2022	NB

Time	Motorcycle	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	6	5	0	0	0	0	0	0	0	0	0	0	11
06:00	0	25	8	3	3	0	0	0	0	0	0	0	0	39
07:00	0	33	15	0	1	0	0	0	0	0	0	0	0	49
08:00	0	79	15	1	1	0	0	0	0	0	0	0	0	96
09:00	0	73	28	1	3	0	0	0	0	0	0	0	0	105
10:00	0	89	18	1	1	0	0	0	0	0	0	0	0	109
11:00	1	90	25	0	3	1	0	0	0	0	0	0	0	120
12:00 PM	0	92	22	0	9	0	0	0	0	0	0	0	0	123
01:00	1	111	14	0	5	0	0	2	0	0	0	0	0	133
02:00	0	103	21	1	9	0	0	0	0	0	0	0	0	134
03:00	1	95	24	2	4	0	0	3	0	0	0	0	0	129
04:00	0	91	18	0	3	0	0	0	0	0	0	0	0	112
05:00	0	68	11	1	1	0	0	0	0	0	0	0	0	81
06:00	2	62	7	0	0	0	0	0	0	0	0	0	0	71
07:00	0	34	7	0	0	0	0	0	0	0	0	0	0	41
08:00	0	25	2	0	1	0	0	0	0	0	0	0	0	28
09:00	0	13	1	0	1	0	0	0	0	0	0	0	0	15
10:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
11:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
Total	5	1,101	244	10	46	1	0	5	0	0	0	0	0	1,412
Percent	0%	78%	17%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	100%

Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

Intersection: WoodlandAve at MitchellAve
Counted By: Kyle Newcomb
Date: 10/18/2022
Weather: Clear 65

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 1

Groups Printed- Cars - Trucks - Bikes

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	15
07:15 AM	0	9	0	0	9	0	0	1	0	1	0	15	0	0	15	0	0	0	0	0	25
07:30 AM	0	13	0	0	13	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	26
07:45 AM	0	22	0	0	22	0	0	1	0	1	0	20	1	0	21	0	0	0	0	0	44
Total	0	49	0	0	49	0	0	2	0	2	0	58	1	0	59	0	0	0	0	0	110
08:00 AM	1	9	0	0	10	1	0	0	0	1	0	18	0	0	18	0	0	0	0	0	29
08:15 AM	0	20	0	0	20	0	0	1	0	1	0	22	1	0	23	0	0	0	0	0	44
08:30 AM	2	29	0	0	31	0	0	4	0	4	0	17	0	0	17	0	0	0	0	0	52
08:45 AM	2	14	0	0	16	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	40
Total	5	72	0	0	77	1	0	5	0	6	0	81	1	0	82	0	0	0	0	0	165
*** BREAK ***																					
11:00 AM	0	22	0	0	22	0	0	0	0	0	0	22	1	0	23	0	0	0	0	0	45
11:15 AM	0	30	0	0	30	1	0	0	0	1	0	25	0	0	25	0	0	0	0	0	56
11:30 AM	2	26	0	0	28	1	0	2	0	3	0	23	0	0	23	0	0	0	0	0	54
11:45 AM	1	22	0	0	23	0	0	2	0	2	0	29	0	0	29	0	0	0	0	0	54
Total	3	100	0	0	103	2	0	4	0	6	0	99	1	0	100	0	0	0	0	0	209
12:00 PM	0	27	0	0	27	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	52
12:15 PM	0	26	0	0	26	0	0	0	0	0	0	35	1	0	36	0	0	0	0	0	62
12:30 PM	1	17	0	0	18	0	0	1	0	1	0	36	0	0	36	0	0	0	0	0	55
12:45 PM	3	34	0	0	37	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	63
Total	4	104	0	0	108	0	0	1	0	1	0	122	1	0	123	0	0	0	0	0	232
01:00 PM	1	27	0	0	28	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	46
01:15 PM	0	35	0	0	35	1	0	2	0	3	0	25	0	0	25	0	0	0	0	0	63
01:30 PM	0	27	0	0	27	1	0	0	0	1	0	27	0	0	27	0	0	0	0	0	55
01:45 PM	1	21	0	0	22	0	0	1	0	1	0	18	0	0	18	0	0	0	0	0	41
Total	2	110	0	0	112	2	0	3	0	5	0	88	0	0	88	0	0	0	0	0	205
02:00 PM	0	26	0	0	26	0	0	0	0	0	0	43	0	0	43	0	0	0	0	0	69
*** BREAK ***																					
Total	0	26	0	0	26	0	0	0	0	0	0	43	0	0	43	0	0	0	0	0	69
03:00 PM	0	39	0	0	39	0	0	1	0	1	0	22	0	0	22	0	0	0	0	0	62
03:15 PM	1	25	0	0	26	0	0	2	0	2	0	39	0	0	39	0	0	0	0	0	67
03:30 PM	1	29	0	0	30	1	0	1	0	2	0	28	2	0	30	0	0	0	0	0	62
03:45 PM	1	36	0	0	37	0	0	2	0	2	0	42	0	0	42	0	0	0	0	0	81
Total	3	129	0	0	132	1	0	6	0	7	0	131	2	0	133	0	0	0	0	0	272
04:00 PM	1	30	0	0	31	0	0	0	0	0	0	33	0	0	33	0	0	0	0	0	64
04:15 PM	1	25	0	0	26	0	0	1	0	1	0	26	0	0	26	0	0	0	0	0	53
04:30 PM	2	31	0	0	33	0	0	2	0	2	0	26	0	0	26	0	0	0	0	0	61
04:45 PM	0	27	0	0	27	1	0	1	0	2	0	22	0	0	22	0	0	0	0	0	51
Total	4	113	0	0	117	1	0	4	0	5	0	107	0	0	107	0	0	0	0	0	229
05:00 PM	0	27	0	0	27	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	57
05:15 PM	0	24	0	0	24	1	0	2	0	3	0	31	0	0	31	0	0	0	0	0	58
05:30 PM	0	24	0	0	24	0	0	0	0	0	0	27	0	0	27	0	0	0	0	0	51
05:45 PM	4	28	0	0	32	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	46
Total	4	103	0	0	107	1	0	2	0	3	0	102	0	0	102	0	0	0	0	0	212

Century Engineering, LLC. A Kleinfelder Company

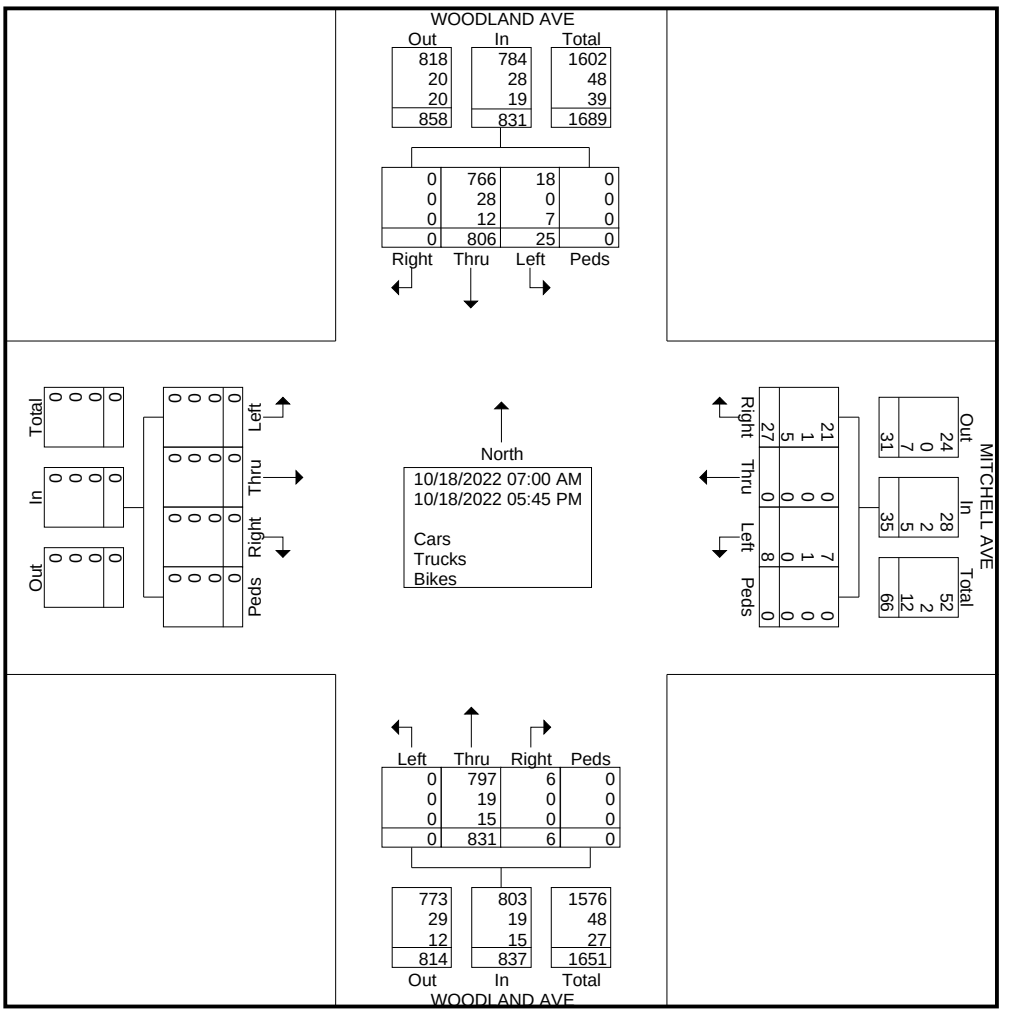
550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 2

Groups Printed- Cars - Trucks - Bikes

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	25	806	0	0	831	8	0	27	0	35	0	831	6	0	837	0	0	0	0	0	1703
Apprch %	3	97	0	0		22.9	0	77.1	0		0	99.3	0.7	0		0	0	0	0		
Total %	1.5	47.3	0	0	48.8	0.5	0	1.6	0	2.1	0	48.8	0.4	0	49.1	0	0	0	0	0	
Cars	18	766	0	0	784	7	0	21	0	28	0	797	6	0	803	0	0	0	0	0	1615
% Cars	72	95	0	0	94.3	87.5	0	77.8	0	80	0	95.9	100	0	95.9	0	0	0	0	0	94.8
Trucks	0	28	0	0	28	1	0	1	0	2	0	19	0	0	19	0	0	0	0	0	49
% Trucks	0	3.5	0	0	3.4	12.5	0	3.7	0	5.7	0	2.3	0	0	2.3	0	0	0	0	0	2.9
Bikes	7	12	0	0	19	0	0	5	0	5	0	15	0	0	15	0	0	0	0	0	39
% Bikes	28	1.5	0	0	2.3	0	0	18.5	0	14.3	0	1.8	0	0	1.8	0	0	0	0	0	2.3



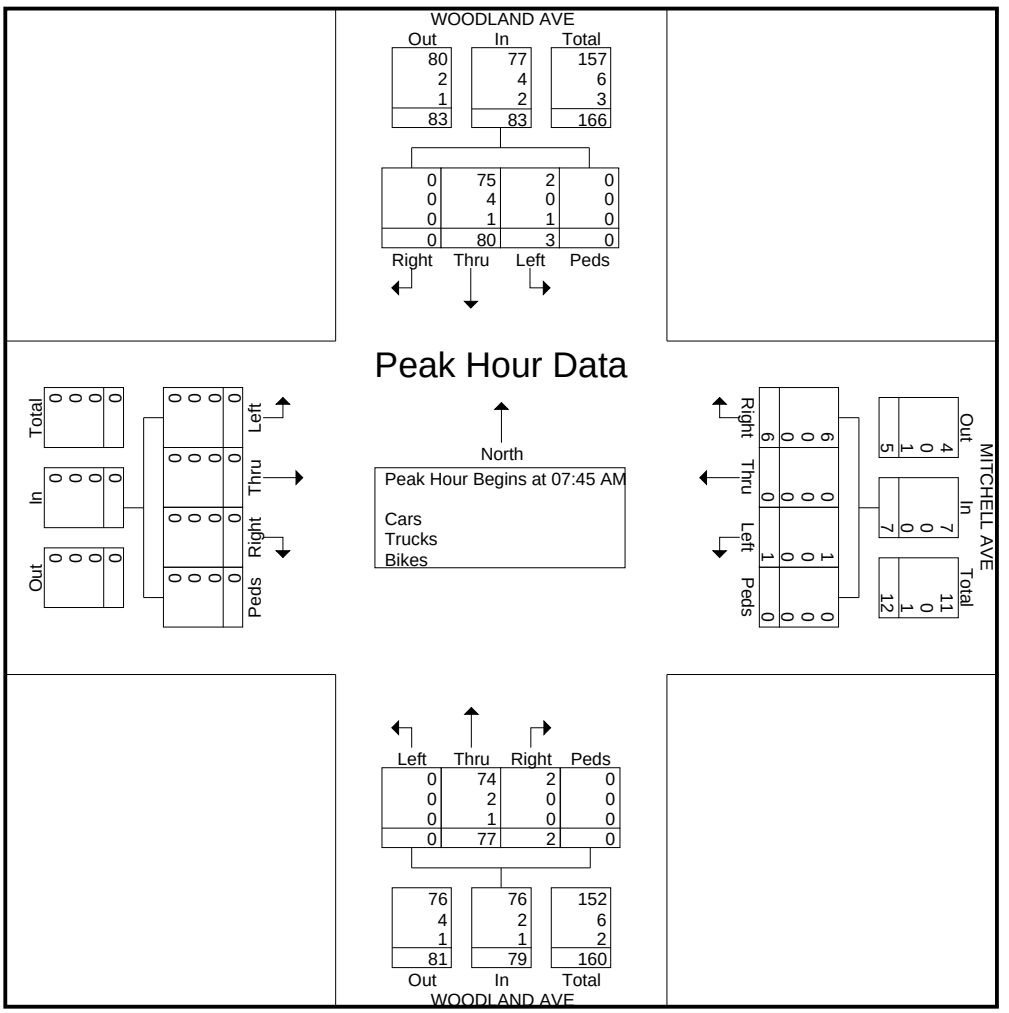
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 3

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	22	0	0	22	0	0	1	0	1	0	20	**1**	0	21	0	0	0	0	0	44
08:00 AM	1	9	0	0	10	**1**	0	0	0	1	0	18	0	0	18	0	0	0	0	0	29
08:15 AM	0	20	0	0	20	0	0	1	0	1	0	**22**	1	0	**23**	0	0	0	0	0	44
08:30 AM	**2**	**29**	0	0	**31**	0	0	**4**	0	**4**	0	17	0	0	17	0	0	0	0	0	**52**
Total Volume	3	80	0	0	83	1	0	6	0	7	0	77	2	0	79	0	0	0	0	0	169
% App. Total	3.6	96.4	0	0		14.3	0	85.7	0		0	97.5	2.5	0		0	0	0	0		
PHF	.375	.690	.000	.000	.669	.250	.000	.375	.000	.438	.000	.875	.500	.000	.859	.000	.000	.000	.000	.000	.813
Cars	2	75	0	0	77	1	0	6	0	7	0	74	2	0	76	0	0	0	0	0	160
% Cars	66.7	93.8	0	0	92.8	100	0	100	0	100	0	96.1	100	0	96.2	0	0	0	0	0	94.7
Trucks	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Trucks	0	5.0	0	0	4.8	0	0	0	0	0	0	2.6	0	0	2.5	0	0	0	0	0	3.6
Bikes	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% Bikes	33.3	1.3	0	0	2.4	0	0	0	0	0	0	1.3	0	0	1.3	0	0	0	0	0	1.8



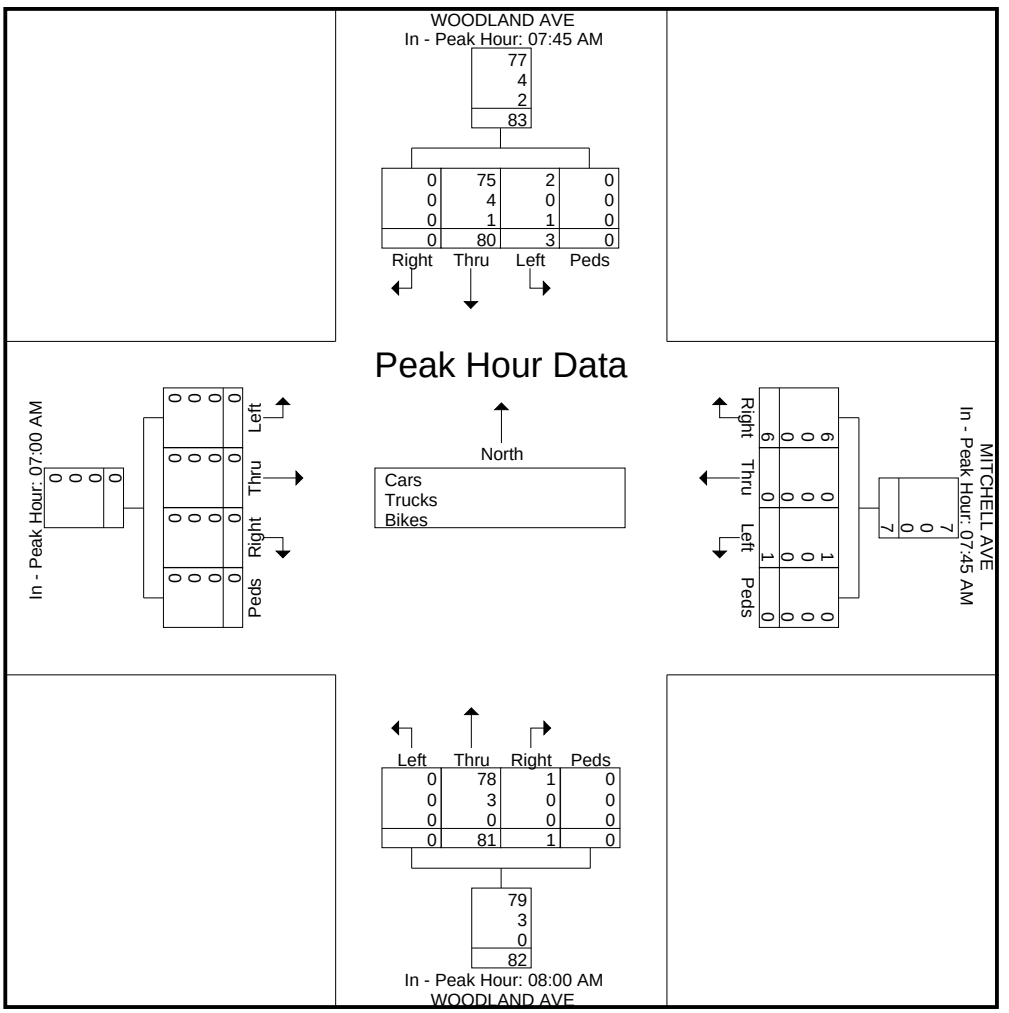
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 4

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:45 AM					07:45 AM					08:00 AM					07:00 AM					
+0 mins.	0	22	0	0	22	0	0	1	0	1	0	18	0	0	18	0	0	0	0	0	
+15 mins.	1	9	0	0	10	**1**	0	0	0	1	0	22	**1**	0	23	0	0	0	0	0	
+30 mins.	0	20	0	0	20	0	0	1	0	1	0	17	0	0	17	0	0	0	0	0	
+45 mins.	**2**	**29**	0	0	**31**	0	0	**4**	0	**4**	0	**24**	0	0	**24**	0	0	0	0	0	
Total Volume	3	80	0	0	83	1	0	6	0	7	0	81	1	0	82	0	0	0	0	0	
% App. Total	3.6	96.4	0	0		14.3	0	85.7	0		0	98.8	1.2	0		0	0	0	0		
PHF	.375	.690	.000	.000	.669	.250	.000	.375	.000	.438	.000	.844	.250	.000	.854	.000	.000	.000	.000	.000	
Cars	2	75	0	0	77	1	0	6	0	7	0	78	1	0	79	0	0	0	0	0	
% Cars	66.7	93.8	0	0	92.8	100	0	100	0	100	0	96.3	100	0	96.3	0	0	0	0	0	
Trucks	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	
% Trucks	0	5	0	0	4.8	0	0	0	0	0	0	3.7	0	0	3.7	0	0	0	0	0	
Bikes	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bikes	33.3	1.2	0	0	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



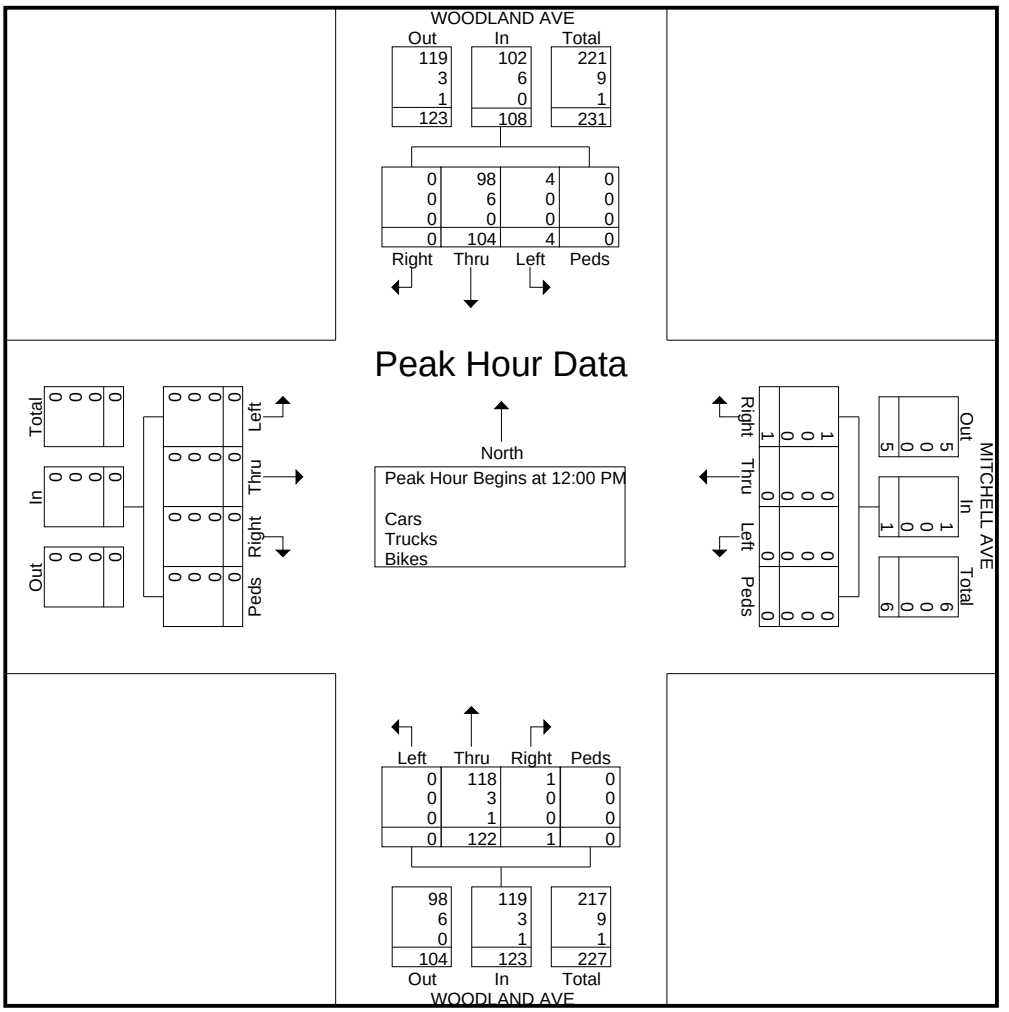
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 5

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	27	0	0	27	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	52
12:15 PM	0	26	0	0	26	0	0	0	0	0	0	35	**1**	0	**36**	0	0	0	0	0	62
12:30 PM	1	17	0	0	18	0	0	**1**	0	**1**	0	**36**	0	0	36	0	0	0	0	0	55
12:45 PM	**3**	**34**	0	0	**37**	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	**63**
Total Volume	4	104	0	0	108	0	0	1	0	1	0	122	1	0	123	0	0	0	0	0	232
% App. Total	3.7	96.3	0	0		0	0	100	0		0	99.2	0.8	0		0	0	0	0		
PHF	.333	.765	.000	.000	.730	.000	.000	.250	.000	.250	.000	.847	.250	.000	.854	.000	.000	.000	.000	.000	.921
Cars	4	98	0	0	102	0	0	1	0	1	0	118	1	0	119	0	0	0	0	0	222
% Cars	100	94.2	0	0	94.4	0	0	100	0	100	0	96.7	100	0	96.7	0	0	0	0	0	95.7
Trucks	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	9
% Trucks	0	5.8	0	0	5.6	0	0	0	0	0	0	2.5	0	0	2.4	0	0	0	0	0	3.9
Bikes	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.8	0	0	0	0	0	0.4



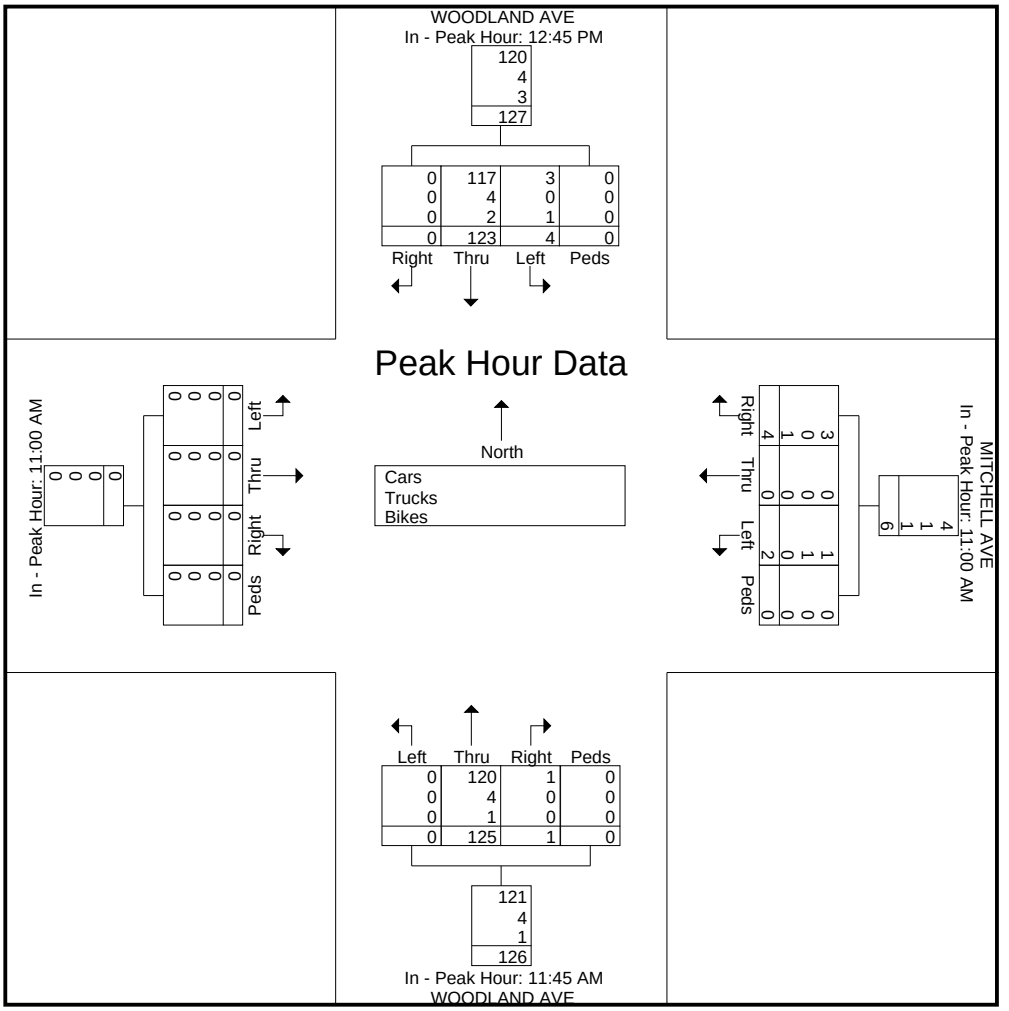
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 6

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	12:45 PM					11:00 AM					11:45 AM					11:00 AM					
+0 mins.	**3**	34	0	0	**37**	0	0	0	0	0	0	29	0	0	29	0	0	0	0	0	
+15 mins.	1	27	0	0	28	**1**	0	0	0	1	0	25	0	0	25	0	0	0	0	0	
+30 mins.	0	**35**	0	0	35	1	0	**2**	0	**3**	0	35	**1**	0	**36**	0	0	0	0	0	
+45 mins.	0	27	0	0	27	0	0	2	0	2	0	**36**	0	0	36	0	0	0	0	0	
Total Volume	4	123	0	0	127	2	0	4	0	6	0	125	1	0	126	0	0	0	0	0	
% App. Total	3.1	96.9	0	0		33.3	0	66.7	0		0	99.2	0.8	0		0	0	0	0		
PHF	.333	.879	.000	.000	.858	.500	.000	.500	.000	.500	.000	.868	.250	.000	.875	.000	.000	.000	.000	.000	
Cars	3	117	0	0	120	1	0	3	0	4	0	120	1	0	121	0	0	0	0	0	
% Cars	75	95.1	0	0	94.5	50	0	75	0	66.7	0	96	100	0	96	0	0	0	0	0	
Trucks	0	4	0	0	4	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	
% Trucks	0	3.3	0	0	3.1	50	0	0	0	16.7	0	3.2	0	0	3.2	0	0	0	0	0	
Bikes	1	2	0	0	3	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	
% Bikes	25	1.6	0	0	2.4	0	0	25	0	16.7	0	0.8	0	0	0.8	0	0	0	0	0	



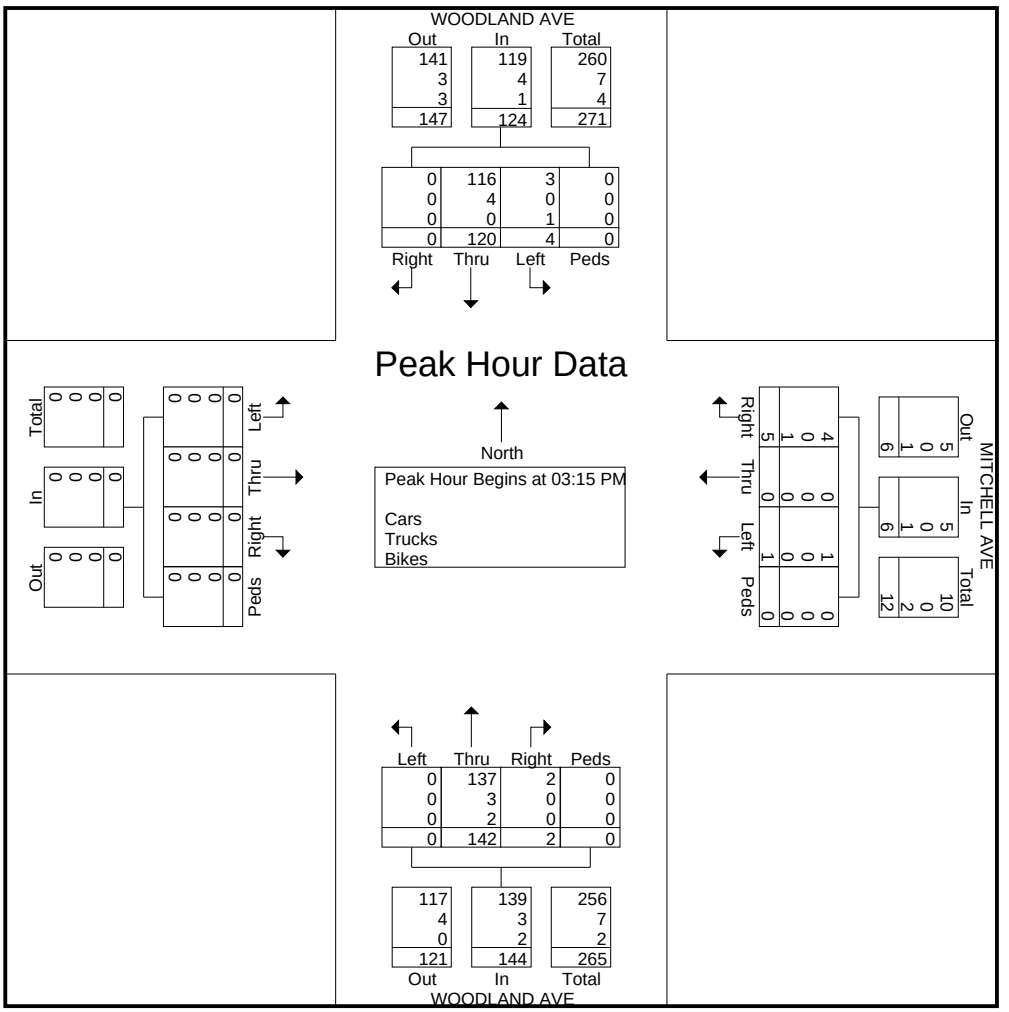
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 7

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 03:15 PM																					
03:15 PM	**1**	25	0	0	26	0	0	**2**	0	**2**	0	39	0	0	39	0	0	0	0	0	67
03:30 PM	1	29	0	0	30	**1**	0	1	0	2	0	28	**2**	0	30	0	0	0	0	0	62
03:45 PM	1	**36**	0	0	**37**	0	0	2	0	2	0	**42**	0	0	**42**	0	0	0	0	0	**81**
04:00 PM	1	30	0	0	31	0	0	0	0	0	0	33	0	0	33	0	0	0	0	0	64
Total Volume	4	120	0	0	124	1	0	5	0	6	0	142	2	0	144	0	0	0	0	0	274
% App. Total	3.2	96.8	0	0		16.7	0	83.3	0		0	98.6	1.4	0		0	0	0	0		
PHF	1.00	.833	.000	.000	.838	.250	.000	.625	.000	.750	.000	.845	.250	.000	.857	.000	.000	.000	.000	.000	.846
Cars	3	116	0	0	119	1	0	4	0	5	0	137	2	0	139	0	0	0	0	0	263
% Cars	75.0	96.7	0	0	96.0	100	0	80.0	0	83.3	0	96.5	100	0	96.5	0	0	0	0	0	96.0
Trucks	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
% Trucks	0	3.3	0	0	3.2	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	2.6
Bikes	1	0	0	0	1	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	4
% Bikes	25.0	0	0	0	0.8	0	0	20.0	0	16.7	0	1.4	0	0	1.4	0	0	0	0	0	1.5



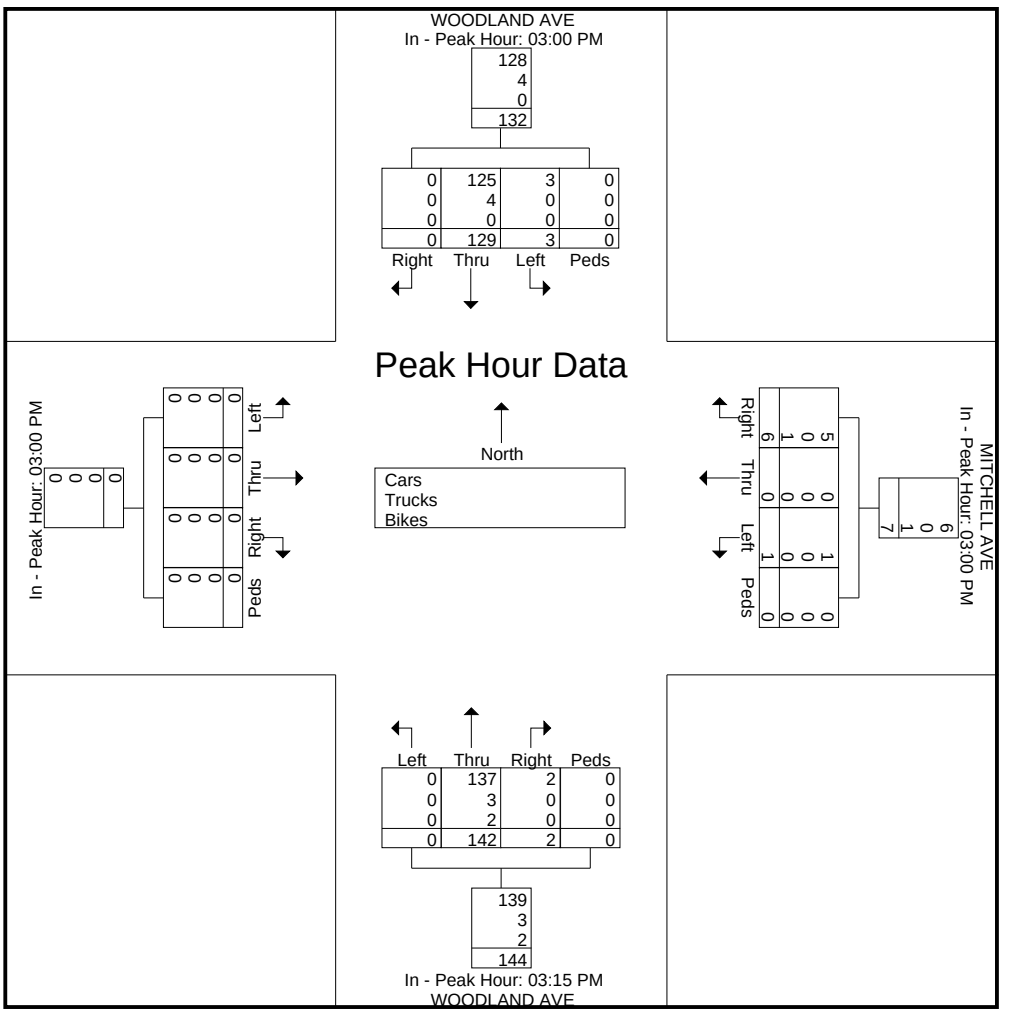
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Mitchell Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 8

	WOODLAND AVE From North					MITCHELL AVE From East					WOODLAND AVE From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	03:00 PM					03:00 PM					03:15 PM					03:00 PM					
+0 mins.	0	**39**	0	0	**39**	0	0	1	0	1	0	39	0	0	39	0	0	0	0	0	
+15 mins.	**1**	25	0	0	26	0	0	**2**	0	**2**	0	28	**2**	0	30	0	0	0	0	0	
+30 mins.	1	29	0	0	30	**1**	0	1	0	2	0	**42**	0	0	**42**	0	0	0	0	0	
+45 mins.	1	36	0	0	37	0	0	2	0	2	0	33	0	0	33	0	0	0	0	0	
Total Volume	3	129	0	0	132	1	0	6	0	7	0	142	2	0	144	0	0	0	0	0	
% App. Total	2.3	97.7	0	0		14.3	0	85.7	0		0	98.6	1.4	0		0	0	0	0		
PHF	.750	.827	.000	.000	.846	.250	.000	.750	.000	.875	.000	.845	.250	.000	.857	.000	.000	.000	.000	.000	
Cars	3	125	0	0	128	1	0	5	0	6	0	137	2	0	139	0	0	0	0	0	
% Cars	100	96.9	0	0	97	100	0	83.3	0	85.7	0	96.5	100	0	96.5	0	0	0	0	0	
Trucks	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	
% Trucks	0	3.1	0	0	3	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	
% Bikes	0	0	0	0	0	0	0	16.7	0	14.3	0	1.4	0	0	1.4	0	0	0	0	0	



Century Engineering, LLC. A Kleinfelder Company
550 S Bay Rd, Dover DE
Phone: 302-734-9188 Fax: 302-734-4589

Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

Intersection: WoodlandAve at CentralAve
Counted By: Dennis Spence
Date: 10/18/2022
Weather: Sunny 65

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 1

Groups Printed- Cars - Trucks - Bikes

	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	2	3	0	5	0	4	0	0	4	8	4	1	0	13	2	20	5	0	27	49
07:15 AM	0	3	1	0	4	1	13	0	0	14	18	2	2	0	22	1	23	3	0	27	67
07:30 AM	0	4	4	0	8	2	11	0	0	13	14	1	1	0	16	1	37	15	0	53	90
07:45 AM	1	2	1	0	4	1	14	0	0	15	18	2	0	0	20	3	38	13	0	54	93
Total	1	11	9	0	21	4	42	0	0	46	58	9	4	0	71	7	118	36	0	161	299
08:00 AM	0	3	4	0	7	1	13	1	0	15	22	0	3	0	25	5	37	13	0	55	102
08:15 AM	0	3	6	0	9	1	16	1	0	18	19	3	2	0	24	3	45	17	0	65	116
08:30 AM	1	2	1	0	4	5	20	0	0	25	16	2	2	0	20	1	69	20	0	90	139
08:45 AM	0	3	2	0	5	1	25	2	0	28	22	3	4	0	29	6	47	10	0	63	125
Total	1	11	13	0	25	8	74	4	0	86	79	8	11	0	98	15	198	60	0	273	482
*** BREAK ***																					
11:15 AM	4	6	6	0	16	1	34	0	0	35	22	0	9	0	31	3	46	24	0	73	155
11:30 AM	1	2	5	0	8	4	30	1	0	35	28	2	3	0	33	3	41	17	0	61	137
11:45 AM	2	3	3	0	8	1	26	1	0	28	27	1	5	0	33	0	45	34	0	79	148
Total	7	11	14	0	32	6	90	2	0	98	77	3	17	0	97	6	132	75	0	213	440
12:00 PM	2	5	6	0	13	1	28	0	0	29	27	1	3	0	31	0	33	19	0	52	125
12:15 PM	2	3	5	0	10	4	21	0	0	25	24	2	4	0	30	2	46	21	0	69	134
12:30 PM	0	5	3	0	8	2	30	1	0	33	44	2	3	0	49	1	43	15	0	59	149
12:45 PM	0	3	5	0	8	1	39	0	0	40	24	3	6	0	33	1	37	31	0	69	150
Total	4	16	19	0	39	8	118	1	0	127	119	8	16	0	143	4	159	86	0	249	558
01:00 PM	1	4	5	0	10	3	34	1	0	38	27	2	3	0	32	0	32	24	0	56	136
01:15 PM	0	2	3	0	5	2	30	4	0	36	18	1	5	0	24	0	31	20	0	51	116
01:30 PM	1	5	9	0	15	5	25	0	0	30	24	2	3	0	29	1	49	33	0	83	157
01:45 PM	1	1	2	0	4	4	35	0	0	39	20	3	4	0	27	0	29	14	0	43	113
Total	3	12	19	0	34	14	124	5	0	143	89	8	15	0	112	1	141	91	0	233	522
02:00 PM	0	4	7	0	11	1	39	0	0	40	22	1	2	0	25	3	32	21	0	56	132
*** BREAK ***																					
Total	0	4	7	0	11	1	39	0	0	40	22	1	2	0	25	3	32	21	0	56	132
03:00 PM	0	3	6	0	9	5	33	1	0	39	22	3	1	0	26	1	28	28	0	57	131
03:15 PM	0	4	3	0	7	7	39	0	0	46	33	3	2	0	38	1	26	27	0	54	145
03:30 PM	1	6	6	0	13	7	32	0	0	39	29	3	5	0	37	1	44	28	0	73	162
03:45 PM	1	7	4	0	12	2	39	0	0	41	29	8	4	0	41	2	39	27	0	68	162
Total	2	20	19	0	41	21	143	1	0	165	113	17	12	0	142	5	137	110	0	252	600
04:00 PM	0	3	3	0	6	0	42	0	0	42	28	2	3	0	33	4	36	29	0	69	150
04:15 PM	0	6	2	0	8	5	39	0	0	44	25	3	0	0	28	1	35	16	0	52	132
04:30 PM	1	6	8	0	15	3	30	0	0	33	22	4	4	0	30	2	39	25	0	66	144
04:45 PM	0	4	6	0	10	3	29	0	0	32	22	3	1	0	26	0	33	23	0	56	124
Total	1	19	19	0	39	11	140	0	0	151	97	12	8	0	117	7	143	93	0	243	550
05:00 PM	0	6	6	0	12	4	40	0	0	44	25	3	2	0	30	3	26	14	0	43	129
05:15 PM	2	3	5	0	10	2	29	0	0	31	28	1	5	0	34	0	30	32	0	62	137
05:30 PM	1	1	4	0	6	5	21	1	0	27	22	1	3	0	26	1	29	16	0	46	105
05:45 PM	0	3	2	0	5	1	14	0	0	15	14	0	2	0	16	1	39	25	0	65	101
Total	3	13	17	0	33	12	104	1	0	117	89	5	12	0	106	5	124	87	0	216	472

Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
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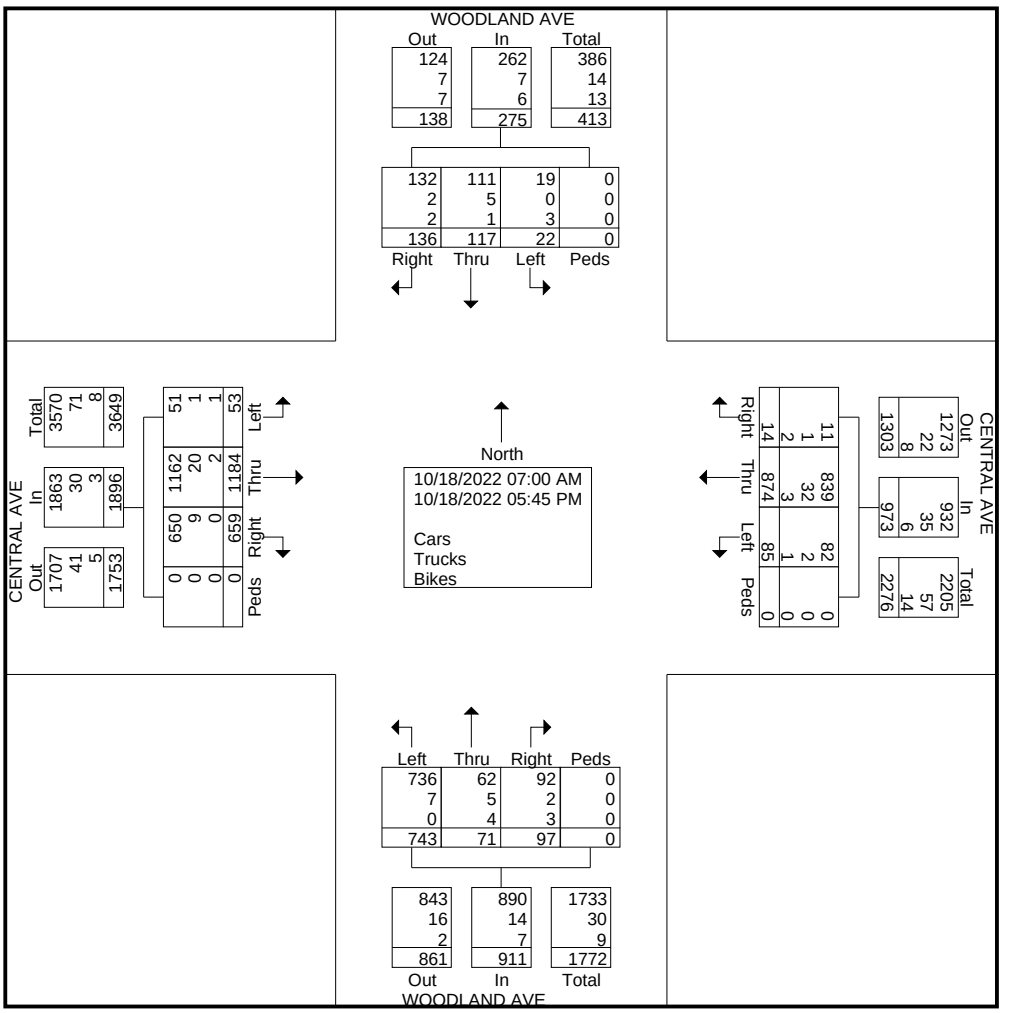
Groups Printed- Cars - Trucks - Bikes

	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Grand Total	22	117	136	0	275	85	874	14	0	973	743	71	97	0	911	53	1184	659	0	1896	4055
Apprch %	8	42.5	49.5	0		8.7	89.8	1.4	0		81.6	7.8	10.6	0		2.8	62.4	34.8	0		
Total %	0.5	2.9	3.4	0	6.8	2.1	21.6	0.3	0	24	18.3	1.8	2.4	0	22.5	1.3	29.2	16.3	0	46.8	
Cars	19	111	132	0	262	82	839	11	0	932	736	62	92	0	890	51	1162	650	0	1863	3947
% Cars	86.4	94.9	97.1	0	95.3	96.5	96	78.6	0	95.8	99.1	87.3	94.8	0	97.7	96.2	98.1	98.6	0	98.3	97.3
Trucks	0	5	2	0	7	2	32	1	0	35	7	5	2	0	14	1	20	9	0	30	86
% Trucks	0	4.3	1.5	0	2.5	2.4	3.7	7.1	0	3.6	0.9	7	2.1	0	1.5	1.9	1.7	1.4	0	1.6	2.1
Bikes	3	1	2	0	6	1	3	2	0	6	0	4	3	0	7	1	2	0	0	3	22
% Bikes	13.6	0.9	1.5	0	2.2	1.2	0.3	14.3	0	0.6	0	5.6	3.1	0	0.8	1.9	0.2	0	0	0.2	0.5



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
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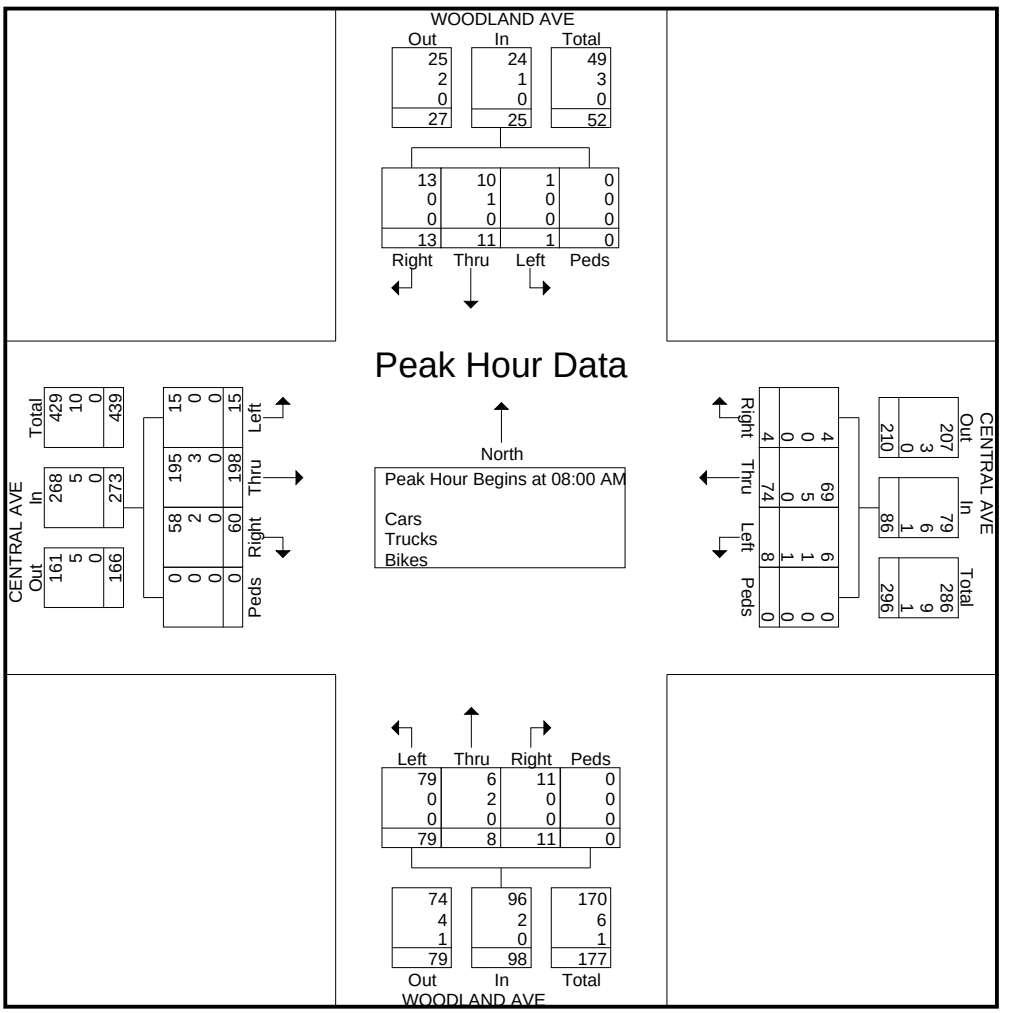
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	**3**	4	0	7	1	13	1	0	15	**22**	0	3	0	25	5	37	13	0	55	102
08:15 AM	0	3	**6**	0	**9**	1	16	1	0	18	19	**3**	2	0	24	3	45	17	0	65	116
08:30 AM	**1**	2	1	0	4	**5**	20	0	0	25	16	2	2	0	20	1	**69**	**20**	0	**90**	**139**
08:45 AM	0	3	2	0	5	1	**25**	**2**	0	**28**	22	3	**4**	0	**29**	**6**	47	10	0	63	125
Total Volume	1	11	13	0	25	8	74	4	0	86	79	8	11	0	98	15	198	60	0	273	482
% App. Total	4	44	52	0		9.3	86	4.7	0		80.6	8.2	11.2	0		5.5	72.5	22	0		
PHF	.250	.917	.542	.000	.694	.400	.740	.500	.000	.768	.898	.667	.688	.000	.845	.625	.717	.750	.000	.758	.867
Cars	1	10	13	0	24	6	69	4	0	79	79	6	11	0	96	15	195	58	0	268	467
% Cars	100	90.9	100	0	96.0	75.0	93.2	100	0	91.9	100	75.0	100	0	98.0	100	98.5	96.7	0	98.2	96.9
Trucks	0	1	0	0	1	1	5	0	0	6	0	2	0	0	2	0	3	2	0	5	14
% Trucks	0	9.1	0	0	4.0	12.5	6.8	0	0	7.0	0	25.0	0	0	2.0	0	1.5	3.3	0	1.8	2.9
Bikes	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bikes	0	0	0	0	0	12.5	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0	0.2



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
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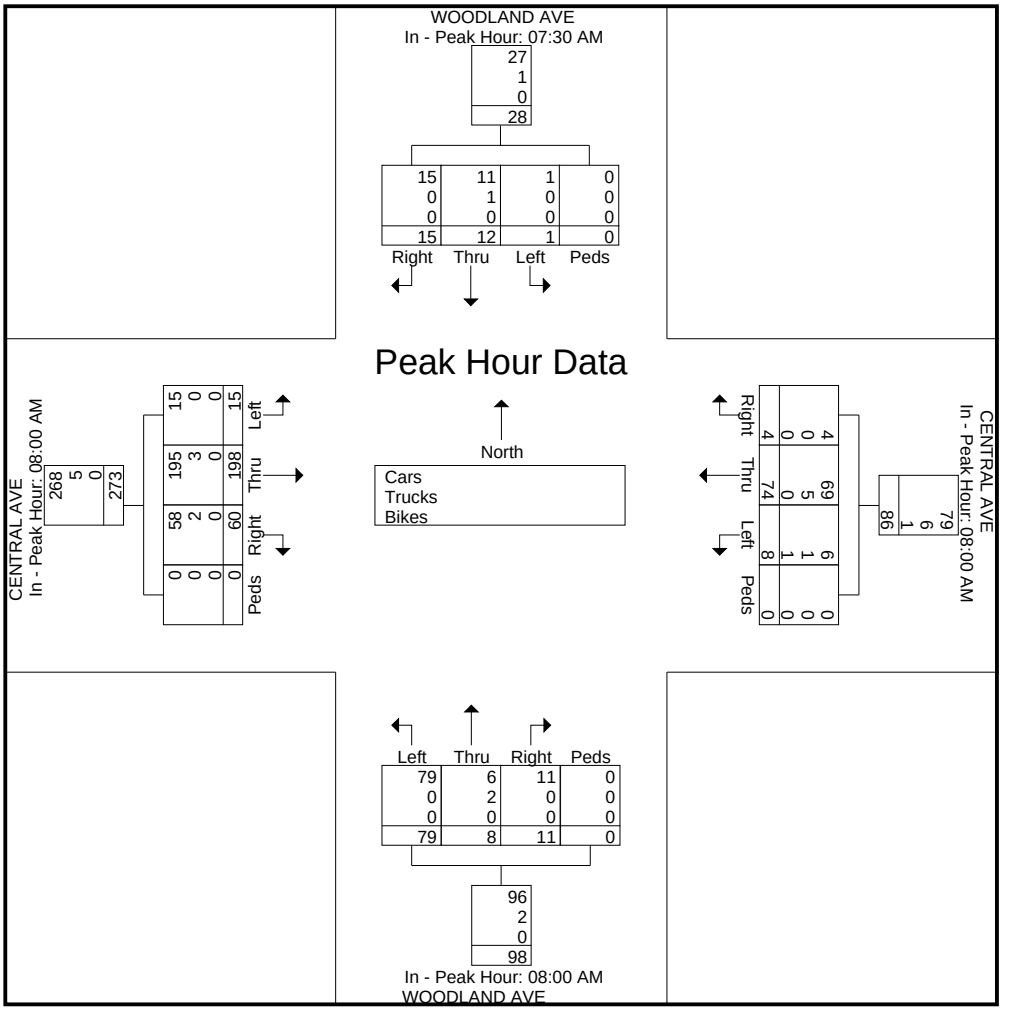
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:30 AM					08:00 AM					08:00 AM					08:00 AM					
+0 mins.	0	**4**	4	0	8	1	13	1	0	15	**22**	0	3	0	25	5	37	13	0	55	
+15 mins.	**1**	2	1	0	4	1	16	1	0	18	19	**3**	2	0	24	3	45	17	0	65	
+30 mins.	0	3	4	0	7	**5**	20	0	0	25	16	2	2	0	20	1	**69**	**20**	0	**90**	
+45 mins.	0	3	**6**	0	**9**	1	**25**	**2**	0	**28**	22	3	**4**	0	**29**	**6**	47	10	0	63	
Total Volume	1	12	15	0	28	8	74	4	0	86	79	8	11	0	98	15	198	60	0	273	
% App. Total	3.6	42.9	53.6	0		9.3	86	4.7	0		80.6	8.2	11.2	0		5.5	72.5	22	0		
PHF	.250	.750	.625	.000	.778	.400	.740	.500	.000	.768	.898	.667	.688	.000	.845	.625	.717	.750	.000	.758	
Cars	1	11	15	0	27	6	69	4	0	79	79	6	11	0	96	15	195	58	0	268	
% Cars	100	91.7	100	0	96.4	75	93.2	100	0	91.9	100	75	100	0	98	100	98.5	96.7	0	98.2	
Trucks	0	1	0	0	1	1	5	0	0	6	0	2	0	0	2	0	3	2	0	5	
% Trucks	0	8.3	0	0	3.6	12.5	6.8	0	0	7	0	25	0	0	2	0	1.5	3.3	0	1.8	
Bikes	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
% Bikes	0	0	0	0	0	12.5	0	0	0	1.2	0	0	0	0	0	0	0	0	0	0	



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
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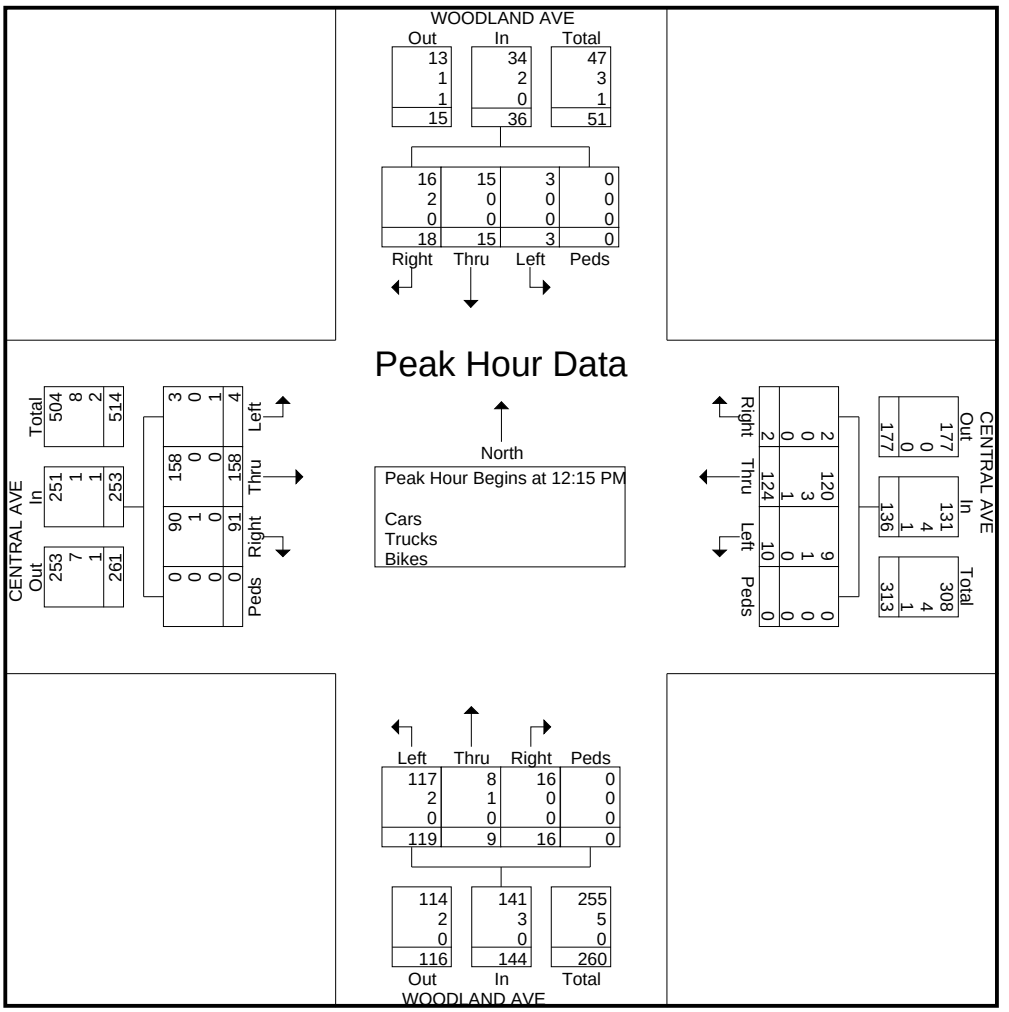
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	**2**	3	**5**	0	**10**	**4**	21	0	0	25	24	2	4	0	30	**2**	**46**	21	0	**69**	134
12:30 PM	0	**5**	3	0	8	2	30	**1**	0	33	**44**	2	3	0	**49**	1	43	15	0	59	149
12:45 PM	0	3	5	0	8	1	**39**	0	0	**40**	24	**3**	**6**	0	33	1	37	**31**	0	69	**150**
01:00 PM	1	4	5	0	10	3	34	1	0	38	27	2	3	0	32	0	32	24	0	56	136
Total Volume	3	15	18	0	36	10	124	2	0	136	119	9	16	0	144	4	158	91	0	253	569
% App. Total	8.3	41.7	50	0		7.4	91.2	1.5	0		82.6	6.2	11.1	0		1.6	62.5	36	0		
PHF	.375	.750	.900	.000	.900	.625	.795	.500	.000	.850	.676	.750	.667	.000	.735	.500	.859	.734	.000	.917	.948
Cars	3	15	16	0	34	9	120	2	0	131	117	8	16	0	141	3	158	90	0	251	557
% Cars	100	100	88.9	0	94.4	90.0	96.8	100	0	96.3	98.3	88.9	100	0	97.9	75.0	100	98.9	0	99.2	97.9
Trucks	0	0	2	0	2	1	3	0	0	4	2	1	0	0	3	0	0	1	0	1	10
% Trucks	0	0	11.1	0	5.6	10.0	2.4	0	0	2.9	1.7	11.1	0	0	2.1	0	0	1.1	0	0.4	1.8
Bikes	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2
% Bikes	0	0	0	0	0	0	0.8	0	0	0.7	0	0	0	0	0	25.0	0	0	0	0.4	0.4



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
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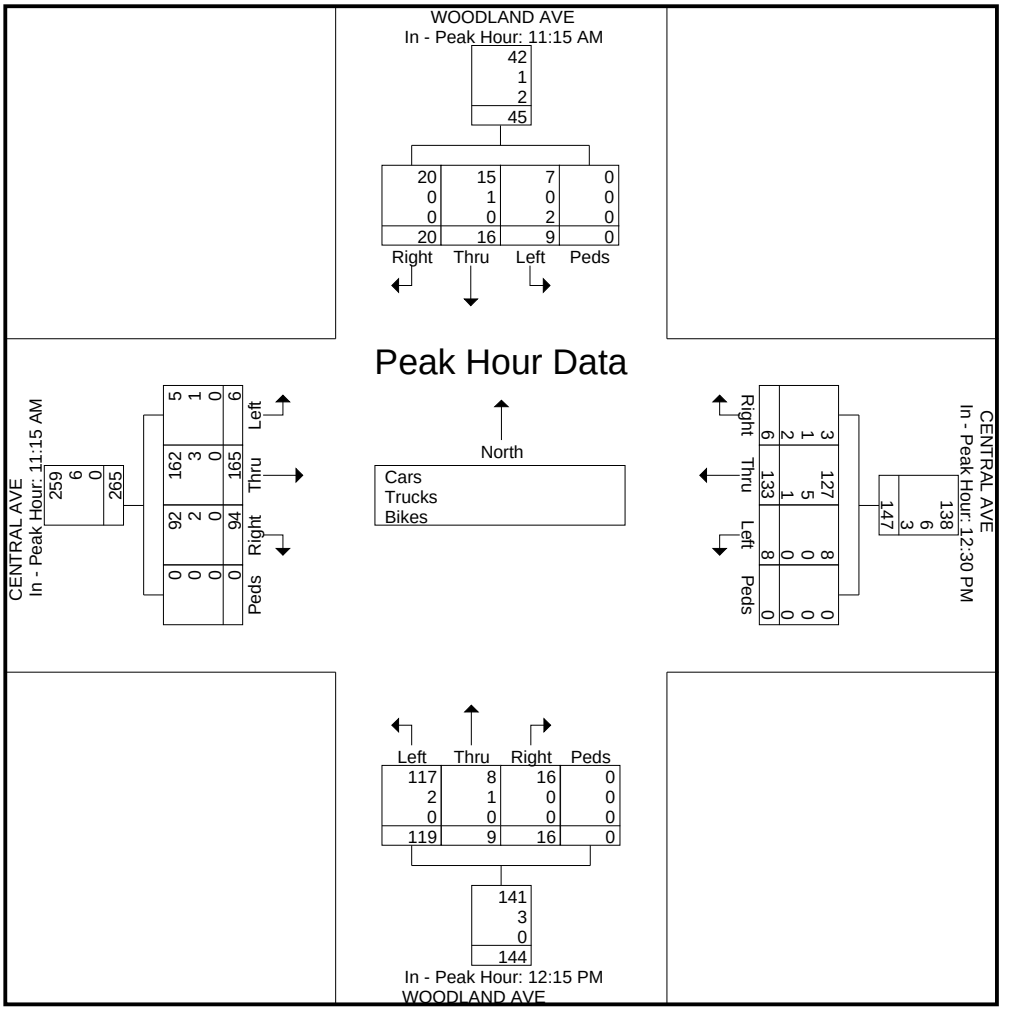
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	11:15 AM					12:30 PM					12:15 PM					11:15 AM					
+0 mins.	**4**	**6**	**6**	0	**16**	2	30	1	0	33	24	2	4	0	30	**3**	**46**	24	0	73	
+15 mins.	1	2	5	0	8	1	**39**	0	0	**40**	**44**	2	3	0	**49**	3	41	17	0	61	
+30 mins.	2	3	3	0	8	**3**	34	1	0	38	24	**3**	**6**	0	33	0	45	**34**	0	**79**	
+45 mins.	2	5	6	0	13	2	30	**4**	0	36	27	2	3	0	32	0	33	19	0	52	
Total Volume	9	16	20	0	45	8	133	6	0	147	119	9	16	0	144	6	165	94	0	265	
% App. Total	20	35.6	44.4	0		5.4	90.5	4.1	0		82.6	6.2	11.1	0		2.3	62.3	35.5	0		
PHF	.563	.667	.833	.000	.703	.667	.853	.375	.000	.919	.676	.750	.667	.000	.735	.500	.897	.691	.000	.839	
Cars	7	15	20	0	42	8	127	3	0	138	117	8	16	0	141	5	162	92	0	259	
% Cars	77.8	93.8	100	0	93.3	100	95.5	50	0	93.9	98.3	88.9	100	0	97.9	83.3	98.2	97.9	0	97.7	
Trucks	0	1	0	0	1	0	5	1	0	6	2	1	0	0	3	1	3	2	0	6	
% Trucks	0	6.2	0	0	2.2	0	3.8	16.7	0	4.1	1.7	11.1	0	0	2.1	16.7	1.8	2.1	0	2.3	
Bikes	2	0	0	0	2	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	
% Bikes	22.2	0	0	0	4.4	0	0.8	33.3	0	2	0	0	0	0	0	0	0	0	0	0	



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
Start Date : 10/18/2022
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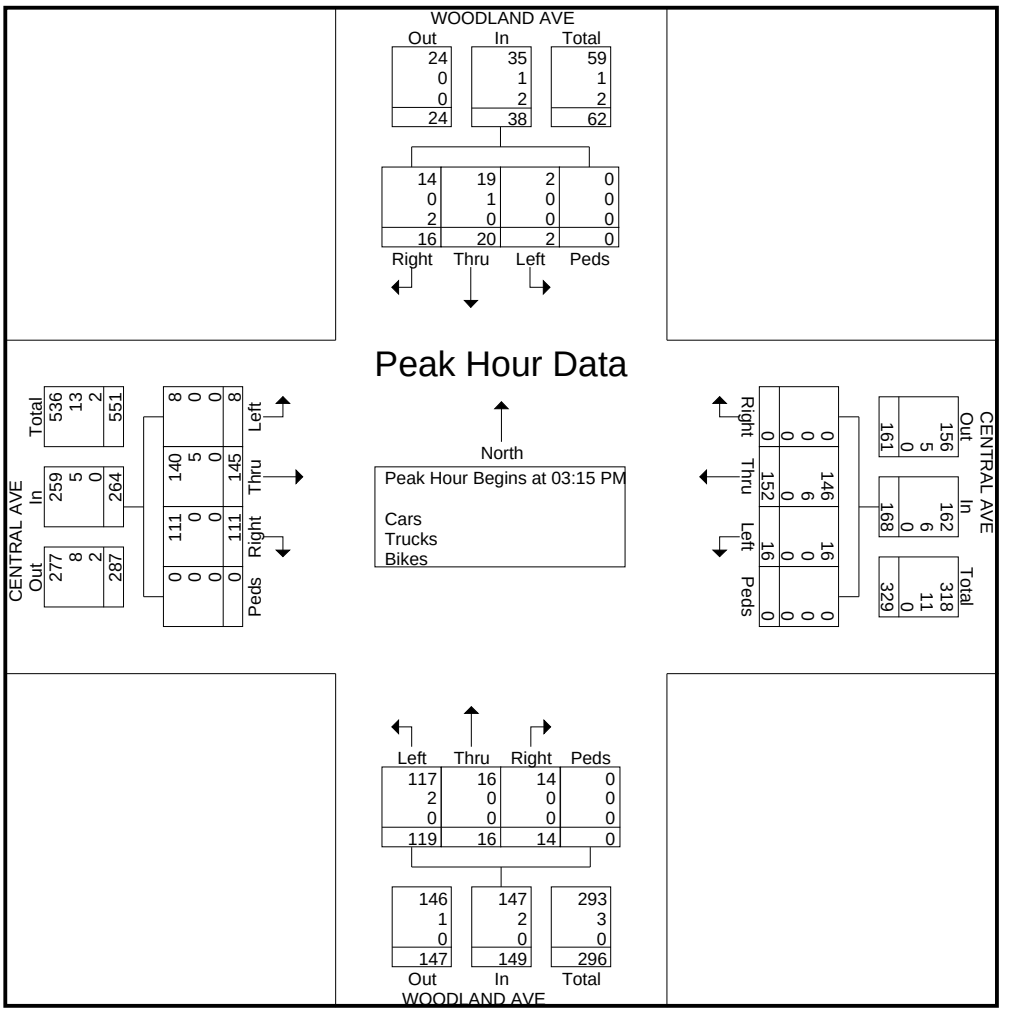
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:15 PM																					
03:15 PM	0	4	3	0	7	**7**	39	0	0	**46**	**33**	3	2	0	38	1	26	27	0	54	145
03:30 PM	**1**	6	**6**	0	**13**	7	32	0	0	39	29	3	**5**	0	37	1	**44**	28	0	**73**	**162**
03:45 PM	1	**7**	4	0	12	2	39	0	0	41	29	**8**	4	0	**41**	2	39	27	0	68	162
04:00 PM	0	3	3	0	6	0	**42**	0	0	42	28	2	3	0	33	**4**	36	**29**	0	69	150
Total Volume	2	20	16	0	38	16	152	0	0	168	119	16	14	0	149	8	145	111	0	264	619
% App. Total	5.3	52.6	42.1	0		9.5	90.5	0	0		79.9	10.7	9.4	0		3	54.9	42	0		
PHF	.500	.714	.667	.000	.731	.571	.905	.000	.000	.913	.902	.500	.700	.000	.909	.500	.824	.957	.000	.904	.955
Cars	2	19	14	0	35	16	146	0	0	162	117	16	14	0	147	8	140	111	0	259	603
% Cars	100	95.0	87.5	0	92.1	100	96.1	0	0	96.4	98.3	100	100	0	98.7	100	96.6	100	0	98.1	97.4
Trucks	0	1	0	0	1	0	6	0	0	6	2	0	0	0	2	0	5	0	0	5	14
% Trucks	0	5.0	0	0	2.6	0	3.9	0	0	3.6	1.7	0	0	0	1.3	0	3.4	0	0	1.9	2.3
Bikes	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Bikes	0	0	12.5	0	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at Central Ave
Site Code : 00000000
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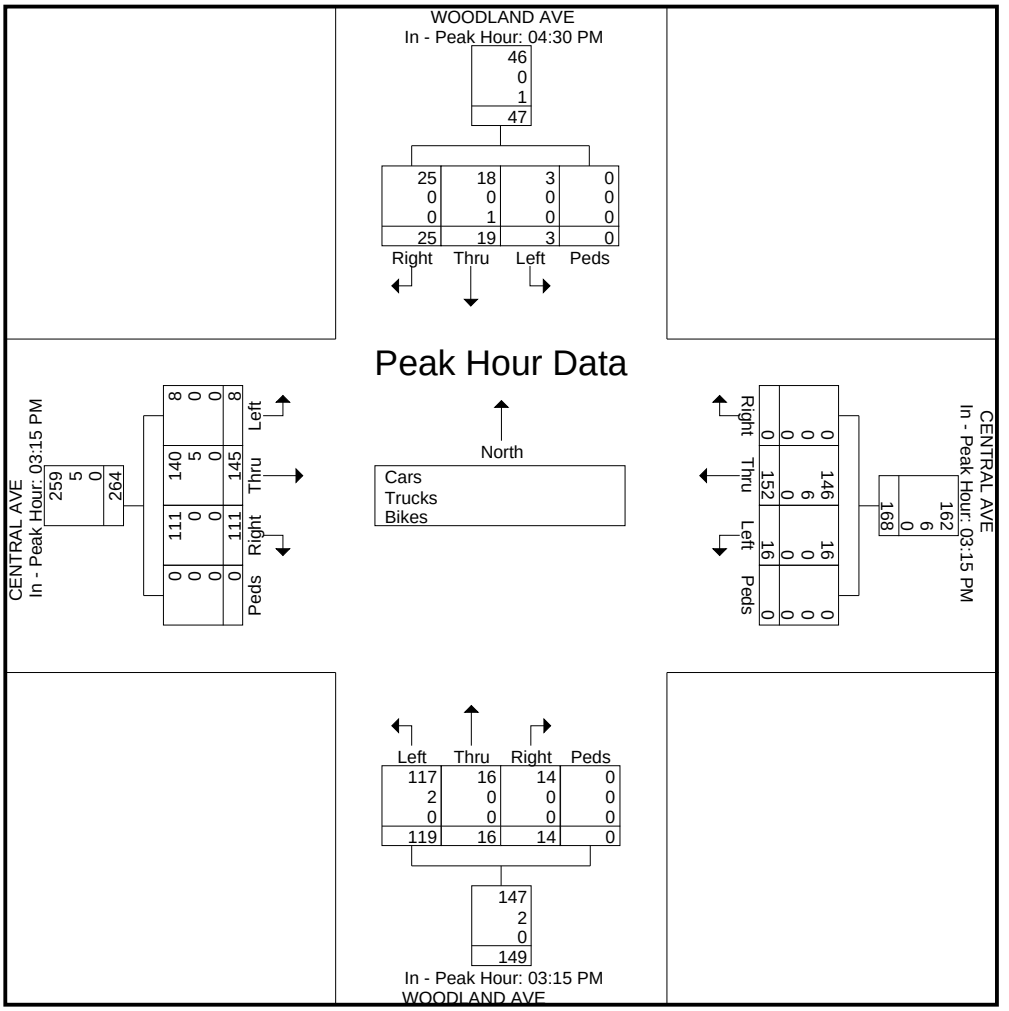
	WOODLAND AVE From North					CENTRAL AVE From East					WOODLAND AVE From South					CENTRAL AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:30 PM					03:15 PM					03:15 PM					03:15 PM					
+0 mins.	1	**6**	**8**	0	**15**	**7**	39	0	0	**46**	**33**	3	2	0	38	1	26	27	0	54	
+15 mins.	0	4	6	0	10	7	32	0	0	39	29	3	**5**	0	37	1	**44**	28	0	**73**	
+30 mins.	0	6	6	0	12	2	39	0	0	41	29	**8**	4	0	**41**	2	39	27	0	68	
+45 mins.	**2**	3	5	0	10	0	**42**	0	0	42	28	2	3	0	33	**4**	36	**29**	0	69	
Total Volume	3	19	25	0	47	16	152	0	0	168	119	16	14	0	149	8	145	111	0	264	
% App. Total	6.4	40.4	53.2	0		9.5	90.5	0	0		79.9	10.7	9.4	0		3	54.9	42	0		
PHF	.375	.792	.781	.000	.783	.571	.905	.000	.000	.913	.902	.500	.700	.000	.909	.500	.824	.957	.000	.904	
Cars	3	18	25	0	46	16	146	0	0	162	117	16	14	0	147	8	140	111	0	259	
% Cars	100	94.7	100	0	97.9	100	96.1	0	0	96.4	98.3	100	100	0	98.7	100	96.6	100	0	98.1	
Trucks	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	5	0	0	5	
% Trucks	0	0	0	0	0	0	3.9	0	0	3.6	1.7	0	0	0	1.3	0	3.4	0	0	1.9	
Bikes	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bikes	0	5.3	0	0	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

Intersection: Woodland Ave at West Ave
Counted By: Evan Martine
Date: 10/18/2022
Weather: Sunny 65

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 1

Groups Printed- Cars - Trucks - Bikes

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	9	2	1	12	0	0	2	0	2	8	14	0	0	22	2	0	5	1	8	44
07:15 AM	0	14	2	1	17	0	1	1	0	2	12	25	0	0	37	4	0	7	1	12	68
07:30 AM	0	12	2	1	15	0	1	2	0	3	13	14	0	0	27	1	0	10	1	12	57
07:45 AM	0	15	2	1	18	0	0	0	0	0	17	22	0	0	39	3	1	17	1	22	79
Total	0	50	8	4	62	0	2	5	0	7	50	75	0	0	125	10	1	39	4	54	248
08:00 AM	1	16	1	0	18	0	1	1	0	2	15	41	1	0	57	3	0	7	0	10	87
08:15 AM	0	14	5	0	19	1	0	1	0	2	21	31	0	0	52	6	0	14	0	20	93
08:30 AM	0	29	0	1	30	0	0	0	0	0	15	28	0	0	43	2	0	26	0	28	101
08:45 AM	0	27	1	0	28	0	0	0	0	0	21	50	0	0	71	0	1	18	0	19	118
Total	1	86	7	1	95	1	1	2	0	4	72	150	1	0	223	11	1	65	0	77	399
*** BREAK ***																					
11:00 AM	3	44	7	0	54	0	0	2	0	2	19	33	0	0	52	2	0	23	0	25	133
11:15 AM	1	27	8	0	36	0	0	1	0	1	16	38	0	0	54	10	0	21	0	31	122
11:30 AM	0	33	6	0	39	1	0	2	0	3	14	22	0	0	36	3	0	21	0	24	102
11:45 AM	2	37	5	0	44	0	0	0	0	0	17	62	0	0	79	4	0	17	2	23	146
Total	6	141	26	0	173	1	0	5	0	6	66	155	0	0	221	19	0	82	2	103	503
12:00 PM	2	30	9	0	41	0	0	1	0	1	12	43	1	0	56	0	0	28	0	28	126
12:15 PM	1	30	5	0	36	0	0	2	0	2	28	40	0	0	68	5	0	22	0	27	133
12:30 PM	0	19	17	0	36	0	0	0	0	0	24	30	0	0	54	1	0	13	0	14	104
12:45 PM	1	25	8	0	34	0	0	0	0	0	19	33	1	0	53	5	1	18	0	24	111
Total	4	104	39	0	147	0	0	3	0	3	83	146	2	0	231	11	1	81	0	93	474
01:00 PM	0	37	4	0	41	0	0	0	0	0	22	33	1	0	56	2	0	18	0	20	117
01:15 PM	0	38	6	0	44	0	0	1	0	1	11	32	1	0	44	3	0	28	0	31	120
01:30 PM	0	27	11	0	38	0	1	0	0	1	20	24	0	0	44	4	1	29	0	34	117
01:45 PM	1	29	6	0	36	0	0	1	0	1	15	27	0	0	42	1	0	16	0	17	96
Total	1	131	27	0	159	0	1	2	0	3	68	116	2	0	186	10	1	91	0	102	450
*** BREAK ***																					
03:00 PM	2	29	5	0	36	0	1	1	0	2	16	27	0	0	43	6	0	33	0	39	120
03:15 PM	0	27	11	0	38	1	0	0	0	1	27	31	0	0	58	4	0	20	0	24	121
03:30 PM	0	37	8	0	45	0	0	1	0	1	23	28	1	0	52	3	0	27	0	30	128
03:45 PM	0	29	8	0	37	1	1	2	1	5	32	28	1	0	61	6	1	30	3	40	143
Total	2	122	32	0	156	2	2	4	1	9	98	114	2	0	214	19	1	110	3	133	512
04:00 PM	0	43	6	0	49	0	0	0	0	0	27	35	1	0	63	4	0	24	0	28	140
04:15 PM	1	44	7	0	52	0	0	0	0	0	18	25	0	0	43	2	0	20	0	22	117
04:30 PM	1	36	10	0	47	0	0	1	0	1	15	29	0	0	44	4	0	24	0	28	120
04:45 PM	2	30	10	0	42	0	1	1	0	2	13	24	0	0	37	2	1	27	0	30	111
Total	4	153	33	0	190	0	1	2	0	3	73	113	1	0	187	12	1	95	0	108	488
05:00 PM	0	23	5	0	28	0	1	0	0	1	25	31	0	0	56	1	0	24	0	25	110
05:15 PM	1	41	10	0	52	1	0	1	0	2	26	20	0	0	46	2	0	18	0	20	120
05:30 PM	3	14	4	0	21	0	1	1	0	2	19	24	0	0	43	1	0	22	0	23	89
05:45 PM	1	13	4	3	21	0	0	1	0	1	11	17	0	0	28	8	0	19	0	27	77
Total	5	91	23	3	122	1	2	3	0	6	81	92	0	0	173	12	0	83	0	95	396
Grand Total	23	878	195	8	1104	5	9	26	1	41	591	961	8	0	1560	104	6	646	9	765	3470
Apprch %	2.1	79.5	17.7	0.7		12.2	22	63.4	2.4		37.9	61.6	0.5	0		13.6	0.8	84.4	1.2		
Total %	0.7	25.3	5.6	0.2	31.8	0.1	0.3	0.7	0	1.2	17	27.7	0.2	0	45	3	0.2	18.6	0.3	22	

Century Engineering, LLC. A Kleinfelder Company

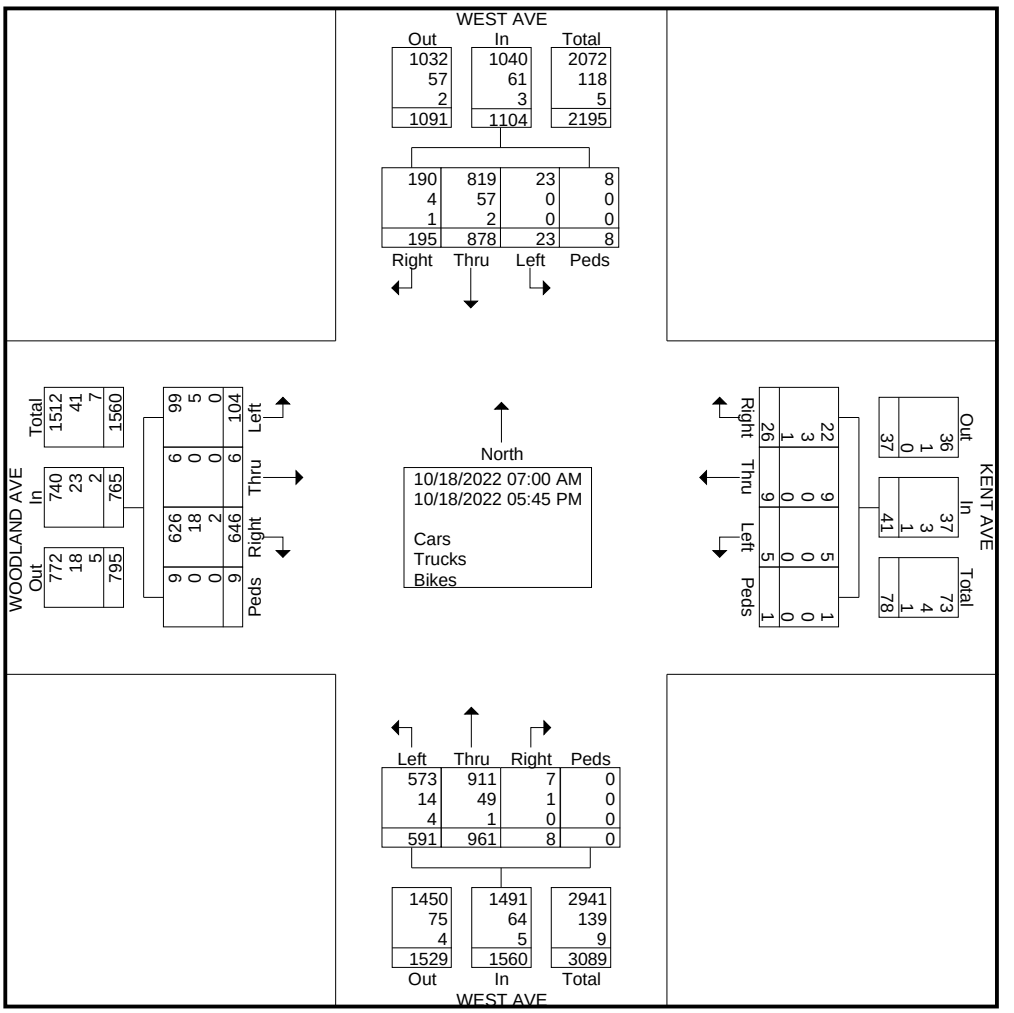
550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 2

Groups Printed- Cars - Trucks - Bikes

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Cars	23	819	190	8	1040	5	9	22	1	37	573	911	7	0	1491	99	6	626	9	740	3308
% Cars	100	93.3	97.4	100	94.2	100	100	84.6	100	90.2	97	94.8	87.5	0	95.6	95.2	100	96.9	100	96.7	95.3
Trucks	0	57	4	0	61	0	0	3	0	3	14	49	1	0	64	5	0	18	0	23	151
% Trucks	0	6.5	2.1	0	5.5	0	0	11.5	0	7.3	2.4	5.1	12.5	0	4.1	4.8	0	2.8	0	3	4.4
Bikes	0	2	1	0	3	0	0	1	0	1	4	1	0	0	5	0	0	2	0	2	11
% Bikes	0	0.2	0.5	0	0.3	0	0	3.8	0	2.4	0.7	0.1	0	0	0.3	0	0	0.3	0	0.3	0.3



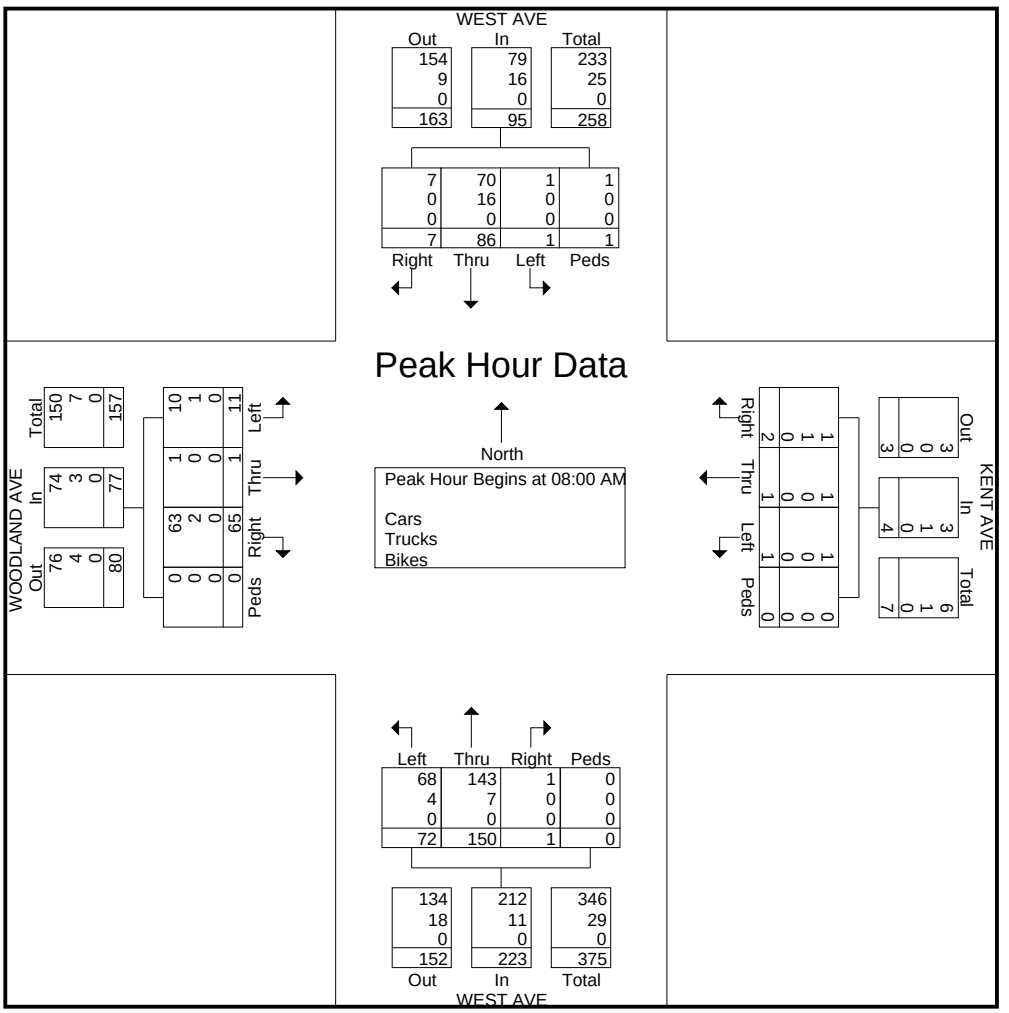
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 3

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	**1**	16	1	0	18	0	**1**	**1**	0	**2**	15	41	**1**	0	57	3	0	7	0	10	87
08:15 AM	0	14	**5**	0	19	**1**	0	1	0	2	**21**	31	0	0	52	**6**	0	14	0	20	93
08:30 AM	0	**29**	0	**1**	**30**	0	0	0	0	0	15	28	0	0	43	2	0	**26**	0	**28**	101
08:45 AM	0	27	1	0	28	0	0	0	0	0	21	**50**	0	0	**71**	0	**1**	18	0	19	**118**
Total Volume	1	86	7	1	95	1	1	2	0	4	72	150	1	0	223	11	1	65	0	77	399
% App. Total	1.1	90.5	7.4	1.1		25	25	50	0		32.3	67.3	0.4	0		14.3	1.3	84.4	0		
PHF	.250	.741	.350	.250	.792	.250	.250	.500	.000	.500	.857	.750	.250	.000	.785	.458	.250	.625	.000	.688	.845
Cars	1	70	7	1	79	1	1	1	0	3	68	143	1	0	212	10	1	63	0	74	368
% Cars	100	81.4	100	100	83.2	100	100	50.0	0	75.0	94.4	95.3	100	0	95.1	90.9	100	96.9	0	96.1	92.2
Trucks	0	16	0	0	16	0	0	1	0	1	4	7	0	0	11	1	0	2	0	3	31
% Trucks	0	18.6	0	0	16.8	0	0	50.0	0	25.0	5.6	4.7	0	0	4.9	9.1	0	3.1	0	3.9	7.8
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



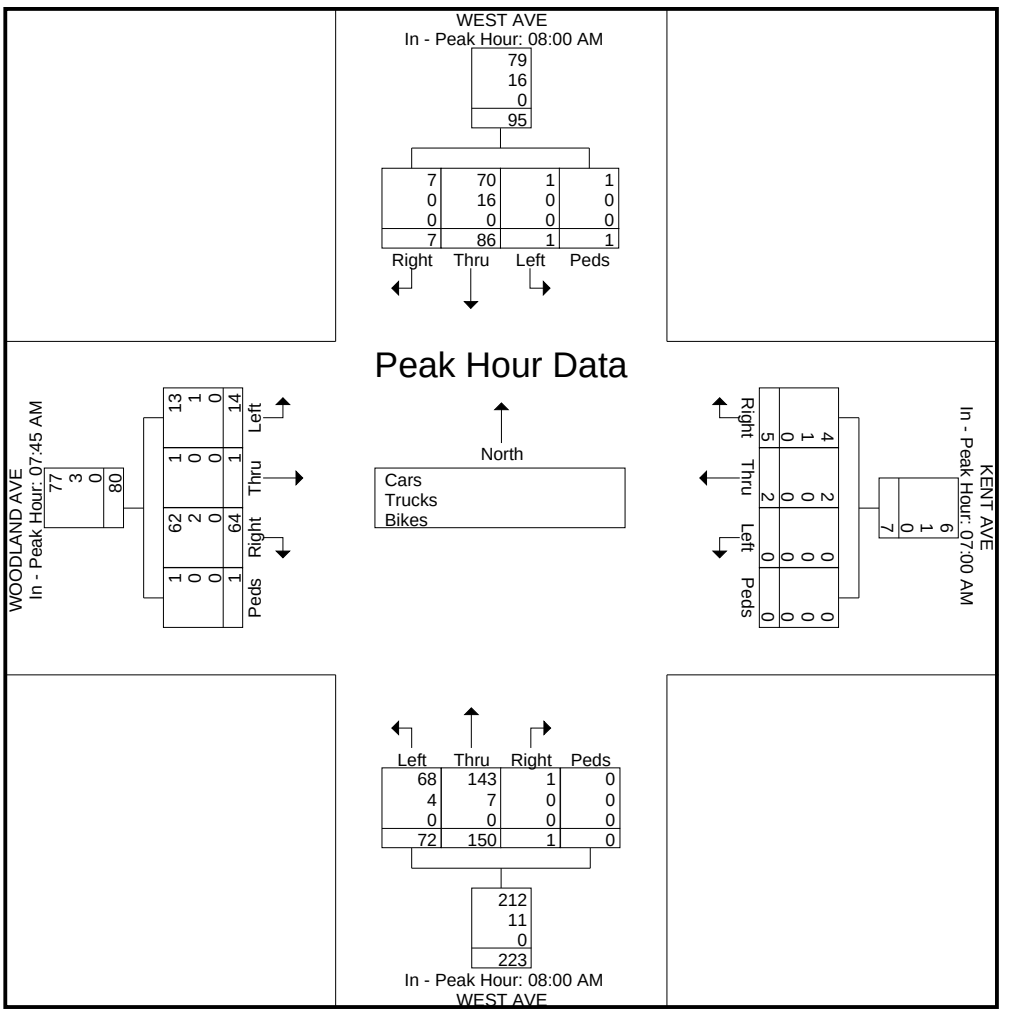
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 4

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					07:00 AM					08:00 AM					07:45 AM					
+0 mins.	**1**	16	1	0	18	0	0	**2**	0	2	15	41	**1**	0	57	3	**1**	17	**1**	22	
+15 mins.	0	14	**5**	0	19	0	**1**	1	0	2	**21**	31	0	0	52	3	0	7	0	10	
+30 mins.	0	**29**	0	**1**	**30**	0	1	2	0	**3**	15	28	0	0	43	**6**	0	14	0	20	
+45 mins.	0	27	1	0	28	0	0	0	0	0	21	**50**	0	0	**71**	2	0	**26**	0	**28**	
Total Volume	1	86	7	1	95	0	2	5	0	7	72	150	1	0	223	14	1	64	1	80	
% App. Total	1.1	90.5	7.4	1.1		0	28.6	71.4	0		32.3	67.3	0.4	0		17.5	1.2	80	1.2		
PHF	.250	.741	.350	.250	.792	.000	.500	.625	.000	.583	.857	.750	.250	.000	.785	.583	.250	.615	.250	.714	
Cars	1	70	7	1	79	0	2	4	0	6	68	143	1	0	212	13	1	62	1	77	
% Cars	100	81.4	100	100	83.2	0	100	80	0	85.7	94.4	95.3	100	0	95.1	92.9	100	96.9	100	96.2	
Trucks	0	16	0	0	16	0	0	1	0	1	4	7	0	0	11	1	0	2	0	3	
% Trucks	0	18.6	0	0	16.8	0	0	20	0	14.3	5.6	4.7	0	0	4.9	7.1	0	3.1	0	3.8	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



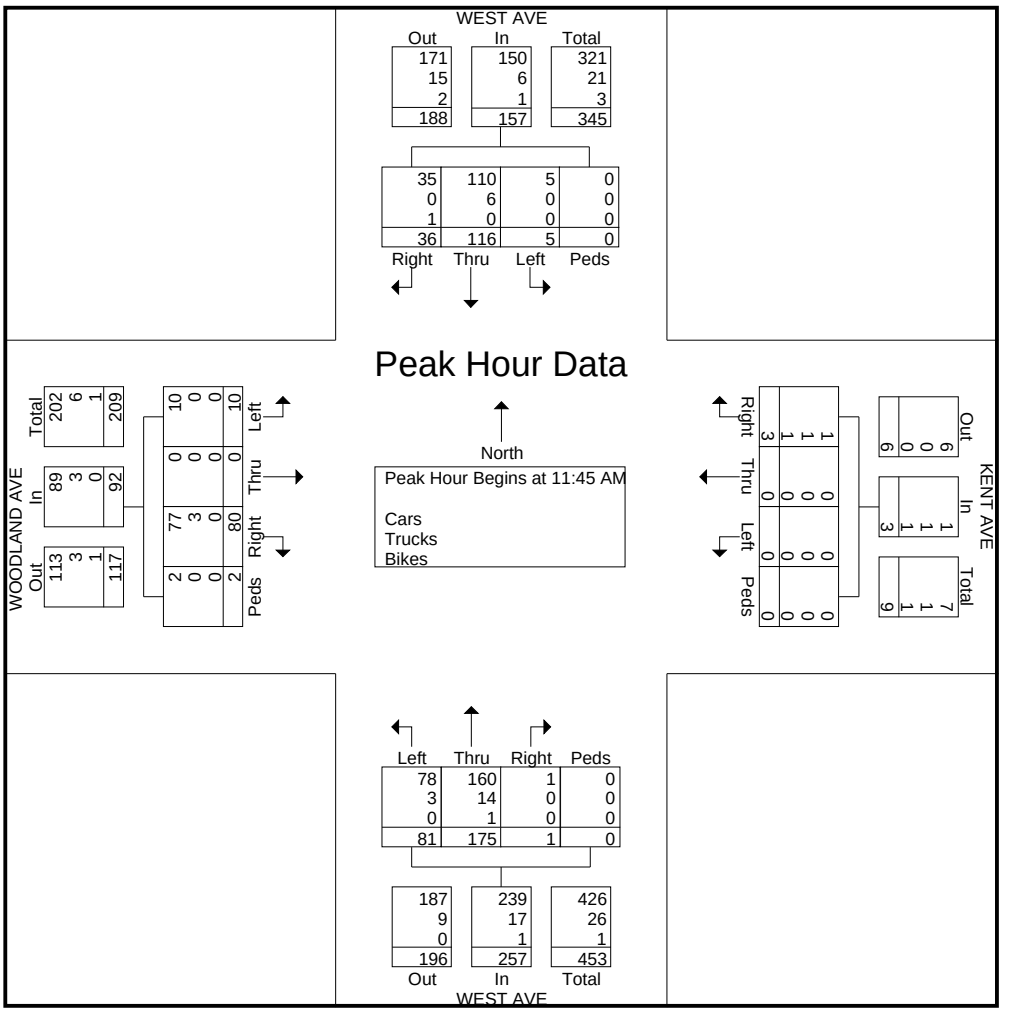
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 5

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	**2**	**37**	5	0	**44**	0	0	0	0	0	17	**62**	0	0	**79**	4	0	17	**2**	23	**146**
12:00 PM	2	30	9	0	41	0	0	1	0	1	12	43	**1**	0	56	0	0	**28**	0	**28**	126
12:15 PM	1	30	5	0	36	0	0	**2**	0	**2**	**28**	40	0	0	68	**5**	0	22	0	27	133
12:30 PM	0	19	**17**	0	36	0	0	0	0	0	24	30	0	0	54	1	0	13	0	14	104
Total Volume	5	116	36	0	157	0	0	3	0	3	81	175	1	0	257	10	0	80	2	92	509
% App. Total	3.2	73.9	22.9	0		0	0	100	0		31.5	68.1	0.4	0		10.9	0	87	2.2		
PHF	.625	.784	.529	.000	.892	.000	.000	.375	.000	.375	.723	.706	.250	.000	.813	.500	.000	.714	.250	.821	.872
Cars	5	110	35	0	150	0	0	1	0	1	78	160	1	0	239	10	0	77	2	89	479
% Cars	100	94.8	97.2	0	95.5	0	0	33.3	0	33.3	96.3	91.4	100	0	93.0	100	0	96.3	100	96.7	94.1
Trucks	0	6	0	0	6	0	0	1	0	1	3	14	0	0	17	0	0	3	0	3	27
% Trucks	0	5.2	0	0	3.8	0	0	33.3	0	33.3	3.7	8.0	0	0	6.6	0	0	3.8	0	3.3	5.3
Bikes	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
% Bikes	0	0	2.8	0	0.6	0	0	33.3	0	33.3	0	0.6	0	0	0.4	0	0	0	0	0	0.6



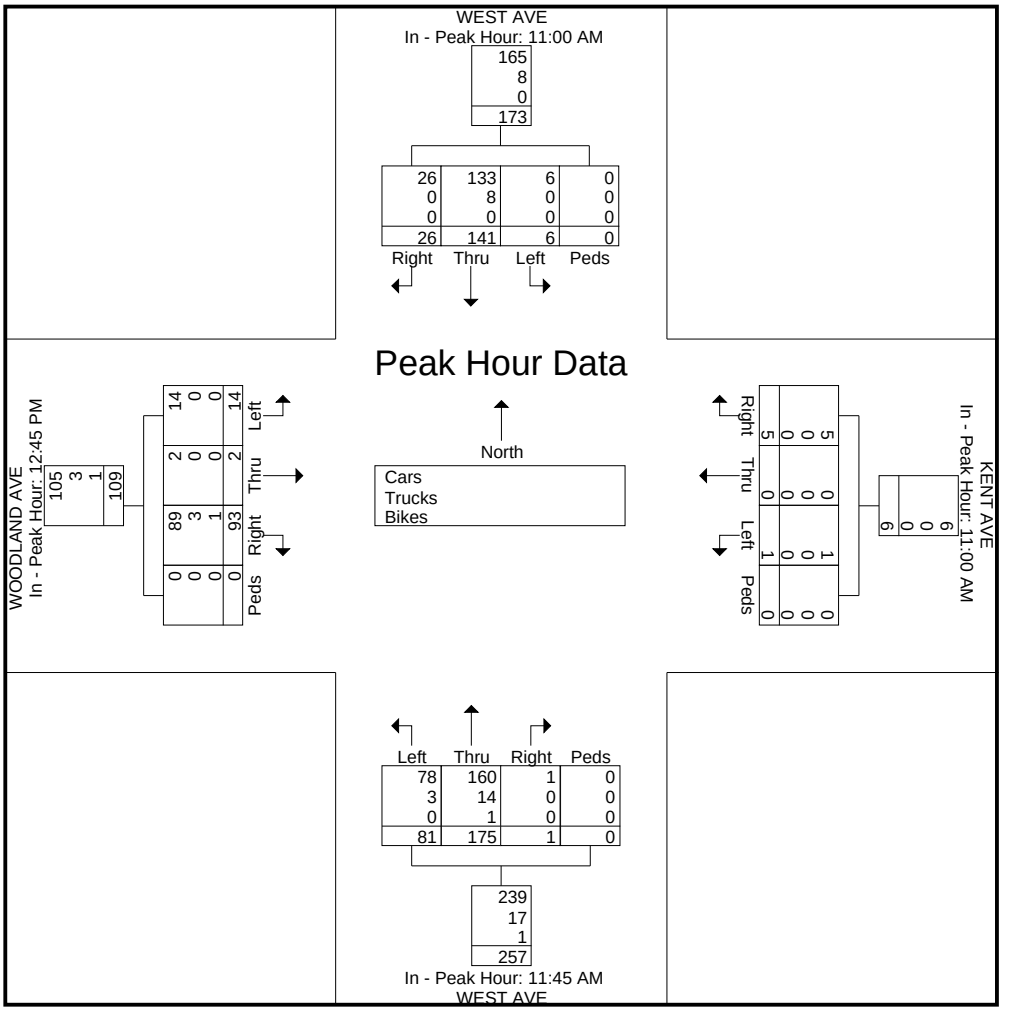
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 6

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	11:00 AM					11:00 AM					11:45 AM					12:45 PM					
+0 mins.	**3**	**44**	7	0	**54**	0	0	**2**	0	2	17	**62**	0	0	**79**	**5**	**1**	18	0	24	
+15 mins.	1	27	**8**	0	36	0	0	1	0	1	12	43	**1**	0	56	2	0	18	0	20	
+30 mins.	0	33	6	0	39	**1**	0	2	0	**3**	**28**	40	0	0	68	3	0	28	0	31	
+45 mins.	2	37	5	0	44	0	0	0	0	0	24	30	0	0	54	4	1	**29**	0	**34**	
Total Volume	6	141	26	0	173	1	0	5	0	6	81	175	1	0	257	14	2	93	0	109	
% App. Total	3.5	81.5	15	0		16.7	0	83.3	0		31.5	68.1	0.4	0		12.8	1.8	85.3	0		
PHF	.500	.801	.813	.000	.801	.250	.000	.625	.000	.500	.723	.706	.250	.000	.813	.700	.500	.802	.000	.801	
Cars	6	133	26	0	165	1	0	5	0	6	78	160	1	0	239	14	2	89	0	105	
% Cars	100	94.3	100	0	95.4	100	0	100	0	100	96.3	91.4	100	0	93	100	100	95.7	0	96.3	
Trucks	0	8	0	0	8	0	0	0	0	0	3	14	0	0	17	0	0	3	0	3	
% Trucks	0	5.7	0	0	4.6	0	0	0	0	0	3.7	8	0	0	6.6	0	0	3.2	0	2.8	
Bikes	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.4	0	0	1.1	0	0.9	



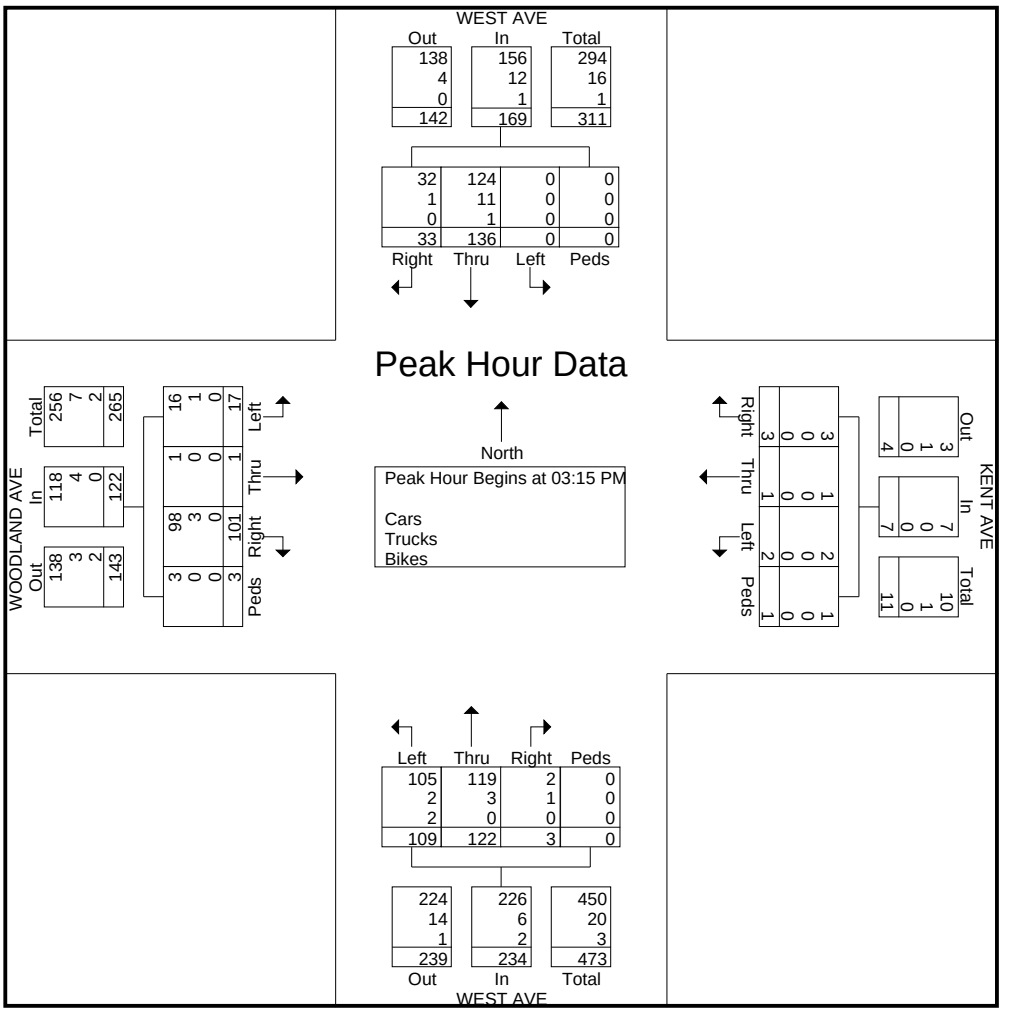
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 7

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 03:15 PM																					
03:15 PM	0	27	**11**	0	38	**1**	0	0	0	1	27	31	0	0	58	4	0	20	0	24	121
03:30 PM	0	37	8	0	45	0	0	1	0	1	23	28	**1**	0	52	3	0	27	0	30	128
03:45 PM	0	29	8	0	37	1	**1**	**2**	**1**	**5**	**32**	28	1	0	61	**6**	**1**	**30**	**3**	**40**	**143**
04:00 PM	0	**43**	6	0	**49**	0	0	0	0	0	27	**35**	1	0	**63**	4	0	24	0	28	140
Total Volume	0	136	33	0	169	2	1	3	1	7	109	122	3	0	234	17	1	101	3	122	532
% App. Total	0	80.5	19.5	0		28.6	14.3	42.9	14.3		46.6	52.1	1.3	0		13.9	0.8	82.8	2.5		
PHF	.000	.791	.750	.000	.862	.500	.250	.375	.250	.350	.852	.871	.750	.000	.929	.708	.250	.842	.250	.763	.930
Cars	0	124	32	0	156	2	1	3	1	7	105	119	2	0	226	16	1	98	3	118	507
% Cars	0	91.2	97.0	0	92.3	100	100	100	100	100	96.3	97.5	66.7	0	96.6	94.1	100	97.0	100	96.7	95.3
Trucks	0	11	1	0	12	0	0	0	0	0	2	3	1	0	6	1	0	3	0	4	22
% Trucks	0	8.1	3.0	0	7.1	0	0	0	0	0	1.8	2.5	33.3	0	2.6	5.9	0	3.0	0	3.3	4.1
Bikes	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	3
% Bikes	0	0.7	0	0	0.6	0	0	0	0	0	1.8	0	0	0	0.9	0	0	0	0	0	0.6



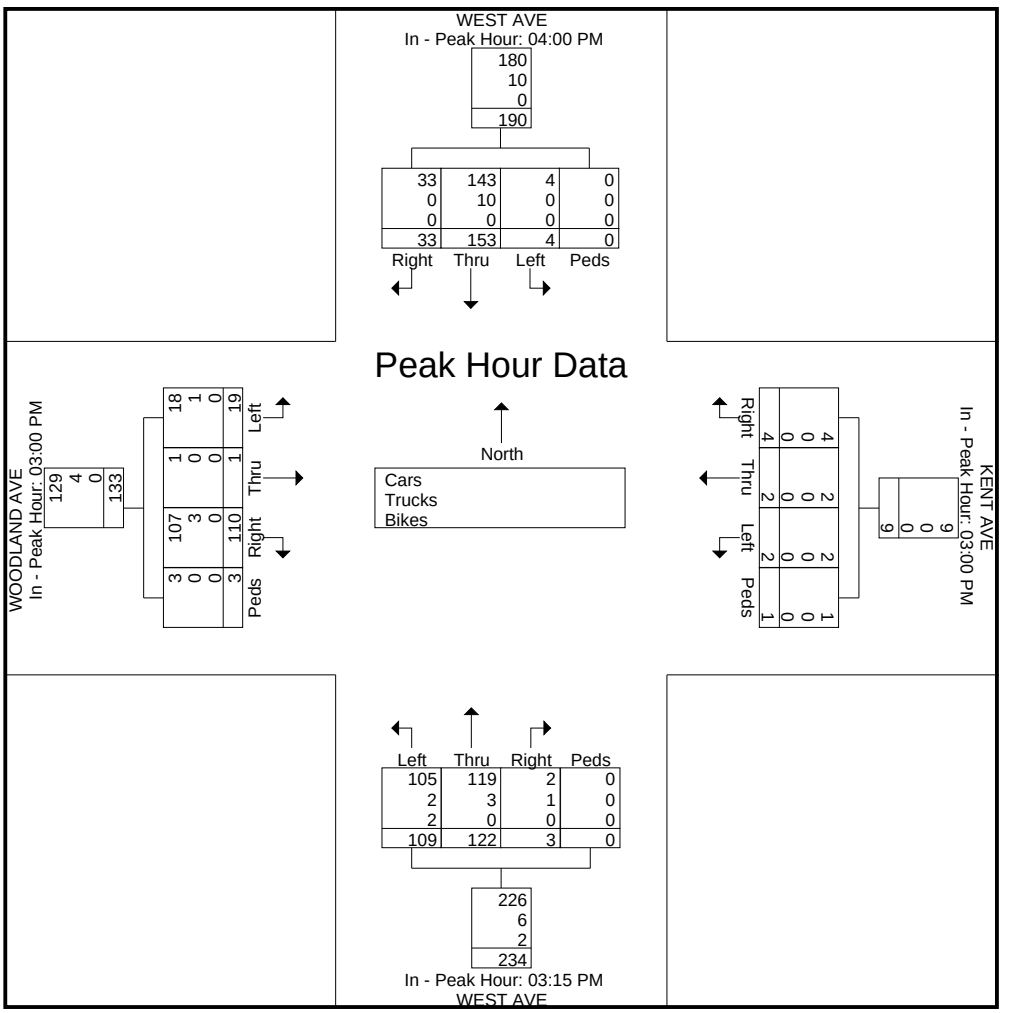
Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : Woodland Ave at West Ave
Site Code : 00000000
Start Date : 10/18/2022
Page No : 8

	WEST AVE From North					KENT AVE From East					WEST AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:00 PM					03:00 PM					03:15 PM					03:00 PM					
+0 mins.	0	43	6	0	49	0	**1**	1	0	2	27	31	0	0	58	**6**	0	**33**	0	39	
+15 mins.	1	**44**	7	0	**52**	**1**	0	0	0	1	23	28	**1**	0	52	4	0	20	0	24	
+30 mins.	1	36	**10**	0	47	0	0	1	0	1	**32**	28	1	0	61	3	0	27	0	30	
+45 mins.	**2**	30	10	0	42	1	1	**2**	**1**	**5**	27	**35**	1	0	**63**	6	**1**	30	**3**	**40**	
Total Volume	4	153	33	0	190	2	2	4	1	9	109	122	3	0	234	19	1	110	3	133	
% App. Total	2.1	80.5	17.4	0		22.2	22.2	44.4	11.1		46.6	52.1	1.3	0		14.3	0.8	82.7	2.3		
PHF	.500	.869	.825	.000	.913	.500	.500	.500	.250	.450	.852	.871	.750	.000	.929	.792	.250	.833	.250	.831	
Cars	4	143	33	0	180	2	2	4	1	9	105	119	2	0	226	18	1	107	3	129	
% Cars	100	93.5	100	0	94.7	100	100	100	100	100	96.3	97.5	66.7	0	96.6	94.7	100	97.3	100	97	
Trucks	0	10	0	0	10	0	0	0	0	0	2	3	1	0	6	1	0	3	0	4	
% Trucks	0	6.5	0	0	5.3	0	0	0	0	0	1.8	2.5	33.3	0	2.6	5.3	0	2.7	0	3	
Bikes	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	
% Bikes	0	0	0	0	0	0	0	0	0	0	1.8	0	0	0	0.9	0	0	0	0	0	



Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

Intersection: WoodlandAve at MitchellAve
Counted By: Pedro Rivera
Date: 03-11-2023
Weather: Overcast 50

File Name : 23-03-11 Woodland at Mitchell
Site Code : 00000000
Start Date : 3/11/2023
Page No : 1

Groups Printed- Cars - Trucks - Bikes

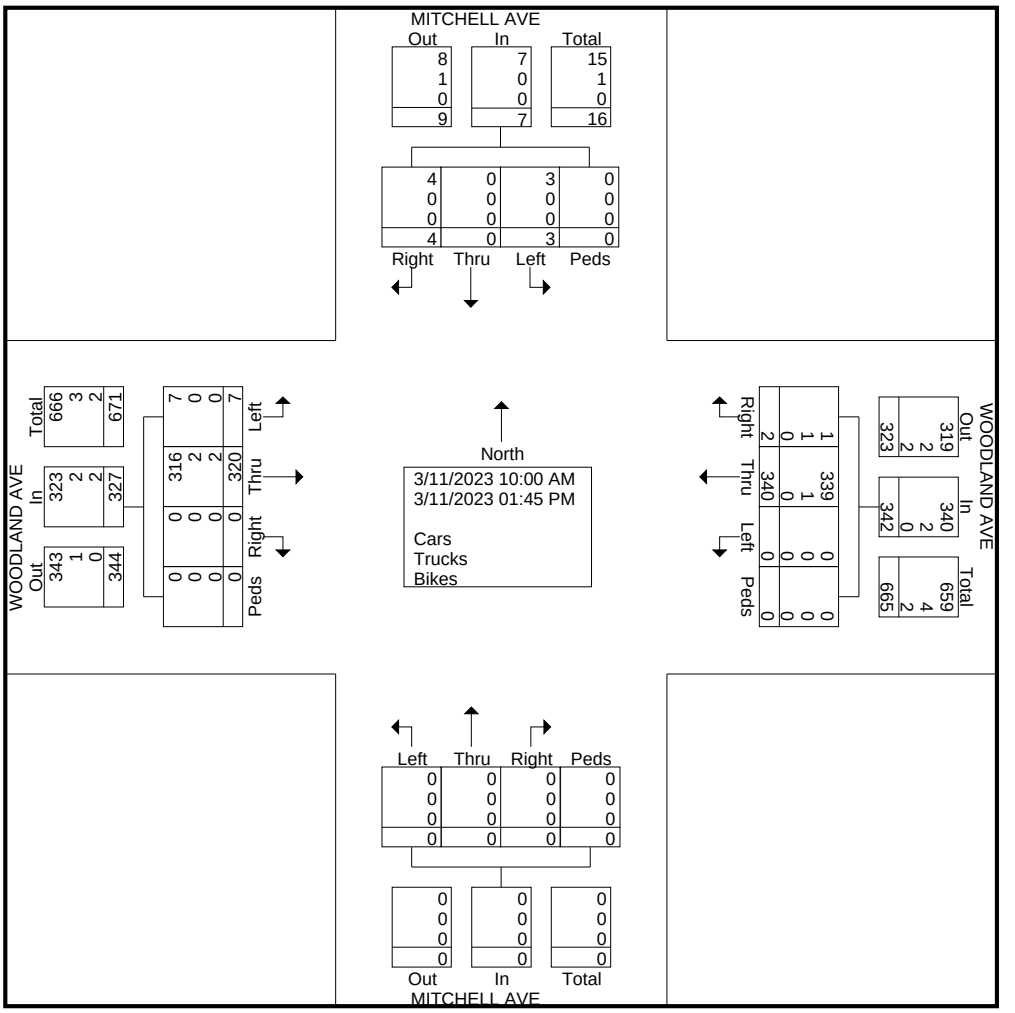
	MITCHELL AVE From North					WOODLAND AVE From East					MITCHELL AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
10:00 AM	0	0	0	0	0	0	33	0	0	33	0	0	0	0	0	1	22	0	0	23	56
10:15 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	1	17	0	0	18	40
10:30 AM	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	0	20	0	0	20	51
10:45 AM	0	0	2	0	2	0	17	0	0	17	0	0	0	0	0	0	14	0	0	14	33
Total	0	0	2	0	2	0	103	0	0	103	0	0	0	0	0	2	73	0	0	75	180
11:00 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	21	0	0	21	43
11:15 AM	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	1	27	0	0	28	53
11:30 AM	1	0	0	0	1	0	20	0	0	20	0	0	0	0	0	1	25	0	0	26	47
11:45 AM	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	16	0	0	16	37
Total	1	0	0	0	1	0	88	0	0	88	0	0	0	0	0	2	89	0	0	91	180
12:00 PM	0	0	0	0	0	0	23	1	0	24	0	0	0	0	0	1	14	0	0	15	39
12:15 PM	1	0	0	0	1	0	23	0	0	23	0	0	0	0	0	0	30	0	0	30	54
12:30 PM	0	0	1	0	1	0	20	0	0	20	0	0	0	0	0	1	15	0	0	16	37
12:45 PM	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	17	0	0	17	31
Total	2	0	1	0	3	0	79	1	0	80	0	0	0	0	0	2	76	0	0	78	161
01:00 PM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	18	0	0	18	38
01:15 PM	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	17	0	0	17	37
01:30 PM	0	0	1	0	1	0	12	0	0	12	0	0	0	0	0	1	27	0	0	28	41
01:45 PM	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	20	0	0	20	39
Total	0	0	1	0	1	0	70	1	0	71	0	0	0	0	0	1	82	0	0	83	155
Grand Total	3	0	4	0	7	0	340	2	0	342	0	0	0	0	0	7	320	0	0	327	676
Apprch %	42.9	0	57.1	0		0	99.4	0.6	0		0	0	0	0		2.1	97.9	0	0		
Total %	0.4	0	0.6	0	1	0	50.3	0.3	0	50.6	0	0	0	0	0	1	47.3	0	0	48.4	
Cars	3	0	4	0	7	0	339	1	0	340	0	0	0	0	0	7	316	0	0	323	670
% Cars	100	0	100	0	100	0	99.7	50	0	99.4	0	0	0	0	0	100	98.8	0	0	98.8	99.1
Trucks	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	4
% Trucks	0	0	0	0	0	0	0.3	50	0	0.6	0	0	0	0	0	0	0.6	0	0	0.6	0.6
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0.3

Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : 23-03-11 Woodland at Mitchell
Site Code : 00000000
Start Date : 3/11/2023
Page No : 2



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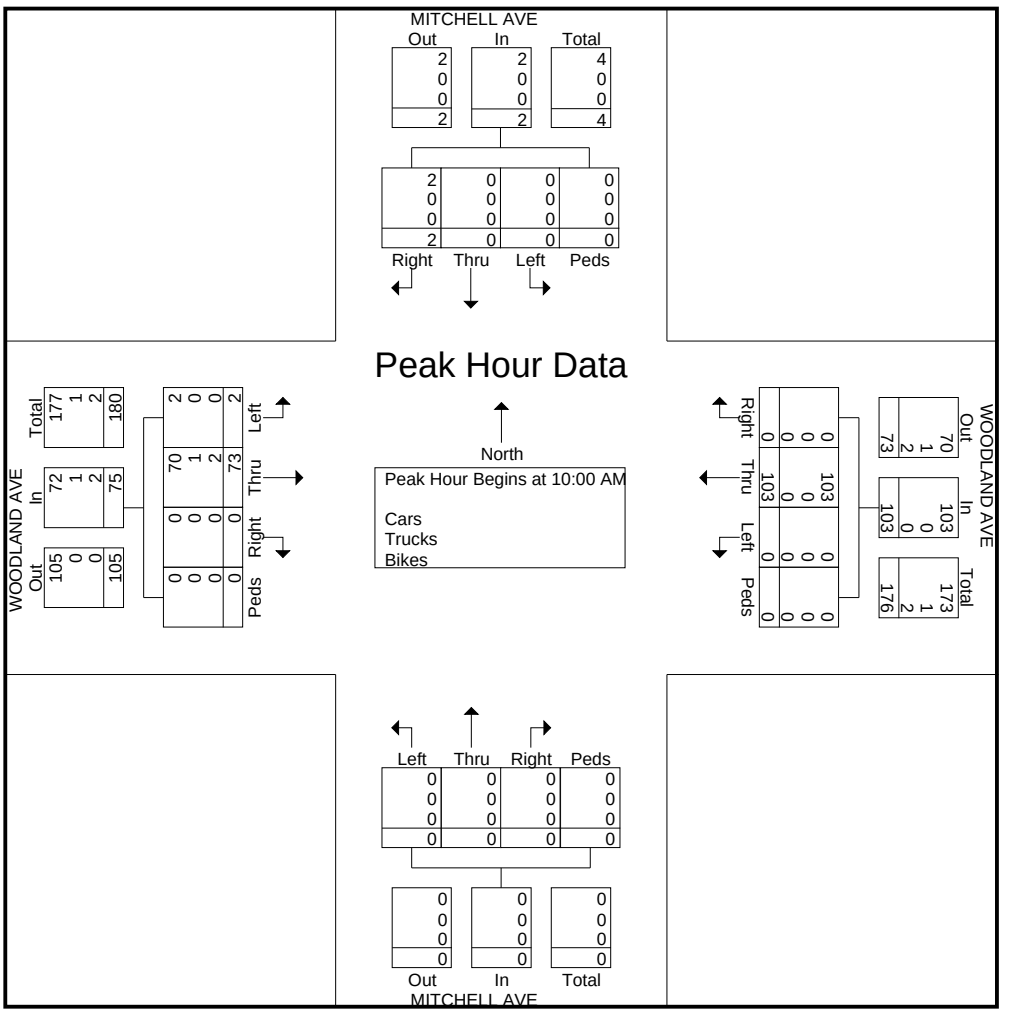
550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

File Name : 23-03-11 Woodland at Mitchell
Site Code : 00000000
Start Date : 3/11/2023
Page No : 3

	MITCHELL AVE From North					WOODLAND AVE From East					MITCHELL AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 10:00 AM																					
10:00 AM	0	0	0	0	0	0	**33**	0	0	**33**	0	0	0	0	0	**1**	**22**	0	0	**23**	**56**
10:15 AM	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	1	17	0	0	18	40
10:30 AM	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	0	20	0	0	20	51
10:45 AM	0	0	**2**	0	**2**	0	17	0	0	17	0	0	0	0	0	0	14	0	0	14	33
Total Volume	0	0	2	0	2	0	103	0	0	103	0	0	0	0	0	2	73	0	0	75	180
% App. Total	0	0	100	0		0	100	0	0		0	0	0	0		2.7	97.3	0	0		
PHF	.000	.000	.250	.000	.250	.000	.780	.000	.000	.780	.000	.000	.000	.000	.000	.500	.830	.000	.000	.815	.804
Cars	0	0	2	0	2	0	103	0	0	103	0	0	0	0	0	2	70	0	0	72	177
% Cars	0	0	100	0	100	0	100	0	0	100	0	0	0	0	0	100	95.9	0	0	96.0	98.3
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	0	0	1.3	0.6
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7	0	0	2.7	1.1



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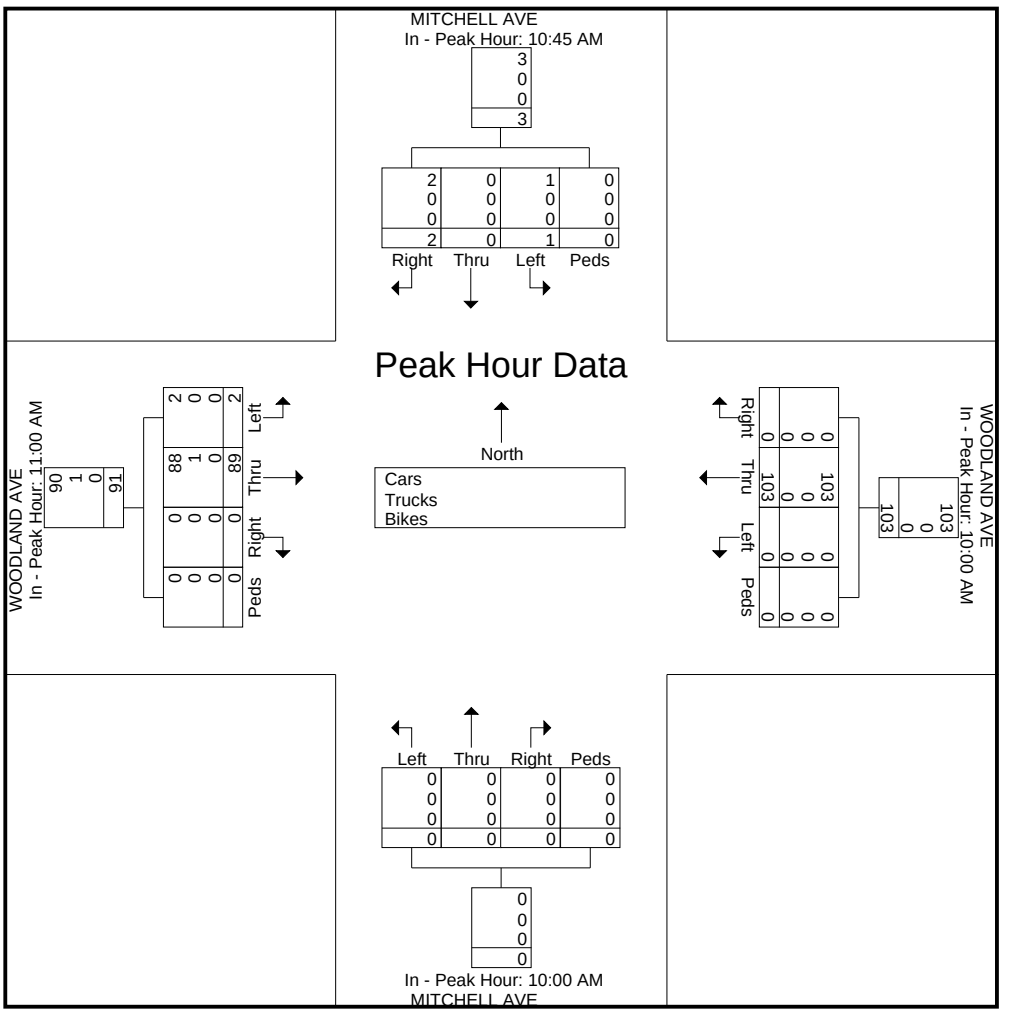
550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589

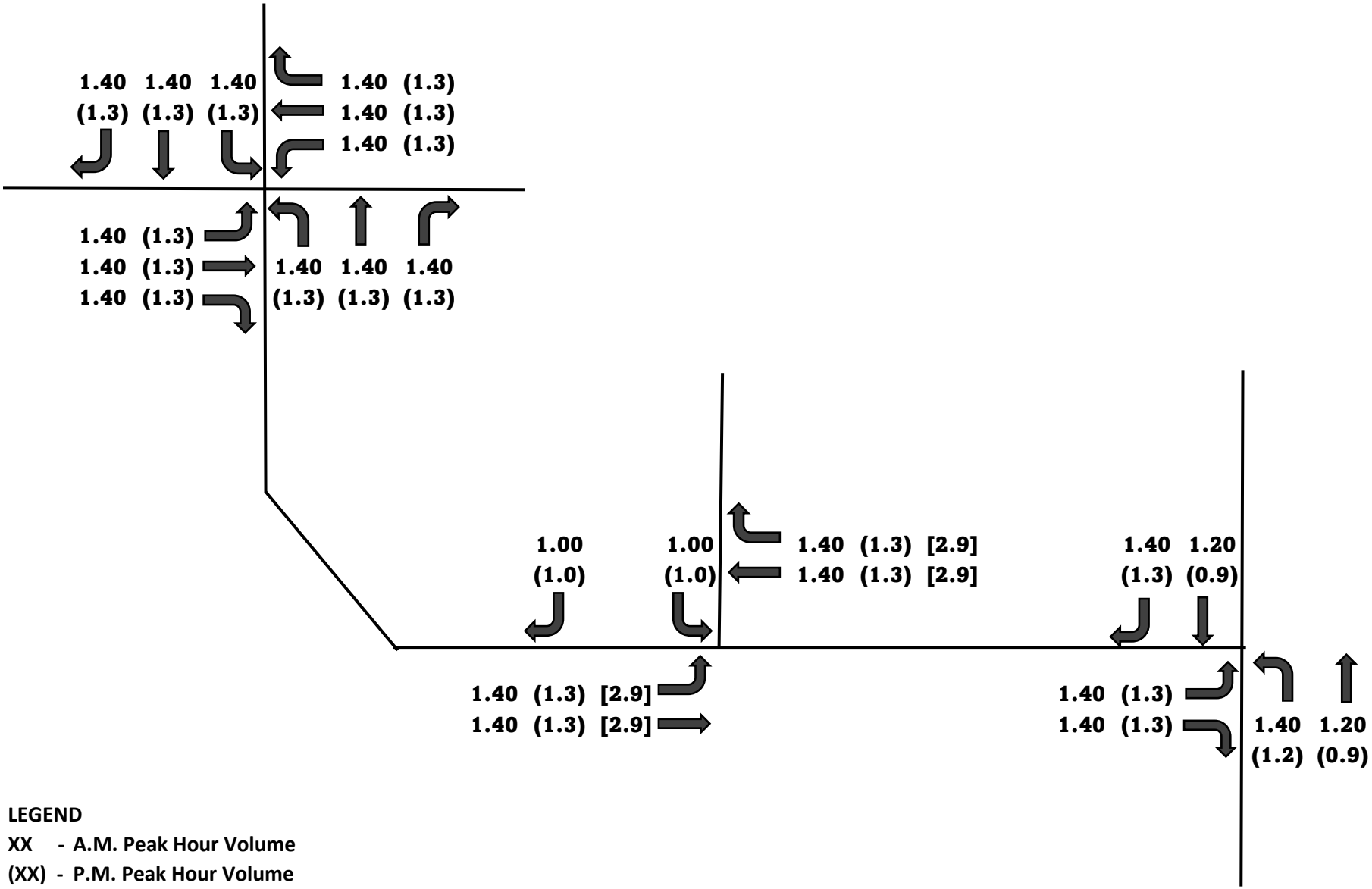
File Name : 23-03-11 Woodland at Mitchell
Site Code : 00000000
Start Date : 3/11/2023
Page No : 4

	MITCHELL AVE From North					WOODLAND AVE From East					MITCHELL AVE From South					WOODLAND AVE From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	10:45 AM					10:00 AM					10:00 AM					11:00 AM					
+0 mins.	0	0	**2**	0	**2**	0	**33**	0	0	**33**	0	0	0	0	0	0	21	0	0	21	
+15 mins.	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	**1**	**27**	0	0	**28**	
+30 mins.	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	1	25	0	0	26	
+45 mins.	**1**	0	0	0	1	0	17	0	0	17	0	0	0	0	0	0	16	0	0	16	
Total Volume	1	0	2	0	3	0	103	0	0	103	0	0	0	0	0	2	89	0	0	91	
% App. Total	33.3	0	66.7	0		0	100	0	0		0	0	0	0		2.2	97.8	0	0		
PHF	.250	.000	.250	.000	.375	.000	.780	.000	.000	.780	.000	.000	.000	.000	.000	.500	.824	.000	.000	.813	
Cars	1	0	2	0	3	0	103	0	0	103	0	0	0	0	0	2	88	0	0	90	
% Cars	100	0	100	0	100	0	100	0	0	100	0	0	0	0	0	100	98.9	0	0	98.9	
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0	1.1	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



SUMMER SEASONAL ADJUSTMENT FACTORS

Summer Peak Hour Seasonal Adjustment Factors



LEGEND

XX - A.M. Peak Hour Volume

(XX) - P.M. Peak Hour Volume

[XX] - Saturday Peak Hour Volume

Appendix C: Intersection Sight Distance & Auxiliary Lane Worksheets

Revised: April 3, 2017

Intersection Sight Distance

Project Name:	**Submission Date:**
Shore Vista	December 26, 2022
Maintenance Road No. (i.e. KCR356):	**Road Name:**
1018	Woodland Avenue

Intersection Conditions

Total Number of Travel Lanes	2
Number of Near Travel Lanes Crossed (Left Turn)*	1
Number of Travel Lanes Crossed (Right Turn)**	0
Median +/or Turning Lane Width	0
Posted Speed Limit	25
Design Speed	30
Highway Grade (Moving Left to Right)	1.0%
Minor Road Approach Grade	1.0%

Left Turn from Minor Road (Case B1)

From Table	335
ISD = 1.47 x V_{major} x T_g	330.75
Multilane Adjustment for T_g	0.00
Minor Road Approach Adjustment	0
Adjustment Factor	1.00
Time Gap	7.5
ISD With Adjustments	

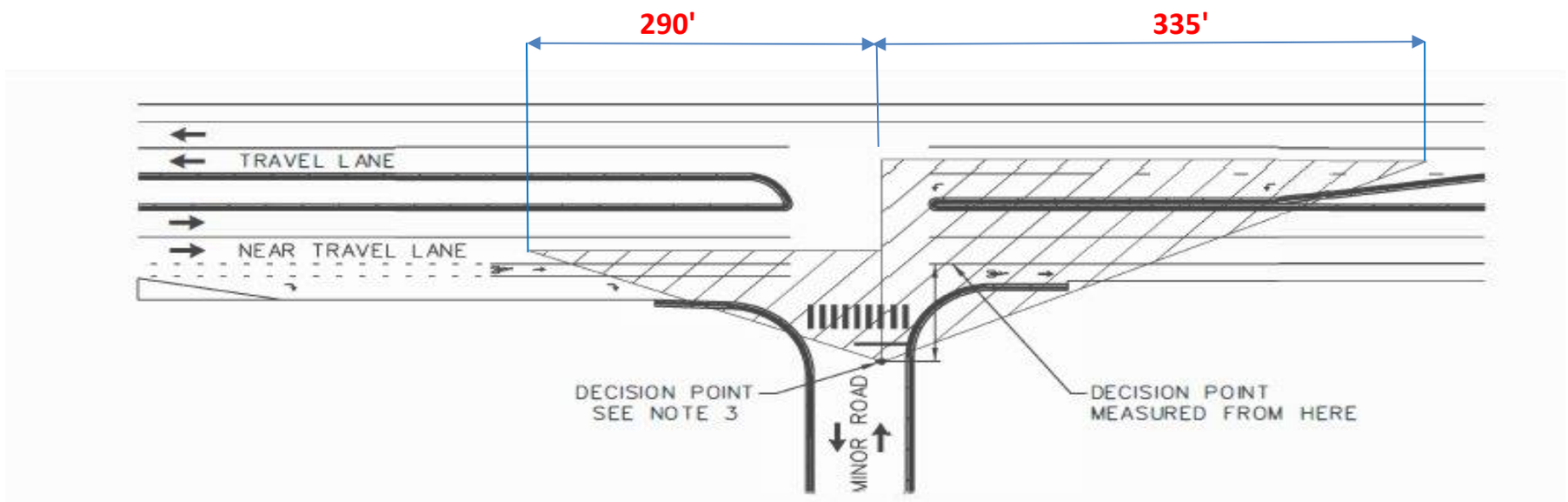
Right Turn from Minor Road (Case B2)

From Table	290
ISD = 1.47 x V_{major} x T_g	286.65
Multilane Adjustment for T_g	0.00
Minor Road Approach Adjustment	0
Adjustment Factor	1.00
Time Gap	6.5
ISD With Adjustments	287

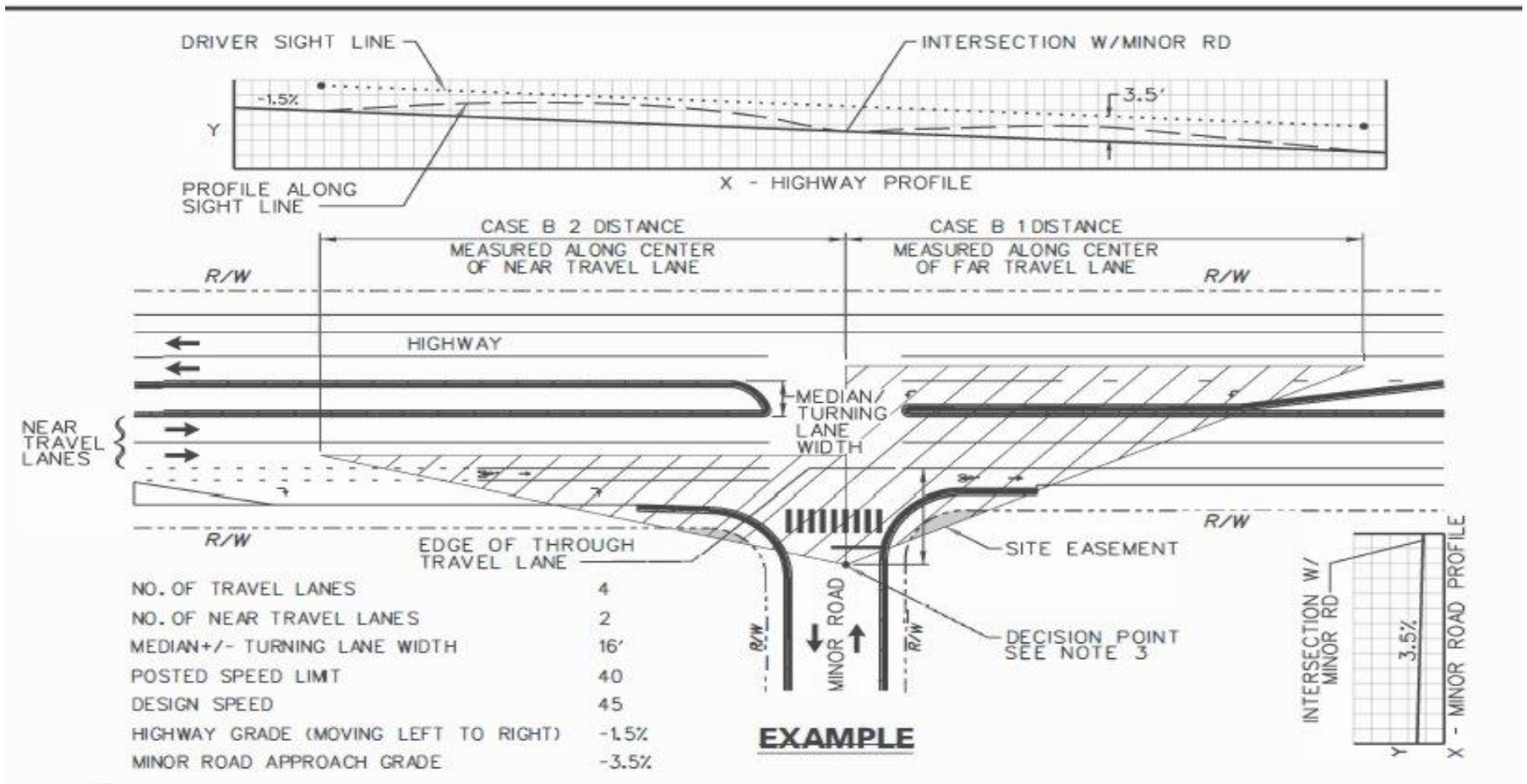
* Include all travel lanes that are completely crossed

**Typically zero for right turning vehicles

Note: See Assumptions tab for notes and intersection sight design criteria



SIGHT DISTANCE DIAGRAM



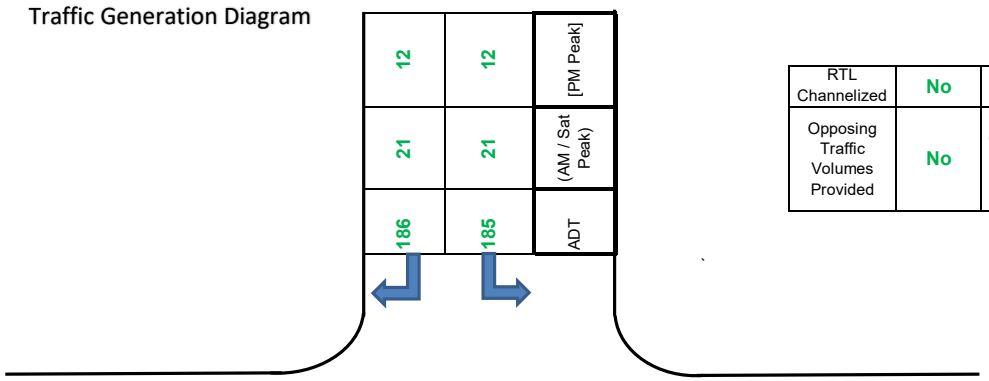
EXAMPLE

NOTES:

1. DIAGRAM IS FOR INFORMATIONAL PURPOSES ONLY. THE NUMBER OF TRAVEL LANE AND PRESENCE OF AUXILIARY LANES AND MEDIAN WILL VARY BASED ON ENTRANCE AND FRONTAGE ROAD REQUIREMENTS.
2. CALCULATED DISTANCES ARE PROJECTED OUT FROM THE DECISION POINT, MEASURED ALONG THE CENTERLINE AND FOLLOW THE CURVATURE OF THE TRAVEL LINE.
3. THE DECISION POINT IS MEASURED FROM THE EDGE OF THE NEAR TRAVEL LANE AS FOLLOWS:
   A. MINOR SUBDIVISION ENTRANCES -14.5'
   B. MAJOR SUBDIVISION ENTRANCES -18'
4. THE 'A' DIMENSION SHOWN ON FIGURE 5-21 IN THE STANDARDS AND REGULATIONS FOR SUBDIVISION STREETS AND STATE HIGHWAY ACCESS MANUAL IS INCORRECT AND WILL BE REVISED TO MATCH THE DIAGRAM ABOVE THE NEXT MANUAL REVISION.

May 26, 2022

Traffic Generation Diagram



RTL Channelized	No		
Opposing Traffic Volumes Provided	No	Opposing based on [AM / Sat] / (PM)	PM

[PM Peak]	(AM / Sat Peak)	ADT
21	7	186

ADT	(AM / Sat Peak)	[PM Peak]
185	6	20

Roadway AADT From DelDOT Traffic Summary:	2851
Committed Development AADT:	0

Notes:
1. Fill in the volumes on the **Traffic Generation Diagram** tab consistent with the Traffic Generation Diagram created for the Entrance Plan.
   i. If the proposed entrance will create the fourth leg to an existing entrance, separate Auxiliary Lane Worksheets shall be completed and submitted for review of both the proposed entrance and the existing entrance.

shall be completed and submitted for review of both the proposed entrance and the existing entrance.

ii. If the proposed entrance will create the fourth leg to an existing T intersection (2 roads), an Auxiliary Lane Worksheet shall be completed for the proposed entrance and all other approaches will need further evaluation per the Development Coordination Manual and associated state and federal manuals (i.e. AASHTO Green Book).

2. If the entrance is an existing access point, left turn and right turn ADT and peak hour volumes shall include site traffic and existing roadway traffic.

3. If opposing roadway traffic volumes were collected, include in the worksheet.

4. If the opposing right-turn movement is channelized, a reduction may be included in the worksheet. Justification for reduction shall be submitted to DelDOT Development Coordination Section for review.

5. If Committed Development traffic information is known, include in the worksheet. This information is commonly included in a Final TIS.

6. In the **Aux Lane Inputs - Tab 2**, fill in the cells with **GREEN** text.

i. If opposing roadway traffic volumes were collected and/or the opposing right- turn movement is channelized, the Left Turn VPH should be the same peak hour as the peak hour chosen for the opposing through and right turn volumes within the **Traffic Generation Diagram** tab.

7. To obtain further clarification on how ADT is determined per approach, see **Left-Right Approach Example** tab within the DelDOT Auxiliary Lane Worksheet.

May 26, 2022 V2020.3

DelDOT Auxiliary Lane Worksheet

Roadway Information and Entrance

Manually Update Cell	XX
Auto-Calculated Cells	XX

Name of Project			Villas at Ocean View			Date of Submittal			2/18/2023		
Maintenance Road No. (i.e. K234A)			41018			Road Name			Woodland Ave-Site		
Signalized / Unsignalized			Unsignalized			Posted Speed Limit			25		
Roadway ADT (From DelDOT Traffic Manual)			2851			Traffic Pattern Group			7		
Left Approach Site ADT	372	Committed Development ADT	0	Total Left Approach ADT	372	Right Approach Site ADT	370	Committed Development ADT	0	Total Right Approach ADT	370
Total Number of Through Lanes (Does Not Include Turn Lanes)			2 lanes			Number of intersection legs			4		
Roadway Functional Classification			Local			Calculation for (specify leg)			Proposed Entrance 1		
Left-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			3679			Right-Approach Projected 10 yr Roadway ADT + Total Site + Committed Development ADT			3677		
K Factor			16.4			D Factor			60.9		

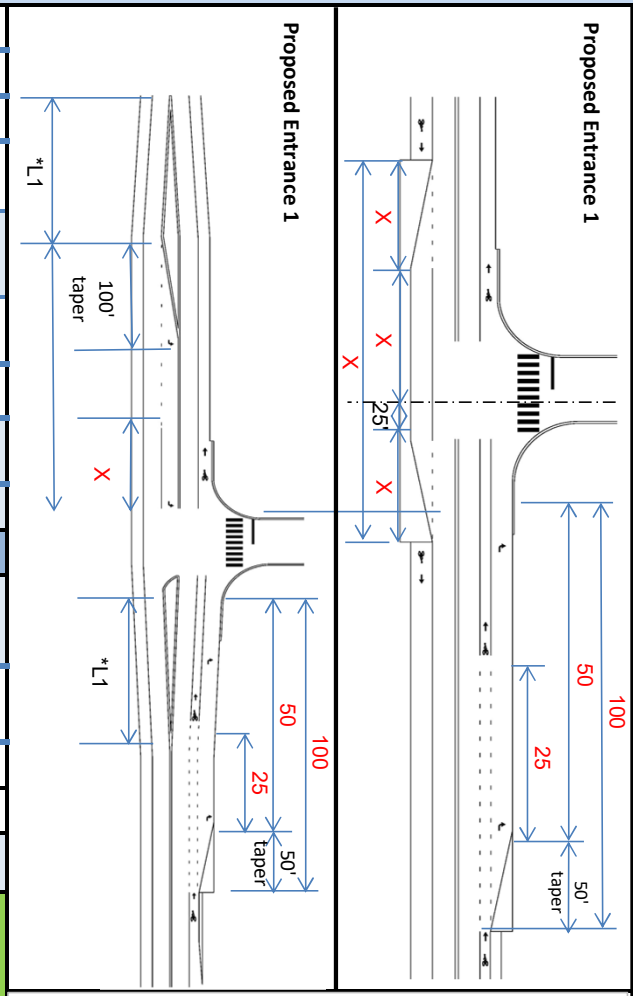
Left Turn Information

Left Turn VPH	21
Left Turn Approach Grade	1.0%
Heavy Vehicle %	5
10 Yr Opposing Vol. (Manual Input - Veh/hr)	0
10 Yr Opposing Volume (Calculated)	330 Veh/hr
10 Yr Opposing Volume (Calculated Vol.)	330 Veh/hr

Right Turn Information

Right Turn ADT	101 - 200
Right Turn Approach Grade	1.0%
Effective Radius of Entrance	R≤50'
Right Turn Length	100 ft

Bypass and Left Turn Lanes are not required



Villas at Ocean View

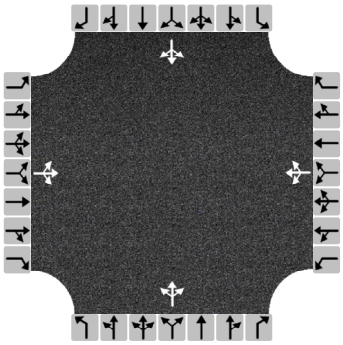
NOTE:
This worksheet is for Right Turn Auxiliary Lanes, and Unsignalized Left Turn Auxiliary Lanes. If a signal analysis is required, please refer to signalized intersection analysis spreadsheet (Tab 6).
*L1 - See Typical Entrance Diagram located at: http://www.deldot.gov/information/business/subdivisions/Typical_Entrance_Diagrams.pdf

Appendix D: HCS Analysis Reports

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2022	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	A.M. Peak Hour		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	11	13	79	8	11	15	198	60	8	74	4
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	29			113			314			99		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.026			0.100			0.279			0.088		
Final Departure Headway, hd (s)	4.77			5.04			4.32			4.83		
Final Degree of Utilization, x	0.038			0.158			0.377			0.133		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.77			3.04			2.32			2.83		

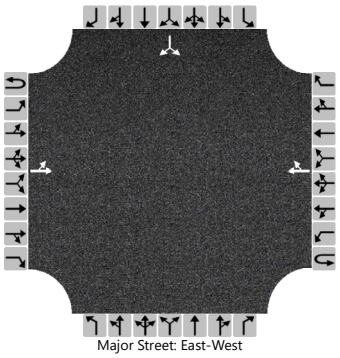
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	29			113			314			99		
Capacity	755			715			833			745		
95% Queue Length, Q_{95} (veh)	0.1			0.6			1.8			0.5		
Control Delay (s/veh)	8.0			9.0			9.9			8.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)	8.0			9.0			9.9			8.6		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	9.4						A					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2022	North/South Street	Mitchell Ave
Time Analyzed	A.M. Peak Hour	Peak Hour Factor	0.81
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	80				77	2						1		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4													9	
Capacity, c (veh/h)		1489													928	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.4	0.0												8.9	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.3												8.9			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

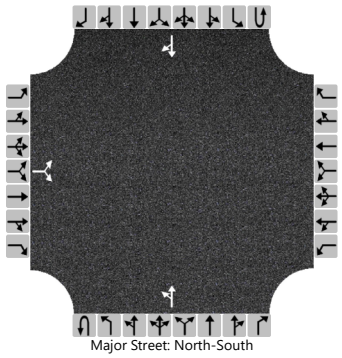
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	11/29/2022
Analysis Year	2022
Time Analyzed	A.M. Peak Hour
Intersection Orientation	North-South
Project Description	Shore Vista TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		12		65						72	151				87	8
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

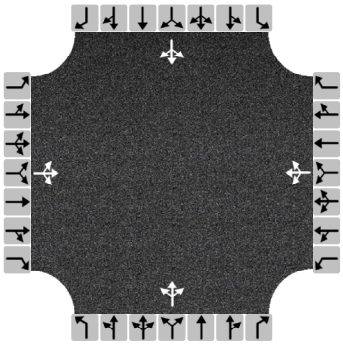
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			91							85						
Capacity, c (veh/h)			836							1447						
v/c Ratio			0.11							0.06						
95% Queue Length, Q_{95} (veh)			0.4							0.2						
Control Delay (s/veh)			9.8							7.6	0.5					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.8								2.8						
Approach LOS		A								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2022	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	P.M. Peak Hour		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	2	20	16	119	16	14	8	145	111	16	152	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	40			155			275			175		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.035			0.138			0.244			0.156		
Final Departure Headway, hd (s)	5.01			5.17			4.45			4.82		
Final Degree of Utilization, x	0.055			0.223			0.340			0.234		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.01			3.17			2.45			2.82		

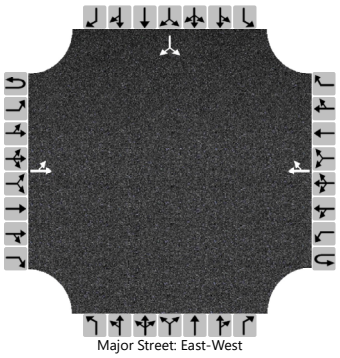
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	40			155			275			175		
Capacity	718			697			809			747		
95% Queue Length, Q_{95} (veh)	0.2			0.8			1.5			0.9		
Control Delay (s/veh)	8.3			9.6			9.7			9.3		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh)	8.3			9.6			9.7			9.3		
Approach LOS	A			A			A			A		
Intersection Delay, s/veh | LOS	9.5						A					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2022	North/South Street	Mitchell Ave
Time Analyzed	P.M. Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		4	120				142	2						1		5
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

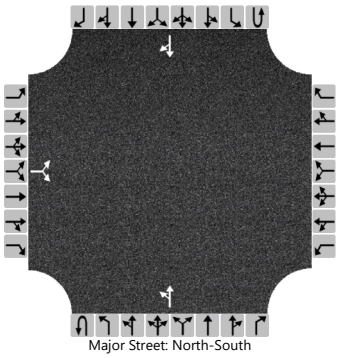
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													7	
Capacity, c (veh/h)		1402													831	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6	0.0												9.4	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)		0.3												9.4		
Approach LOS		A												A		

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Muddy Neck Rd
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2022	North/South Street	Muddy Neck Rd
Time Analyzed	P.M. Peak Hour	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		18		101						109	125				138	34
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

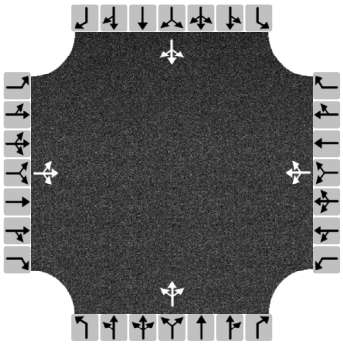
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			128							117						
Capacity, c (veh/h)			767							1384						
v/c Ratio			0.17							0.08						
95% Queue Length, Q_{95} (veh)			0.6							0.3						
Control Delay (s/veh)			10.6							7.8	0.7					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.6								4.0						
Approach LOS		B								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	A.M. Peak Hour FWOP		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	13	15	92	9	13	17	230	70	9	86	5
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	33			131			364			115		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.030			0.116			0.324			0.102		
Final Departure Headway, hd (s)	4.98			5.22			4.42			4.97		
Final Degree of Utilization, x	0.046			0.190			0.448			0.159		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	2.98			3.22			2.42			2.97		

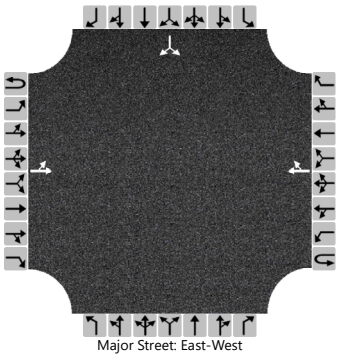
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	33			131			364			115		
Capacity	722			690			814			724		
95% Queue Length, Q_{95} (veh)	0.1			0.7			2.3			0.6		
Control Delay (s/veh)	8.2			9.4			11.0			8.9		
Level of Service, LOS	A			A			B			A		
Approach Delay (s/veh)	8.2			9.4			11.0			8.9		
Approach LOS	A			A			B			A		
Intersection Delay, s/veh | LOS	10.1						B					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Mitchell Ave
Time Analyzed	A.M. Peak Hour FWOP	Peak Hour Factor	0.81
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	93				89	2						1		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4													9	
Capacity, c (veh/h)		1471													907	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.5	0.0												9.0	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.3												9.0			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

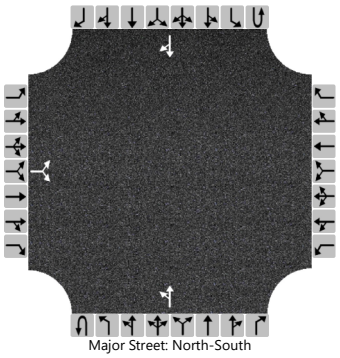
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	11/29/2022
Analysis Year	2032
Time Analyzed	A.M. Peak Hour FWOP
Intersection Orientation	North-South
Project Description	Shore Vista TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		14		75						84	175				101	9
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

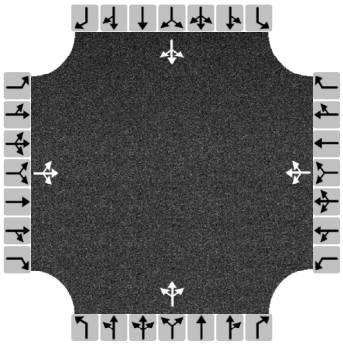
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			105							99						
Capacity, c (veh/h)			797							1426						
v/c Ratio			0.13							0.07						
95% Queue Length, Q_{95} (veh)			0.5							0.2						
Control Delay (s/veh)			10.2							7.7	0.6					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.2								2.9						
Approach LOS		B								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	P.M. Peak Hour FWOP		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	2	23	19	138	19	16	9	168	129	19	176	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	46			180			319			203		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.041			0.160			0.283			0.181		
Final Departure Headway, hd (s)	5.27			5.38			4.61			5.00		
Final Degree of Utilization, x	0.067			0.269			0.408			0.282		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.27			3.38			2.61			3.00		

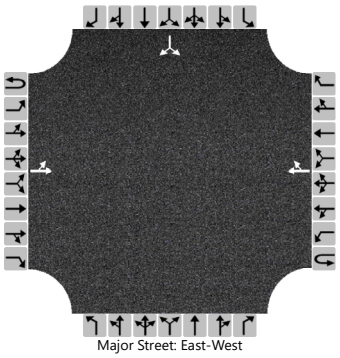
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	46			180			319			203		
Capacity	683			669			781			720		
95% Queue Length, Q_{95} (veh)	0.2			1.1			2.0			1.2		
Control Delay (s/veh)	8.7			10.4			10.7			10.0		
Level of Service, LOS	A			B			B			A		
Approach Delay (s/veh)	8.7			10.4			10.7			10.0		
Approach LOS	A			B			B			A		
Intersection Delay, s/veh | LOS	10.3						B					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Mitchell Ave
Time Analyzed	P.M. Peak Hour FWOP	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	139				165	2						1		5
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

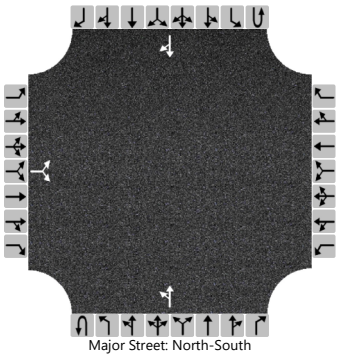
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													7	
Capacity, c (veh/h)		1370													797	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6	0.0												9.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)		0.3												9.6		
Approach LOS		A												A		

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Muddy Neck Rd
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Muddy Neck Rd
Time Analyzed	P.M. Peak Hour FWOP	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		21		117						126	145				160	39
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

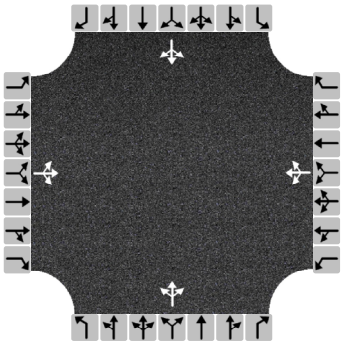
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			148							135						
Capacity, c (veh/h)			721							1350						
v/c Ratio			0.21							0.10						
95% Queue Length, Q_{95} (veh)			0.8							0.3						
Control Delay (s/veh)			11.3							8.0	0.9					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.3								4.2						
Approach LOS		B								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.87
Time Analyzed	A.M. Peak Hour FWP		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	17	15	96	24	15	17	230	71	10	86	5
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	38			155			366			116		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.034			0.138			0.325			0.103		
Final Departure Headway, hd (s)	5.09			5.23			4.51			5.08		
Final Degree of Utilization, x	0.054			0.226			0.458			0.164		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.09			3.23			2.51			3.08		

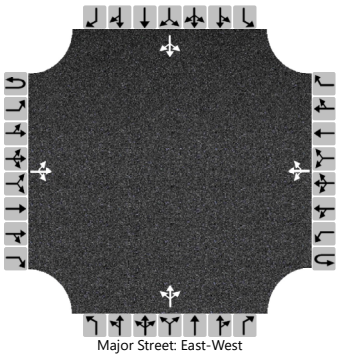
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	38			155			366			116		
Capacity	708			688			798			709		
95% Queue Length, Q_{95} (veh)	0.2			0.9			2.4			0.6		
Control Delay (s/veh)	8.4			9.8			11.3			9.1		
Level of Service, LOS	A			A			B			A		
Approach Delay (s/veh)	8.4			9.8			11.3			9.1		
Approach LOS	A			A			B			A		
Intersection Delay, s/veh | LOS	10.4						B					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Mitchell Ave
Time Analyzed	A.M. Peak Hour FWP	Peak Hour Factor	0.81
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	93	6		7	89	2		21	0	21		1	0	6
Percent Heavy Vehicles (%)		3				3				7	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.17	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.56	4.03	3.33		3.53	4.03	3.33

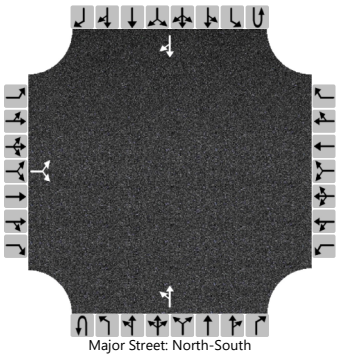
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				9					52				9	
Capacity, c (veh/h)		1471				1459					785				890	
v/c Ratio		0.00				0.01					0.07				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.0	
Control Delay (s/veh)		7.5	0.0	0.0		7.5	0.0	0.0			9.9				9.1	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	0.2				0.6				9.9				9.1			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Muddy Neck Rd
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Muddy Neck Rd
Time Analyzed	A.M. Peak Hour FWP	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		18		92						90	175				101	10
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

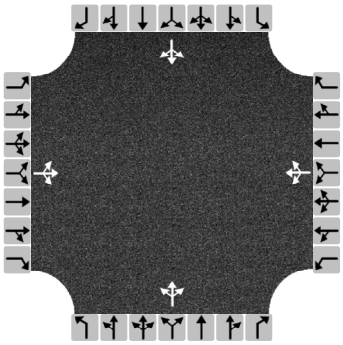
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			129							106						
Capacity, c (veh/h)			787							1424						
v/c Ratio			0.16							0.07						
95% Queue Length, Q_{95} (veh)			0.6							0.2						
Control Delay (s/veh)			10.5							7.7	0.6					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.5								3.1						
Approach LOS		B								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/30/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	P.M. Peak Hour FWP		
Project Description	Shore Vista TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	2	37	19	140	28	17	9	168	133	21	176	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	60			193			323			205		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.054			0.171			0.287			0.182		
Final Departure Headway, hd (s)	5.40			5.44			4.70			5.11		
Final Degree of Utilization, x	0.091			0.291			0.422			0.291		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.40			3.44			2.70			3.11		

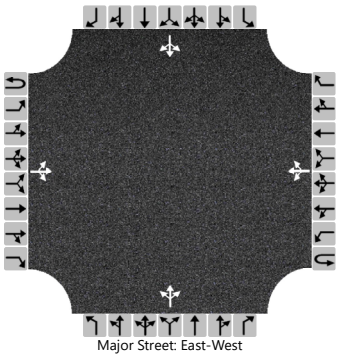
Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	60			193			323			205		
Capacity	667			661			766			705		
95% Queue Length, Q_{95} (veh)	0.3			1.2			2.1			1.2		
Control Delay (s/veh)	8.9			10.7			11.1			10.2		
Level of Service, LOS	A			B			B			B		
Approach Delay (s/veh)	8.9			10.7			11.1			10.2		
Approach LOS	A			B			B			B		
Intersection Delay, s/veh | LOS	10.6						B					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Mitchell Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Mitchell Ave / Site Entrance
Time Analyzed	P.M. Peak Hour FWP	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	139	20		21	165	2		12	0	12		1	0	5
Percent Heavy Vehicles (%)		3				3				7	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.17	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.56	4.03	3.33		3.53	4.03	3.33

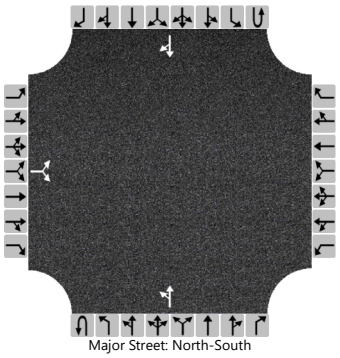
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				25					28				7	
Capacity, c (veh/h)		1370				1381					642				764	
v/c Ratio		0.00				0.02					0.04				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.1				0.0	
Control Delay (s/veh)		7.6	0.0	0.0		7.7	0.2	0.2			10.9				9.8	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	0.3				1.0				10.9				9.8			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Woodland Ave @ Muddy Neck Rd
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	11/29/2022	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Muddy Neck Rd
Time Analyzed	P.M. Peak Hour FWP	Peak Hour Factor	0.93
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Shore Vista TOA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		23		127						143	145				160	43
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			161							154						
Capacity, c (veh/h)			705							1345						
v/c Ratio			0.23							0.11						
95% Queue Length, Q_{95} (veh)			0.9							0.4						
Control Delay (s/veh)			11.6							8.0	1.0					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.6								4.5						
Approach LOS		B								A						

HCS All-Way Stop Control Report

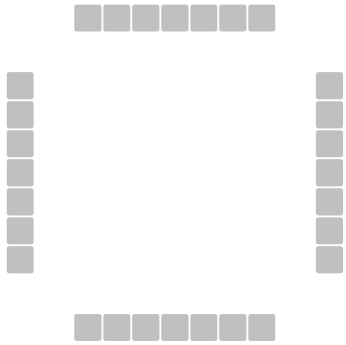
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Summer A.M. Peak Hour
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Central Ave at Woodland Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Central Avenue
Peak Hour Factor	0.87

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	15	18	111	11	15	21	277	84	11	104	6
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	39			157			439			139		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.035			0.140			0.390			0.124		
Final Departure Headway, hd (s)	5.32			5.50			4.58			5.21		
Final Degree of Utilization, x	0.058			0.241			0.559			0.201		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.32			3.50			2.58			3.21		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	39			157			439			139		
Capacity	677			654			786			691		
95% Queue Length, Q_{95} (veh)	0.2			0.9			3.5			0.7		
Control Delay (s/veh)	8.6			10.2			13.2			9.5		
Level of Service, LOS	A			B			B			A		
Approach Delay (s/veh)	8.6			10.2			13.2			9.5		
Approach LOS	A			B			B			A		
Intersection Delay, s/veh | LOS	11.7						B					

HCS Two-Way Stop-Control Report

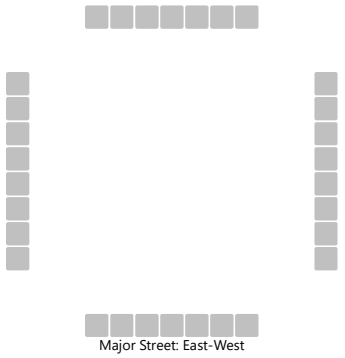
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2022
Time Analyzed	Summer A.M. Peak Hour
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		4	112				108	3						1		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													9	
Capacity, c (veh/h)		1441													874	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.5	0.0												9.2	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.3												9.2			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

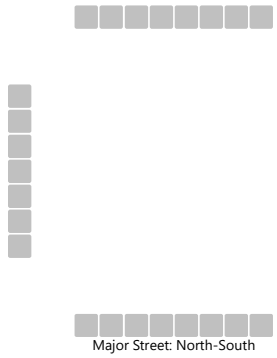
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2022
Time Analyzed	Summer A.M. Peak Hour
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		17		91						101	181				104	11
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			127							119						
Capacity, c (veh/h)			774							1419						
v/c Ratio			0.16							0.08						
95% Queue Length, Q_{95} (veh)			0.6							0.3						
Control Delay (s/veh)			10.6							7.8	0.7					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.6								3.3						
Approach LOS		B								A						

HCS All-Way Stop Control Report

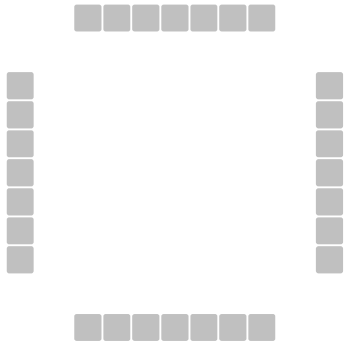
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/247/2023
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	Summer P.M. Peak Hour
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Central Ave at Woodland Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Central Avenue
Peak Hour Factor	0.96

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	3	26	21	155	21	18	10	189	144	21	198	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	52			202			357			228		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.046			0.180			0.318			0.203		
Final Departure Headway, hd (s)	5.56			5.60			4.79			5.19		
Final Degree of Utilization, x	0.080			0.314			0.475			0.329		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.56			3.60			2.79			3.19		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	52			202			357			228		
Capacity	647			643			752			693		
95% Queue Length, Q_{95} (veh)	0.3			1.3			2.6			1.4		
Control Delay (s/veh)	9.0			11.1			12.0			10.7		
Level of Service, LOS	A			B			B			B		
Approach Delay (s/veh)	9.0			11.1			12.0			10.7		
Approach LOS	A			B			B			B		
Intersection Delay, s/veh | LOS	11.3						B					

HCS Two-Way Stop-Control Report

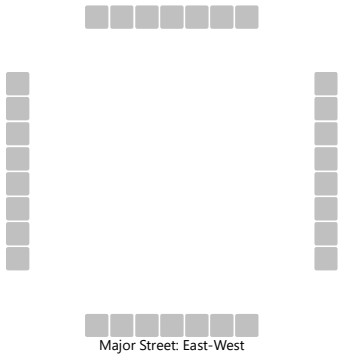
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2022
Analysis Year	2022
Time Analyzed	Summer P.M. Peak Hour
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	156				185	3						1		5
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													7	
Capacity, c (veh/h)		1342													768	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.7	0.0												9.7	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.3												9.7			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

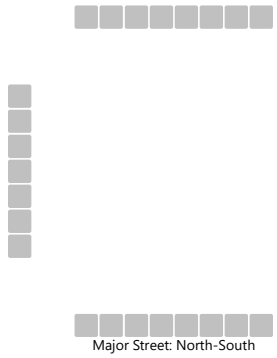
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2022
Time Analyzed	Summer P.M. Peak Hour
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		23		131						142	163				124	44
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			166							153						
Capacity, c (veh/h)			740							1389						
v/c Ratio			0.22							0.11						
95% Queue Length, Q_{95} (veh)			0.9							0.4						
Control Delay (s/veh)			11.3							7.9	1.0					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.3								4.2						
Approach LOS		B								A						

HCS All-Way Stop Control Report

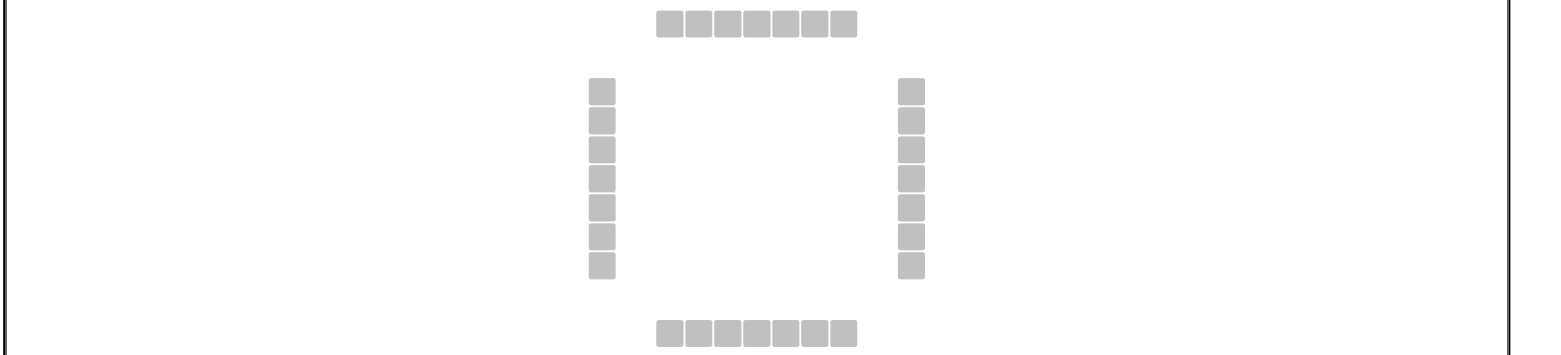
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Analysis Time Period (hrs)	0.25
Time Analyzed	Summer A.M. Peak Hr FWOP
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Central Ave at Woodland Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Central Avenue
Peak Hour Factor	0.87

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	17	21	129	13	17	24	321	97	13	121	7
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	45			183			508			162		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.040			0.162			0.452			0.144		
Final Departure Headway, hd (s)	5.68			5.79			4.77			5.47		
Final Degree of Utilization, x	0.071			0.294			0.673			0.246		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.68			3.79			2.77			3.47		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	45			183			508			162		
Capacity	633			621			755			658		
95% Queue Length, Q_{95} (veh)	0.2			1.2			5.3			1.0		
Control Delay (s/veh)	9.1			11.2			17.0			10.2		
Level of Service, LOS	A			B			C			B		
Approach Delay (s/veh)	9.1			11.2			17.0			10.2		
Approach LOS	A			B			C			B		
Intersection Delay, s/veh | LOS	14.2						B					

HCS Two-Way Stop-Control Report

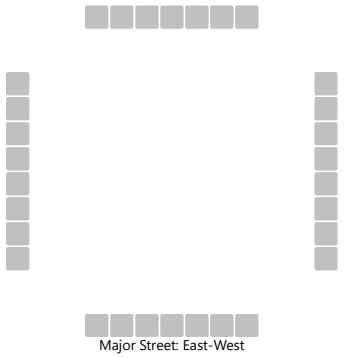
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/2/2023
Analysis Year	2032
Time Analyzed	Summer A.M. Peak Hr FWOP
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	130				125	3						1		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													9	
Capacity, c (veh/h)		1415													845	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.6	0.0												9.3	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.3												9.3			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

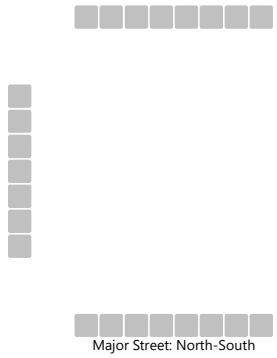
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer A.M. Peak Hr FWOP
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		20		106						117	210				121	13
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

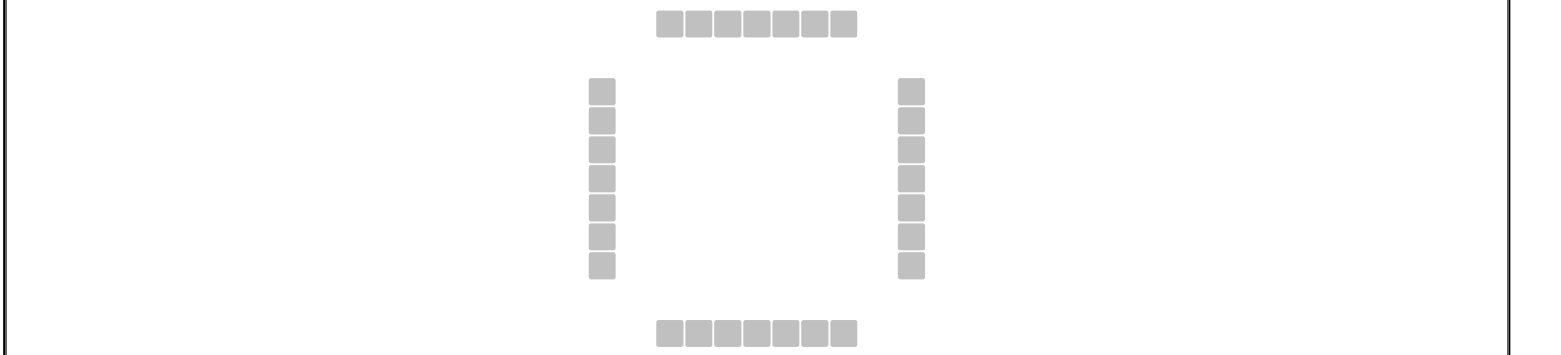
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			148							138						
Capacity, c (veh/h)			726							1392						
v/c Ratio			0.20							0.10						
95% Queue Length, Q_{95} (veh)			0.8							0.3						
Control Delay (s/veh)			11.2							7.9	0.9					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.2								3.4						
Approach LOS		B								A						

HCS All-Way Stop Control Report

General Information		Site Information	
Analyst	Brigitte Odum-Ewuakye	Intersection	Central Ave at Woodland Ave
Agency/Co.	Century Engineering	Jurisdiction	Town of Ocean View
Date Performed	4/24/2023	East/West Street	Woodland Avenue
Analysis Year	2032	North/South Street	Central Avenue
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.96
Time Analyzed	Summer P.M. Peak Hr FWOP		
Project Description	The Villas at Ocean View TOA		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	3	30	24	180	24	21	12	219	167	24	230	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	59			234			415			265		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.053			0.208			0.369			0.235		
Final Departure Headway, hd (s)	6.02			5.95			5.05			5.50		
Final Degree of Utilization, x	0.099			0.387			0.581			0.404		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.02			3.95			3.05			3.50		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	59			234			415			265		
Capacity	598			606			714			654		
95% Queue Length, Q_{95} (veh)	0.3			1.8			3.8			2.0		
Control Delay (s/veh)	9.7			12.6			14.8			12.2		
Level of Service, LOS	A			B			B			B		
Approach Delay (s/veh)	9.7			12.6			14.8			12.2		
Approach LOS	A			B			B			B		
Intersection Delay, s/veh | LOS	13.3						B					

HCS Two-Way Stop-Control Report

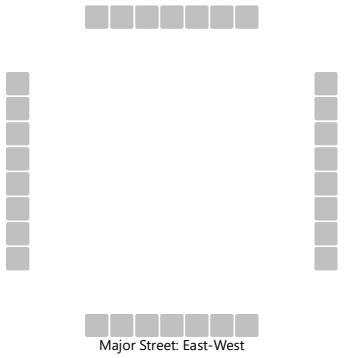
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer P.M. Peak Hr FWOP
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	181				215	3						1		5
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													7	
Capacity, c (veh/h)		1303													727	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.8	0.0												10.0	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)	0.3												10.0			
Approach LOS	A												B			

HCS Two-Way Stop-Control Report

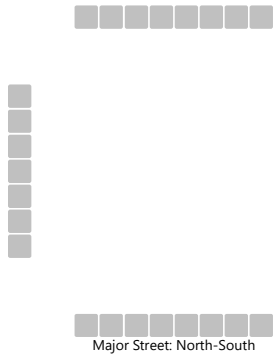
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer P.M. Peak Hr FWOP
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		27		152						165	189				144	51
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			192							177						
Capacity, c (veh/h)			686							1355						
v/c Ratio			0.28							0.13						
95% Queue Length, Q_{95} (veh)			1.1							0.5						
Control Delay (s/veh)			12.3							8.1	1.2					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		12.3								4.4						
Approach LOS		B								A						

HCS All-Way Stop Control Report

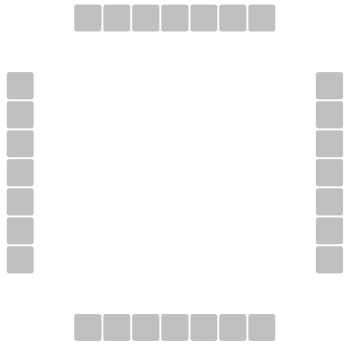
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Analysis Time Period (hrs)	0.25
Time Analyzed	Summer A.M. Peak Hour FWP
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Central Ave at Woodland Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Central Avenue
Peak Hour Factor	0.87

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	1	21	21	133	28	19	24	321	98	14	121	7
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	49			207			509			163		
Percent Heavy Vehicles	3			3			3			13		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.044			0.184			0.453			0.145		
Final Departure Headway, hd (s)	5.84			5.86			4.87			5.61		
Final Degree of Utilization, x	0.080			0.337			0.690			0.255		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	3.84			3.86			2.87			3.61		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	49			207			509			163		
Capacity	616			614			738			641		
95% Queue Length, Q_{95} (veh)	0.3			1.5			5.6			1.0		
Control Delay (s/veh)	9.4			11.8			18.0			10.5		
Level of Service, LOS	A			B			C			B		
Approach Delay (s/veh)	9.4			11.8			18.0			10.5		
Approach LOS	A			B			C			B		
Intersection Delay, s/veh | LOS	14.8						B					

HCS Two-Way Stop-Control Report

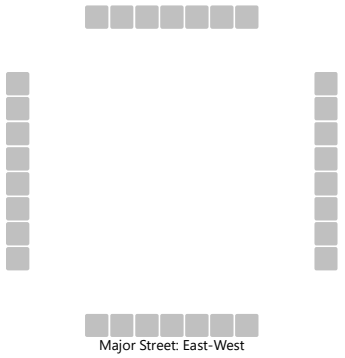
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer A.M. Peak Hr FWP
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	130	6		7	125	3		21	0	21		1	0	6
Percent Heavy Vehicles (%)		3				3				7	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.17	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.56	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				9					52				9	
Capacity, c (veh/h)		1415				1404					702				825	
v/c Ratio		0.00				0.01					0.07				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.0	
Control Delay (s/veh)		7.6	0.0	0.0		7.6	0.1	0.1			10.5				9.4	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	0.3				0.4				10.5				9.4			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

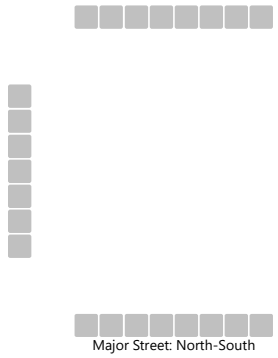
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer A.M. Peak Hr FWP
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		24		123						123	210				121	14
Percent Heavy Vehicles (%)		9		3						7						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.49		6.23						4.17						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.58		3.33						2.26						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			173							145						
Capacity, c (veh/h)			715							1391						
v/c Ratio			0.24							0.10						
95% Queue Length, Q_{95} (veh)			0.9							0.3						
Control Delay (s/veh)			11.6							7.9	1.0					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		11.6								3.5						
Approach LOS		B								A						

HCS All-Way Stop Control Report

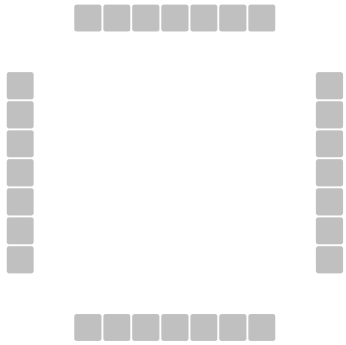
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Analysis Time Period (hrs)	0.25
Time Analyzed	Summer P.M. Peak Hr FWP
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Central Ave at Woodland Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Central Avenue
Peak Hour Factor	0.96

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	3	44	24	182	33	22	12	219	171	26	230	0
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	74			247			419			267		
Percent Heavy Vehicles	3			3			3			3		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.066			0.219			0.372			0.237		
Final Departure Headway, hd (s)	6.17			6.03			5.16			5.64		
Final Degree of Utilization, x	0.127			0.414			0.601			0.418		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.17			4.03			3.16			3.64		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	74			247			419			267		
Capacity	584			597			697			638		
95% Queue Length, Q_{95} (veh)	0.4			2.0			4.0			2.1		
Control Delay (s/veh)	10.1			13.2			15.6			12.6		
Level of Service, LOS	B			B			C			B		
Approach Delay (s/veh)	10.1			13.2			15.6			12.6		
Approach LOS	B			B			C			B		
Intersection Delay, s/veh | LOS	13.8						B					

HCS Two-Way Stop-Control Report

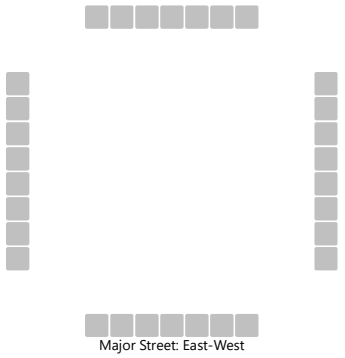
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer P.M. Peak Hr FWP
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave / Site Entrance
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	181	20		21	215	3		12	0	12		1	0	5
Percent Heavy Vehicles (%)		3				3				7	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.17	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.56	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				25					28				7	
Capacity, c (veh/h)		1303				1325					561				691	
v/c Ratio		0.01				0.02					0.05				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.1					0.2				0.0	
Control Delay (s/veh)		7.8	0.0	0.0		7.8	0.2	0.2			11.8				10.3	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.3				0.8				11.8				10.3			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report

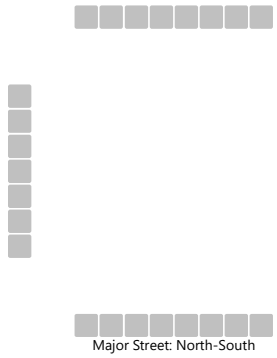
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/24/2023
Analysis Year	2032
Time Analyzed	Summer P.M. Peak Hr FWP
Intersection Orientation	North-South
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Muddy Neck Rd
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Muddy Neck Rd
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		29		162						182	189				144	55
Percent Heavy Vehicles (%)		6		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.46		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.55		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			205							196						
Capacity, c (veh/h)			668							1350						
v/c Ratio			0.31							0.14						
95% Queue Length, Q_{95} (veh)			1.3							0.5						
Control Delay (s/veh)			12.8							8.1	1.3					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		12.8								4.7						
Approach LOS		B								A						

HCS Two-Way Stop-Control Report

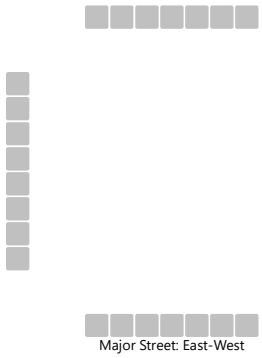
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/3/2023
Analysis Year	2022
Time Analyzed	Summer Saturday Peak Hour
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	213				300	0						0		6
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8													8	
Capacity, c (veh/h)		1195													676	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		8.0	0.1												10.4	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)		0.3												10.4		
Approach LOS		A												B		

HCS Two-Way Stop-Control Report

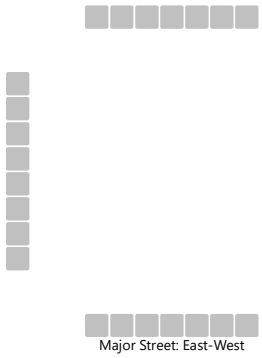
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/3/2023
Analysis Year	2032
Time Analyzed	Summer FWOP Saturday Pk
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		7	247				348	0						0		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													8	
Capacity, c (veh/h)		1119													619	
v/c Ratio		0.01													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		8.2	0.1												10.9	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)		0.3												10.9		
Approach LOS		A												B		

HCS Two-Way Stop-Control Report

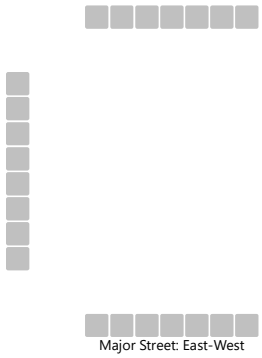
General Information

Analyst	Brigitte Odum-Ewuakye
Agency/Co.	Century Engineering
Date Performed	4/3/2023
Analysis Year	2032
Time Analyzed	Summer FWP Saturday Pk
Intersection Orientation	East-West
Project Description	The Villas at Ocean View TOA

Site Information

Intersection	Woodland Ave @ Mitchell Ave
Jurisdiction	Town of Ocean View
East/West Street	Woodland Avenue
North/South Street	Mitchell Ave / Site Entrance
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		7	247	11		11	348	0		11	0	11		0	0	6
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9				14					28				8	
Capacity, c (veh/h)		1119				1232					417				619	
v/c Ratio		0.01				0.01					0.07				0.01	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.2				0.0	
Control Delay (s/veh)		8.2	0.1	0.1		8.0	0.1	0.1			14.2				10.9	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.3				0.4				14.2				10.9			
Approach LOS	A				A				B				B			