

Appendix 10.9

Traffic Impact Analysis

Seminole Combined Cycle Facility Putnam County, Florida

Traffic Impact Analysis

Prepared by:

Leftwich Consulting, Inc.
P.O. Box 1194
Geneva, Florida 32732
(407) 281-8100

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EXECUTIVE SUMMARY

Leftwich Consulting, Inc. (LC) has been retained by Seminole Electric Cooperative, Inc. (SECI) to perform a Traffic Impact Analysis (TIA) for the construction and operation of new natural gas-fired combined cycle electrical generating unit at its existing Seminole Generating Station (SGS) in unincorporated Putnam County near Palatka, Florida. The new site is also referred to as the Seminole Combined Cycle Facility (SCCF) or Project. SECI currently operates two coal-fired electrical generating units on the site with a full-time operation employment of approximately 290. The main site access is the North Access (Continental Rd) from U.S. 17 which is shared with Continental Building Products' nearby wallboard facility. Another site access is south of the site via W. River Rd (referenced as South Access), a two-lane residential roadway.

This Traffic Impact Analysis for SGS has been performed in accordance with FDOT and Putnam County's *TIA Procedures & Requirements* in order to assess the traffic impacts associated with the proposed Project. It serves as a revision to the earlier TIA dated October 2016, discussed with FDOT.

Construction Analysis

The construction period is expected to last approximately 33 months, followed by a 3 month testing period, with peak construction occurring in 2021. The average number of construction employees is up to approximately 200 workers, with a peak construction workers of up to approximately 500. During construction of the SCCF, craft or construction employees will typically enter and leave the site in 10-hour shifts. The construction workers are expected to arrive to the site by automobile or light truck at an average auto occupancy of 1.2 persons per vehicle. At the peak of construction, this will result in 417 inbound trips in the AM and 417 outbound trips in the PM. 90 percent of construction employees will use the U.S. 17 entrance (North Access), with the remaining 10 percent of construction employees using the W. River Road entrance (South Access). An additional 6 large truck trips per day are anticipated during construction. Furthermore, there will be new potential fly-ash and potential future PWT sludge trucks of approximately 25 trucks per day during 2021 construction conditions.

During the Construction Phase of the SCCF, each spring up to 500 additional employees will be on site for approximately 45 days for planned outages of existing generating units. This results in 417 inbound trips in the AM and 417 outbound trips in the PM. These planned outages are presently occurring and will continue to occur. Outage employees will typically utilize the North Access. During the scheduled outages, an additional 12 daily truck deliveries are expected.

All large trucks will utilize the North Access. Of the 31 (25+6) total trucks during construction, half of these trips are assumed to occur during the peak AM and PM periods to be conservative. This equates to 16 additional trucks. During outage this number increases to 22 trucks, again assuming half of the trips during the peak periods.

Operating Analysis

Operation of the Project may occur as early as late 2021, but could be 2022. For conservatism purposes, the traffic analysis will assess 2022 operating conditions. One of the existing coal units will be removed from service in conjunction with declared commercial operation of the

SCCF. The number of additional operation employees will be approximately 30, for a total of up to approximately 320 total at the SGS site.¹ Using the same average auto occupancy, this will result in 25 inbound trips in the AM and 25 outbound trips in the PM. During operation of the SCCF, employees will typically enter and leave the site in 8-hour or 12-hour shifts. Operation employees will use the South Access. An additional 2 large truck trips per day are anticipated during operation. Upon commercial operation of SCCF and removal from service of one of the coals units, the truck traffic associated with operation of the remaining coal unit will decrease from 90 per day to 45 per day (a net decrease of 45 truck trips). However, there will be new potential fly-ash and potential future PWT sludge trucks of 13 trucks per day during 2022 operating conditions.

During operation of the SCCF, 500 additional employees will be on site every other spring for approximately 45 days for planned outages of existing SGS generating units. This results in 417 inbound trips in the AM and 417 outbound trips in the PM. These planned outages are presently occurring and will continue to occur. During the scheduled outages, an additional 12 daily truck deliveries are expected.

All large trucks will utilize the North Access. Of the net 30 reduction in trucks (2+13-45) total trucks during Operation Phase, half of these trips are assumed to occur during the peak AM and PM periods to be conservative. This equates to a net reduction of 15 trucks. During outage, the net decrease is -9 trucks, again assuming half of the peak period trips (-15+6 outage trucks).

This analysis demonstrates that all roadway segments are forecast to operate at adopted Levels of Service (LOS) conditions during the Construction and Operation Phases. Based on the traffic analysis performed, during the Construction Phase, the U.S. 17 and North Access intersection westbound approach is forecast to experience delays causing the intersection to fall below accepted LOS under general conditions during the PM peak hour, and during the AM and PM peak hours under outage conditions. It is recommended that a police officer directing Project traffic in and out of the SGS facility's North Access be considered at this intersection during the PM peak hour during the Construction Phase, and during the AM and PM peak hours during the Construction Phase and outage condition. The officer will not be interfering with the north and southbound U.S. 17 traffic but rather will make sure that the traffic moving in and out of the site is managed (e.g. southbound left, northbound right, and westbound right and left movements). Portable changeable message signs, or similar signage, are also recommended northbound and southbound along U.S. 17 to alert drivers of conditions ahead.

To a lesser extent, based on the traffic analysis performed, during the Operation Phase, the U.S. 17 and North Access is forecast to experience delays during the PM peak hour during outage conditions (45 days every other spring). This will cause the intersection to fall below accepted LOS during PM peak hour outage conditions. It is recommended that a police officer directing Project traffic in and out of the SGS facility's North Access be considered at this intersection during the PM peak hour under outage conditions until such time as the number of exiting westbound left turns is reduced by 65 or more. Again, it is not recommended that officers

¹ SECI anticipates some undetermined reduction in total employees associated with the removal of one of the existing generating units from service. To ensure a conservative analysis, this assessment assumes no reduction in existing employees.

interfere with northbound or southbound U.S. 17 through traffic. During outages, portable changeable message signs are also recommended southbound and northbound along U.S. 17 until the reduced trips are achieved.

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1.0 INTRODUCTION

Leftwich Consulting, Inc. (LC) has been retained by Seminole Electric Cooperative, Inc. (SECI) to perform a Traffic Impact Analysis (TIA) for the construction and operation of a new natural gas-fired combined cycle electrical generating unit at its existing Seminole Generating Station (SGS) in unincorporated Putnam County near Palatka, Florida (Seminole Combined Cycle Facility, SCCF, or Project). **Figure 1** shows the general SGS site location with the access locations for the site. SECI currently operates two coal-fired electrical generating units on the site which employs approximately 290 full-time employees. One site access is the north Project Access (Continental Rd) from U.S. 17 which is shared with Continental Building Products' nearby wallboard facility (also referenced as "North Access"). Another site access is south of the site via W. River Rd, a two-lane residential roadway (also referenced as "South Access"). The enclosed study for the Project was performed in accordance with Florida Department of Transportation and Putnam County *TIA Procedures & Requirements*.

The traffic study reviews the expected worst case scenarios for the SCCF peak Construction Phase and plant Operation Phase and develops the appropriate mitigation measures under the following assumptions:

- A. The construction period will last approximately 33 months to be followed by a 3 month testing period. Peak construction is anticipated to occur in 2021.
- B. Declared commercial operation of the SCCF may occur as early as late 2021 but could be 2022. One of the existing coal units will be removed from service in conjunction with declared commercial operation of the SCCF.
- C. The number of SCCF construction employees will average up to approximately 200 during the construction period, with a peak of up to 500.
- D. The number of SCCF operation employees will be up to 30. The number of existing SGS employees associated with operation of the two existing coal units is approximately 290. Upon commercial operation of the SCCF and removal from service of one of the coal units, the total workforce on site will decrease by a yet-undetermined number. As a conservative estimate of total operation workforce, this analysis assumes a total of 320 employees on-Site during operation of the SCCF.
- E. During construction of the SCCF, craft employees (approximately 90% of construction employees) will use the North Access, remaining construction employees (approximately 10% of construction employees) will utilize the South Access. During operation, all 30 SCCF employees will use the South Access.
- F. During construction of the SCCF, employees will typically enter and leave the site in 10-hour shifts.
- G. During operation of the SCCF, employees will typically enter and leave the site in 8-hour or 12-hour shifts.

- H. During construction of the SCCF, approximately 6 additional large truck trips per day associated with SCCF construction are anticipated. All additional large trucks will utilize the North Access.
- I. During operation of the SCCF, approximately 2 additional large trucks associated with SCCF operation per day are anticipated. All additional large trucks will utilize the North Access.
- J. During the Construction Phase of the SCCF, up to 500 additional employees are expected on site each spring for approximately 45 days associated with scheduled outages of the existing SGS coal units. During Operation Phase of the SCCF, the outage workforce for the remaining SGS coal unit will be on site every other spring. Outage employees typically utilize the North Access. During the scheduled outages, an additional 12 daily truck deliveries are expected.
- K. Coal train deliveries will decrease by 50% (from approximately 220-240 per year to approximately 110-120 per year) upon commercial operation of SCCF and removal from service of one of the coal units.
- L. Upon commercial operation of SCCF and removal from service of one of the coal units, the truck traffic associated with operation of the remaining coal unit will decrease by approximately 50% (from approximately 90 per day to 45 per day). All large trucks will utilize the North Access.
- M. During construction of SCCF, an additional approximately 25 trucks per day are possible associated with potential future fly-ash sales and potential future PWT sludge trucks. During operation of SCCF, these potential fly-ash and PWT sludge trucks would decrease by 50% to approximately 13 per day due to the removal of one SGS unit from service concurrent with the commercial operation of SCCS. These trucks will utilize the North Access.

To summarize the approximate number of employees associated with the site for the Year 2016/2017 Existing, Year 2021 Construction Phase, and Year 2022 Operating Phase, **Table 1** is provided as shown below.

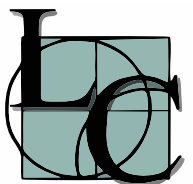
Table 1
Summary of Employees at Site (Existing and Future)

Description	Existing (2016/2017)	Construction Phase (2021)	Operating Phase (2022)
Full-Time Permanent Employees (1)	290	290	320
Peak Construction Employees (2)	-	500	-
General Peak Total Employees	290	790	320
Planned Outage Employees (3)	500	500	500
Plus Outage Total Employees	790	1290	820

(1) Up to an additional 30 full-time employees are planned once construction is complete by the year 2022

(2) Average construction employees 200 per day, with peaks at 500. Construction anticipated for 33-month period.

(3) For construction, each spring 500 additional outage employees are on site for approximately 45 days (operation is every other year).



Project Site Location

Seminole Electric Cooperative

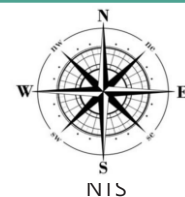


Figure:
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2.0 EXISTING TRAFFIC CONDITIONS

Existing conditions for transportation facilities were determined using 2016/2017 as the base year. An inventory of roadway and intersection characteristics was performed in order to identify the number of traffic lanes, geometry, and other relevant features necessary to determine roadway capacities per procedures outlined in the Highway Capacity Manual. AM and PM peak hour traffic volumes were gathered primarily from the *Florida Department of Transportation* website along with the latest FDOT *Quality/LOS Handbook* generalized tables. Existing volumes were also the basis for forecasting future year back ground trips. Historical growth review is provided in **Appendix A**. Other source materials are included in **Appendices B and C**.

2.1 EXISTING LOS ANALYSIS

A link level of service (LOS) analysis was performed for existing (2016) conditions. This consisted of comparing the total peak hour directional traffic volumes with the corresponding adopted service volumes for each studied roadway link. The study area roadway links, traffic counts, and levels of service are listed in **Tables 2A and 2B** for respectively standard operations and the 45 days when an additional 500 outage employees are on site.

Table 2A
2016 Existing LOS Analysis

FDOT Count Site	Roadway	Description	EXISTING YEAR 2016														
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			Daily Traffic Volume	K	Peak Hour Vol	D	Peak Dir	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
						LOS C	LOS D	LOS E									
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	9,000	0.0950	855	0.619	N	529	C	326	C
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	10,200	0.0950	969	0.619	N	600	C	369	C
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	12,700	0.0950	1,207	0.619	N	747	C	460	C
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	2,300	0.0950	219	0.619	W	83	C	136	C

Table 2B
2016 Existing with 500 Additional Outage Employees LOS Analysis

FDOT Count Site	Roadway	Description							OUTAGE PROJECT TRIPS 2016				Existing With Addtl 500 Outage Employees				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			IN =	0	OUT =	423	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E	Trip Distrib	Project Peak Dir	NB/EB	SB/WB					
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	152	0	681	C	326	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	64.0%	S	0	271	600	C	640	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	271	747	C	730	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	0.0%	W	0	0	83	C	136	C	Pass

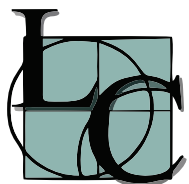
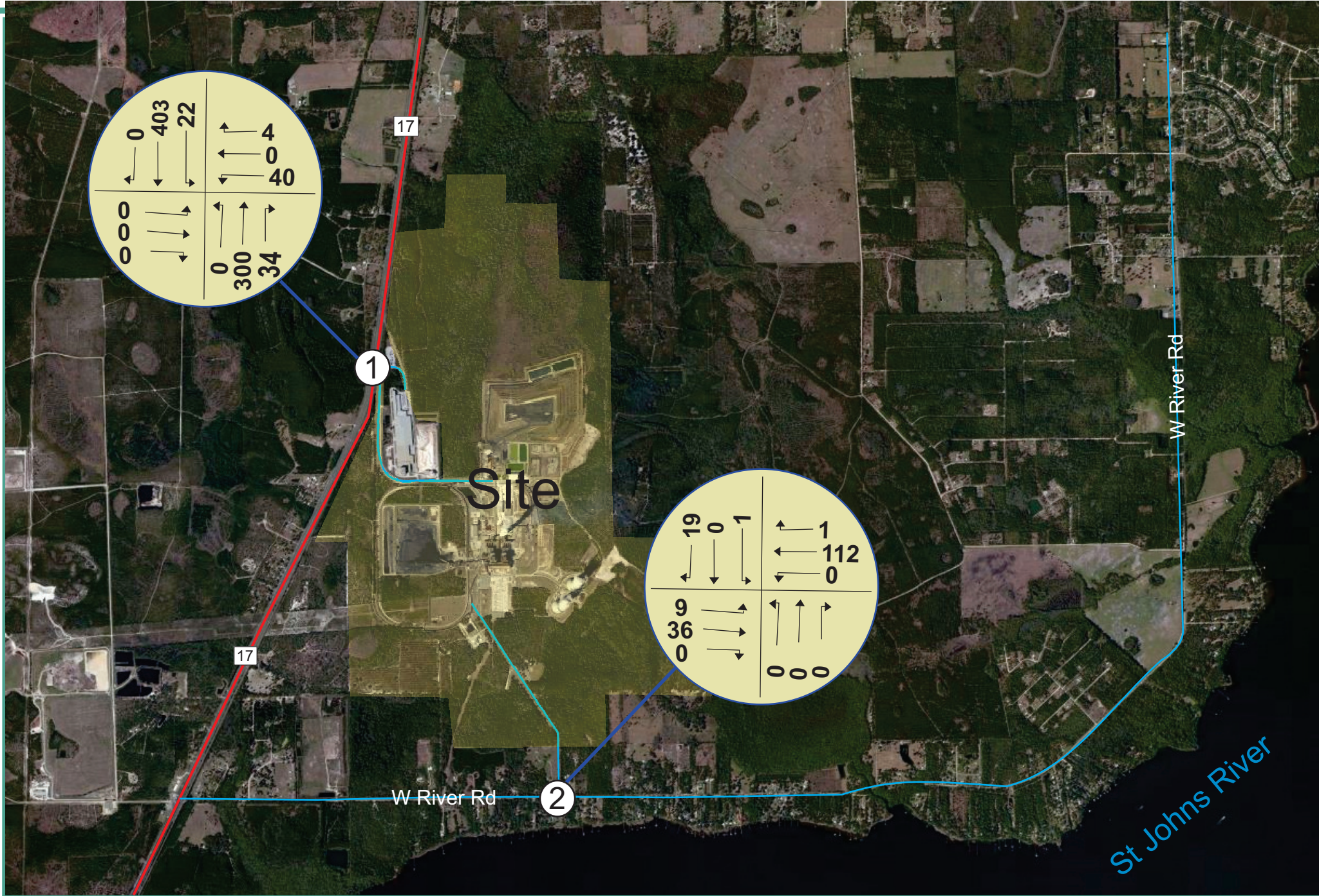
Note: Outage Project Trips include Employees and Trucks, both of which use the North Access exclusively

2.2 EXISTING YEAR INTERSECTION ANALYSIS

An intersection LOS analysis was performed for the two intersections where traffic accesses the SGS site. The intersection analysis was performed in order to determine existing operating conditions for the intersections referenced as North Access (Continental Rd) and U.S. 17 and as South Access and W. River Rd. Turning Movement Counts (TMCs) were conducted at the specified intersections in 2017. **Figures 2** and **3** show the existing AM and PM peak existing trips respectively. Highway Capacity Software (HCS 2010, v6.7), which analyzes intersection data per Highway Capacity Manual procedures, was utilized to determine each intersection LOS. **Tables 3A** through **4B** show the existing AM Peak and PM Peak intersection LOS analysis summary. Turning Movement Volume (TMV) worksheets and HCS outputs are included in **Appendix D**, along with the existing Turning Movement Counts (TMCs).

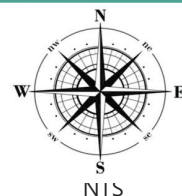
2.3 EXISTING TRUCK TRAFFIC

On January 10, 2017, intersection counts for the intersection of U.S. 17 and North Access (Continental Rd) were collected for purposes of classifying counts by automobile versus trucks. Based on the 8-hour turning movement counts, the AM peak hour from 6:30 to 7:30 has 13 trucks out of a total of 50 outbound trips (26% trucks) and 44 trucks out of a total of 156 inbound trips (29%) at the North Access. The PM peak hour from 4:45 to 5:45 has 13 trucks out of a total of 92 outbound trips (14% trucks) and 11 trucks out of a total of 16 inbound trips (69%). These represent when there are the most overall traffic volumes at the intersection. The count summary shows that the hour from 8:00 to 9:00 AM has 81% trucks using the North Access (Continental Rd) intersection with U.S. 17. The WB approach, from the hour from 2:00 to 3:00 PM, has 19%. These later statistics relate to when the highest percentage of truck trips occur at this intersection. The January 2017 turning movement counts are included in **Appendix D** and incorporate highlights of volumes used to derive the truck percentages for the overall AM and PM peak periods for the inbound and the outbound trips along Continental Rd (e.g. North Access).

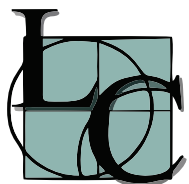


AM Peak Existing Trips

Seminole Electric Cooperative

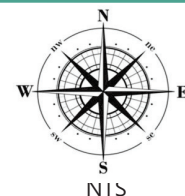


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PM Peak Existing Trips

Seminole Electric Cooperative



3

Table 3A
Existing AM Peak Intersection Analysis

Intersection	Control Type	Approach	Level of Service AM Peak-hour (overall delay)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(9.6 sec/veh) A(0.4 sec/veh) - B(13.4 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.0 sec/veh) A(1.4 sec/veh) -

Table 3B
Existing AM Peak with Additional 500 Outage Employees Intersection Analysis

Intersection	Control Type	Approach	Level of Service AM Peak-hour (overall delay)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(9.9 sec/veh) A(3.1 sec/veh) - C(24.2 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.0 sec/veh) A(1.4 sec/veh) -

Table 4A
Existing PM Peak Intersection Analysis

Intersection	Control Type	Approach	Level of Service PM Peak-hour (overall delay)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0sec/veh) A(0.0sec/veh) - B(13.7 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(8.9 sec/veh) A(0.9 sec/veh) -

Table 4B
Existing PM Peak with Additional 500 Outage Employees Intersection Analysis

Intersection	Control Type	Approach	Level of Service PM Peak-hour (overall delay)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0sec/veh) A(0.0sec/veh) - F(67.8 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(8.9 sec/veh) A(0.9 sec/veh) -

3.0 TRIP GENERATION

The analysis for this Project was based on the expected worst case (peak Construction Phase) scenario and is supported by the scenario associated with the Operation Phase after construction is complete. It includes consideration for the additional 500 outage employees on site each spring for construction and every other year for operation. **Table 5** presents the trip generation summary for the 2021 Construction and the 2022 Operation traffic analyses.

The Construction Phase is expected to last approximately 33 months with peak construction occurring in 2021. The average number of construction employees is approximately 200 workers, with a peak of up to 500. The construction workers are expected to arrive to the site by automobile or light truck at an average auto occupancy of 1.2 persons per vehicle. This will result in 417 inbound trips in the AM and 417 outbound trips in the PM. An additional 6 large truck trips per day are anticipated during construction. Additionally, there will be new potential fly-ash and potential future PWT sludge trucks of approximately 25 trucks per day during 2021 construction conditions. Half of the truck traffic is assumed to occur during AM and PM peaks.

Commercial operation of the SCCF is anticipated to occur in 2022, and the number of operation employees will be up by approximately 30 for a total of up to 320 full-time employees on site. Using the same average auto occupancy, this will result in 25 inbound trips in the AM and 25 outbound trips in the PM. An additional 2 large truck trips per day are anticipated during operation. Upon commercial operation of SCCF and removal from service of one of the coals units, the truck traffic associated with operation of the remaining coal unit will decrease from 90 per day to 45 per day (a net decrease of 45 truck trips). Additionally, there will be new potential fly-ash and potential future PWT sludge trucks of 13 trucks per day during 2022 operating conditions.

As noted, up to 500 additional employees are on site during the Construction Phase for approximately 45 days associated with scheduled outages of existing units. During the Operation Phase, the outage employees will be on-site every other year. Outage employees represent an additional 417 inbound trips in the AM and 417 outbound trips in the PM after applying the 1.2 vehicle occupancy rate.

TABLE 5
Trip Generation Summary

Trip Generation Summary - General Conditions

Analysis Year	Addtl General Employees (1)	Eqvlt Addtl Trips		Distribution				Total Pk Hr Trips		
				North Access		South Access				
		Auto Trips (2)	Truck Trips (3)	General Autos	General Trucks	General Autos	General Trucks	North Access	South Access	Total
2021 Construction Period	500	417	16	90%	100%	10%	0%	391	42	433
2022 Operation Period	30	25	-15	0%	100%	100%	0%	-15	25	10

Trip Generation Summary - Outage Only

Analysis Year	Addtl Outage Employees (4)	Eqvlt Addtl Trips		Distribution				Total Pk Hr Trips		
				North Access		South Access				
		Auto Trips (2)	Truck Trips (5)	Outage Autos	Outage Trucks	Outage Autos	Outage Trucks	North Access	South Access	Total
2021 Construction Period	500	417	6	100%	100%	0%	0%	423	6	429
2022 Operation Period	500	417	6	100%	100%	0%	0%	423	6	429

Trip Generation Summary - Total with Outage

Analysis Year	Addtl Total Employees	Eqvlt Addtl Trips		Distribution				Total Pk Hr Trips		
				North Access		South Access				
		Auto Trips	Truck Trips	General Autos	General Trucks	General Autos	General Trucks	North Access	South Access	Total
2021 Construction Period	1000	834	22	-	-	-	-	814	48	862
2022 Operation Period	530	442	-9	-	-	-	-	408	31	439

- (1) General Employees:
-2021 Construction has an average of 200 additional construction employees, with a peak of 500 construction employees.
-2022 Operation has 30 additional employees, for a total of 320 employees.
- (2) Auto Trips:
-Employees are converted to equivalent vehicle trips by applying a 1.2 vehicle occupancy rate (e.g. Auto Trips = # Employees/1.2 Employees per Veh)
- (3) Truck Trips:
-2021 Construction will add 6 addtl large plus 25 flyash sales/potential sludge PWT, for a total addition of 31 trucks per day.
-2022 Operation will add 2 addtl large truck plus 13 flyash sales/potential sludge PWT minus 45 due to 1 coal unit being removed from service, for a total reduction of 30 trucks per day.
-Spring outage will add an addtl 12 daily trucks.
-To be conservative 50 percent of the daily trucks are assumed to occur during the AM and PM periods (e.g. +16 Construction, -15 Operation, and +6 Outage trucks).
- (4) Outage Employees:
-2021 Construction will include an addtl 500 outage employees each spring.
-2022 and on Operation will include an addtl 500 employees every other spring (outage assumed for 2022 analysis).

4.0 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

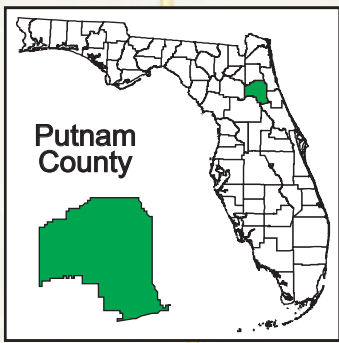
Distribution of Project trips on study area roadways was determined using travel demand model simulation based on the Northeast Regional Planning Model - Activity Based (NERPM-AB). The NERPM-AB travel demand model was used to forecast the Project trip distribution for the SCCF with a build-out year of 2022.

Socio-economic data for the SGS site was entered into a new traffic analysis zone (TAZ) which was situated within the roadway network in a manner to appropriately represent the Project's specifications and access points. The updated model was then run in order to distribute trips for all model trip purposes between allocated origins and destinations. Project trip distribution percentages were extracted from the completed model run, and the data was reviewed to ensure the results were reasonable. A map of the model Project distribution is included in the **Appendix E**.

Along with an initial review of the model Project distribution and the existing turning movements, the ultimate trip distributions were based on consultation with SGS as to future plans. The October 2016 TIA distributions were consulted along with existing turning movement counts and the model's percentages. The result is 36% of the new Project trips are heading north and 64% of the new Project trips are heading south, with specifics per the individual Construction and Operation Phases.

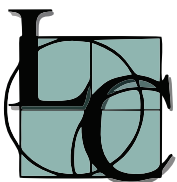
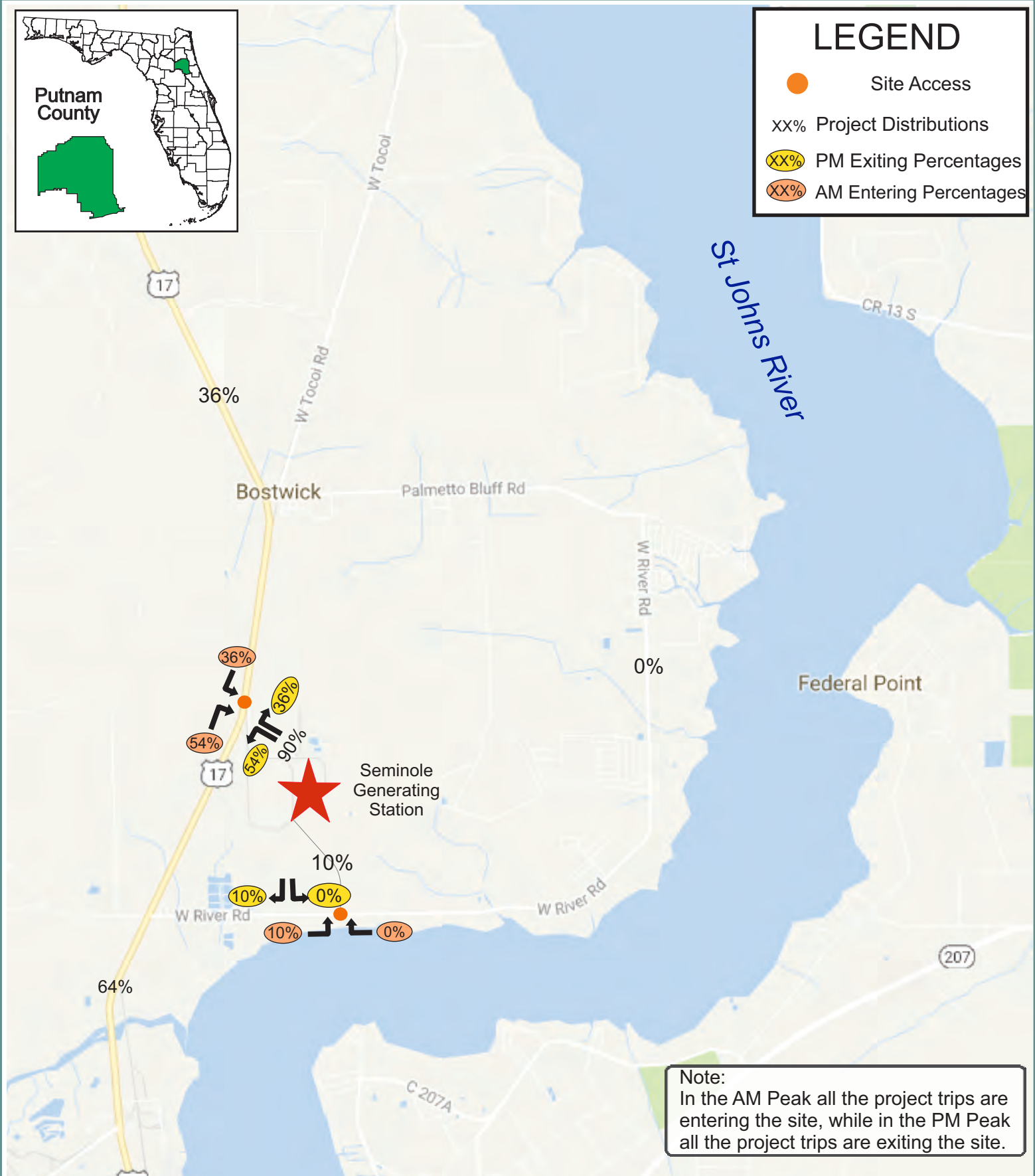
Figure 4A shows the final trip distribution of the Project trips during the Construction Phase, with 90% of the vehicles taking the North Access and 10% taking the South Access. For the Operation Phase, beginning in 2022 after construction has been completed, all new 30 employees are expected to use the South Access. **Figure 4B** provides an overview of the trip distribution associated with these new trips.

A separate percent distribution applies to any spring, regardless of the year, when the additional 500 outage employees are on site (e.g. analyzed Existing, 2021 Construction, and 2022 Operation). **Figure 4C** illustrates the distribution associated with all outage employees utilizing the North Access at U.S. 17. **Figure 4C** also represents the trip distributions associated with analyzed truck traffic at the site since it also corresponds to all trips using the North Access at U.S. 17.



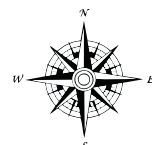
LEGEND

- Site Access
- XX% Project Distributions
- XX% PM Exiting Percentages
- XX% AM Entering Percentages



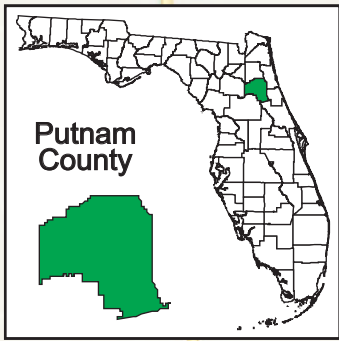
Trip Distribution 2021 Construction Phase

Seminole Electric Cooperative



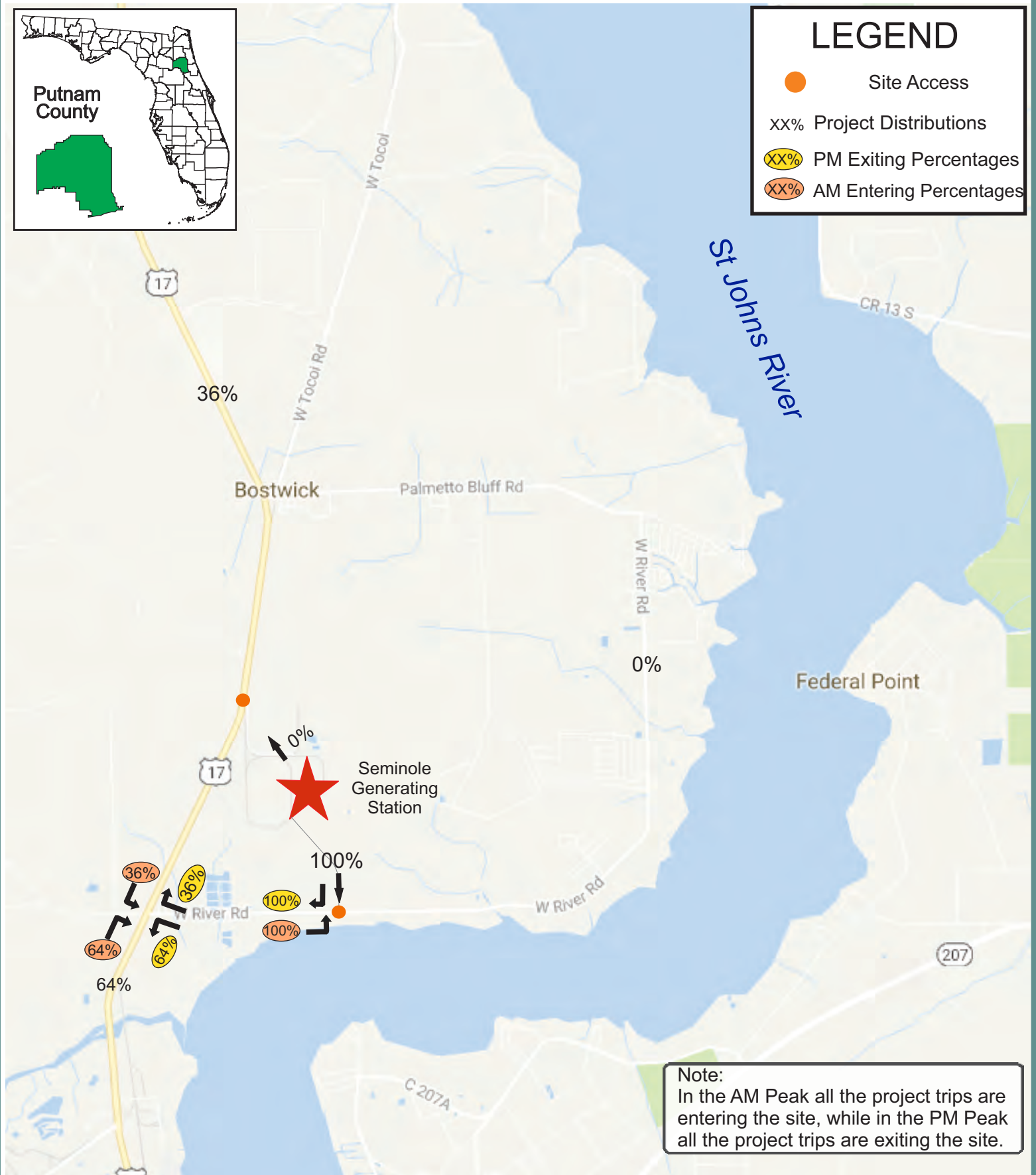
NTS

4A

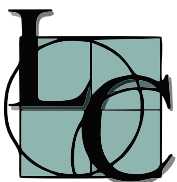


LEGEND

- Site Access
- XX% Project Distributions
- XX% PM Exiting Percentages
- XX% AM Entering Percentages

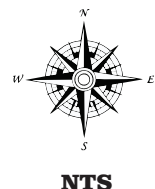


Note:
In the AM Peak all the project trips are entering the site, while in the PM Peak all the project trips are exiting the site.

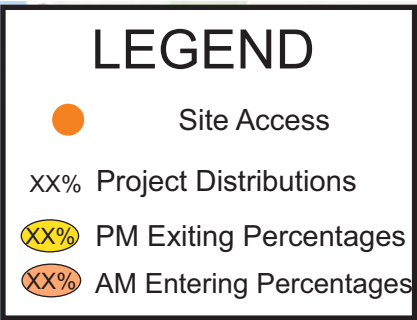


Trip Distribution 2022 Operation Phase 100% South Access

Seminole Electric Cooperative



4B



5.0 FUTURE YEAR ANALYSIS

The Project trip distribution obtained from the travel demand model was used to assign the external trips obtained through the trip generation procedure outlined above to the Existing plus Committed (E+C) network. A link LOS analysis was then performed for the anticipated peak construction in 2021 and operation in 2022. Background and Total with Project (e.g. Total Build-Out) LOS analyses were performed in accordance with the Highway Capacity Manual procedures to determine traffic impact of the proposed Project. Facilities in the study area were assessed for Total Build-Out LOS along with Pass/Fail status. This consisted of comparing the total PM peak hour directional traffic volumes with the corresponding LOS capacities for each studied roadway link. Where any failing link is forecast as a capacity deficiency in the background condition, it is defined as a ‘backlogged’ facility.

5.1 BACKGROUND CONDITIONS

As there are two different phases for this Project (Construction and Operation), two different background years were taken into consideration. Year 2021 represents the Construction Phase of the plant and year 2022 the Operation Phase of the SCCF. Background traffic volumes for each analyzed roadway segment were calculated by growing the existing volumes through a conservative approach of comparing forecasted historical growth volumes and those obtained by applying a 1% growth factor per year to the existing count data as shown in **Appendix A**. **Tables 6A** and **6B** show the link LOS background analysis for both year 2021 under standard operations and during times when the additional 500 employees are on site for the 45 day outages. **Tables 6C** and **6D** provide the corresponding link LOS conditions for year 2022. The analysis shows that there are no existing capacity deficiencies in the background conditions and that all the links are forecast to operate above their adopted LOS. **Figures 5** and **6** show the AM and PM peak background trips respectively (information on background with the additional 500 outage employees are provided in the **Appendix D** turning movement volume spreadsheets).

5.2 TOTAL BUILD-OUT CONDITIONS

A link LOS analysis was performed to determine Total Build-Out Construction Phase (Year 2021) and Operation Phase conditions (Year 2022) for the roadway segments within the Project study area. Total Build-Out peak hour directional volumes are shown as the sum of background volumes and the Project trips assigned to the link. Project trips were based on the trip distributions presented in **Figures 4A** through **4C**, depending on the scenario reviewed. **Tables 7A** and **7B** summarize the PM peak hour link LOS analysis and the Total Build-Out conditions during the site’s Year 2021 Construction Phase for respectively the standard and the with the additional 500 outage employees. **Tables 7C** and **7D** summarize the PM peak hour link LOS analysis for Year 2021 Operation Phase for both the standard conditions and the with 500 additional outage employees. **Figures 7** and **8** show the AM and PM peak Total Build-Out trips respectively for the Construction and the Operation Phases. For information on the traffic volumes that are forecast to occur with the addition of the outage employees, **Appendix D** should be consulted (e.g. turning movement volume spreadsheets).

Table 6A
Future Year LOS Analysis
2021 Construction Phase Background

FDOT Count Site	Roadway	Description	BACKGROUND YEAR 2021																
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol				Future Regress Daily	Final Bkgd Traffic Volume	K	Peak Hour Vol	D	Peak Dir	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
						LOS C	LOS D	LOS E	Growth										
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	9,459	9,290	9,459	0.095	899	0.619	N	556	C	342	C
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	10,720	10,567	10,720	0.095	1,018	0.619	N	630	C	388	C
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	13,348	13,495	13,495	0.095	1,282	0.619	N	794	C	488	C
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	2,417	2,095	2,417	0.095	230	0.619	W	87	C	142	C

Table 6B
Future Year LOS Analysis
2021 Construction Phase with Additional 500 Outage Employees Background

FDOT Count Site	Roadway	Descripton							OUTAGE PROJECT TRIPS 2021				Background With Addtl 500 Outage Employees				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			IN =	0	OUT =	423	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E	Trip Distrib	Project Peak Dir	NB/EB	SB/WB					
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	152	0	708	C	342	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	64.0%	S	0	271	630	C	659	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	271	794	C	759	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	0.0%	W	0	0	87	C	142	C	Pass

Note: Outage Project Trips include Employees and Trucks, both of which use the North Access exclusively

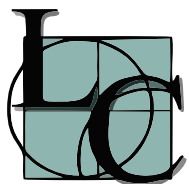
Table 6C
Future Year LOS Analysis
2022 Operation Phase Background

FDOT Count Site	Roadway	Description	BACKGROUND YEAR 2022																
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			1.0% Growth	Future Regress Daily	Final Bkgd Traffic Volume	K	Peak Hour Vol	D	Peak Dir	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)	
						LOS C	LOS D	LOS E											
760252	U.S. 17	North of north project access	0.50	0	0	2,000	9,459	9,290	9,554	9,485	9,554	0.095	908	0.619	N	562	C	346	C
760086		From north project access to W River Rd	0.25	0	0	2,000	10,720	10,567	10,828	10,747	10,828	0.095	1,029	0.619	N	637	C	392	C
760012		South of W River Rd	0.20	0	0	2,000	13,348	13,495	13,481	13,752	13,752	0.095	1,306	0.619	N	809	C	498	C
769108	W River Road	East of U.S. 17	1.75	0	0	880	2,417	2,095	2,441	2,072	2,441	0.095	232	0.619	W	88	C	144	C

Table 6D
Future Year LOS Analysis
2022 Operation Phase with Additional 500 Outage Employees Background

FDOT Count Site	Roadway	Description							OUTAGE PROJECT TRIPS 2022				Background With Addtl 500 Outage Employees				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			IN =	0	OUT =	423	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E	Trip Distrib	Project Peak Dir	NB/EB	SB/WB					
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	152	0	714	C	346	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	64.0%	S	0	271	637	C	662	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	271	809	C	768	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	0.0%	W	0	0	88	C	144	C	Pass

Note: Outage Project Trips include Employees and Trucks, both of which use the North Access exclusively



AM Peak Background Trips

Seminole Electric Cooperative

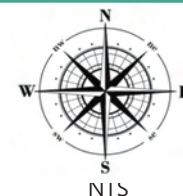
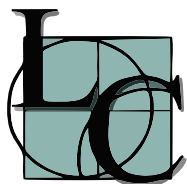


Figure:
5



PM Peak Background Trips

Seminole Electric Cooperative

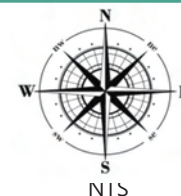


Figure:
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Table 7A
Future Year LOS Analysis
2021 Construction Phase Total Built-Out

FDOT Count Site	Roadway	Description							AUTO PROJECT TRIPS 2021				TRUCK PROJECT TRIPS 2021				Future (During Construction)				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			Trip Distribut ion	Project Peak Dir	NB/EB	SB/WB	Trip Distrib	Project Peak Dir	NB/EB	SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E													
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	150	0	36.0%	N	6	0	712	C	348	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	54.0%	S	0	225	64.0%	S	0	10	630	C	613	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	267	64.0%	S	0	10	794	C	755	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	10.0%	W	0	42	0.0%	W	0	0	87	C	184	C	Pass

Table 7B
Future Year LOS Analysis
2021 Construction Phase with Additional 500 Outage Employees Total Built-Out

FDOT Count Site	Roadway	Description							OUTAGE PROJECT TRIPS 2021				Future With Addtl 500 Outage Employees				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			Trip Distrib	Project Peak Dir	NB/EB	SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E									
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	152	0	864	C	348	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	64.0%	S	0	271	630	C	884	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	271	794	C	1,026	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	0.0%	W	0	0	87	C	184	C	Pass

Note: Outage Project Trips include Employees and Trucks, both of which use the North Access exclusively

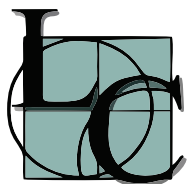
Table 7C
Future Year LOS Analysis
2022 Operation Phase Total Built-Out

FDOT Count Site	Roadway	Description							AUTO PROJECT TRIPS 2022				TRUCK PROJECT TRIPS 2022				Future (Operations)				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			Trip Distribut ion	Project Peak Dir	NB/EB	SB/WB	Trip Distrib	Project Peak Dir	NB/EB	SB/WB	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E													
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	9	0	36.0%	N	0	-5	571	C	340	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	36.0%	N	9	0	36.0%	N	0	-5	646	C	387	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	16	64.0%	S	-10	0	799	C	514	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	100.0%	W	0	25	0.0%	W	0	0	88	C	169	C	Pass

Table 7D
Future Year LOS Analysis
2022 Operation Phase with Additional 500 Outage Employees Total Built-Out

FDOT Count Site	Roadway	Description							OUTAGE PROJECT TRIPS 2022				Future with Addtl 500 Outage Employees				
			Length (mi)	No. of Lanes	Adopted LOS	PHPD Service Vol			IN =	0	OUT =	423	NB/EB (Vol / LOS)		SB/WB (Vol / LOS)		Pass/ Fail
						LOS C	LOS D	LOS E									
760252	U.S. 17	North of north project access	0.50	4	C	1,910	2,000	2,000	36.0%	N	152	0	723	C	340	C	Pass
760086		From north project access to W River Rd	0.25	4	C	1,910	2,000	2,000	64.0%	S	0	271	646	C	657	C	Pass
760012		South of W River Rd	0.20	4	C	1,910	2,000	2,000	64.0%	S	0	271	799	C	784	C	Pass
769108	W River Road	East of U.S. 17	1.75	2	D	830	880	880	0.0%	W	0	0	88	C	169	C	Pass

Note: Outage Project Trips include Employees and Trucks, both of which use the North Access exclusively



AM Peak Build-out Trips

Seminole Electric Cooperative

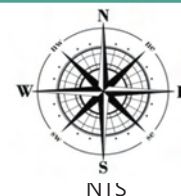
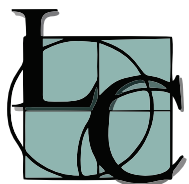


Figure:
7



PM Peak Build-out Trips

Seminole Electric Cooperative



Figure:
8

5.3 FUTURE YEAR INTERSECTION ANALYSIS

An intersection LOS analysis was performed in order to determine background and Total Build-Out operating conditions for the study area intersections near the SGS site. The intersection analysis was completed during AM and PM peak hours, for what is considered peak weekdays. The intersections of at the North Access and U.S. 17 and at the South Access and W. River Rd were considered for the analysis. Total Build-Out turning movement volumes (TMVs) were calculated by summing the background and the Project trips assigned to each turning movement.

Employee Project trips were assigned to study area intersection per trip distributions previously presented and in accordance with the traffic scenario being analyzed. In the AM peak, all the trips are entering inbound trips; while in the PM peak, all the trips are exiting outbound trips. The turning movement worksheets in **Appendix D** show how the background and Total Build-Out TMVs were derived. Included in the turning movement volume spreadsheets are the additional considerations for when the 500 outage employees are on site.

The Highway Capacity Software (HCS 2010, v6.7), which analyzes intersection data per Highway Capacity Manual 2000 procedures, was utilized to determine the LOS at each intersection. For the Construction Phase of the Project, **Tables 8A** and **8B** summarize the background intersection AM and PM LOS conditions for Year 2021 and includes both the standard (Case 1) and the with additional 500 outage employees (Case 2). **Tables 9A** and **9B** show the intersection LOS analysis summary for the future AM and PM peak hour conditions for the Year 2021 Construction Phase (e.g. total with Project trips).

For the Year 2022 background conditions, **Tables 10A** and **10B** summarize the background AM and PM LOS operations for respectively the standard (Case 1) and the with additional 500 outage employees (Case 2). **Tables 11A** and **11B** shows the same analyses for the Operation Phase of the Project after completion. Again, forecast volumes and HCS outputs are included in **Appendix D** for reference.

Table 8A
Background Year 2021 AM Peak Intersection Analysis

Intersection	Control Type	Approach	Background Level of Service AM Peak-hour (Case 1)	Background Level of Service AM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.4 sec/veh) A(9.7 sec/veh) - B(13.7 sec/veh)	A(9.7 sec/veh) A(9.7 sec/veh) - C(22.7 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(1.4 sec/veh) -	- A(9.1 sec/veh) A(1.4 sec/veh) -

Table 8B
Background Year 2021 PM Peak Intersection Analysis

Intersection	Control Type	Approach	Background Level of Service PM Peak-hour (Case 1)	Background Level of Service PM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0 sec/veh) A(0.1 sec/veh) - B(14.2 sec/veh)	A(0.0 sec/veh) A(0.1 sec/veh) - F(80.9 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.0 sec/veh) A(1.0 sec/veh) -	- A(9.0 sec/veh) A(1.0 sec/veh) -

Table 9A
Future Year 2021 AM Peak Intersection Analysis (Construction Phase)

Intersection	Control Type	Approach	Build-out Level of Service AM Peak-hour (Case 1)	Build-out Level of Service AM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(9.7 sec/veh) A(9.7 sec/veh) - C(22.9 sec/veh)	A(9.7 sec/veh) A(14.5 sec/veh) - F(101.4 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(4.5 sec/veh) -	- A(9.1 sec/veh) A(4.5 sec/veh) -

Note: Case 1 shows the Build-Out condition of the intersection when a peak of 500 employees are on-site. Case 2 shows the Build-Out condition of the intersection when the 500 employees plus an add'l 500 employees are on-site.

Table 9B
Future Year 2021 PM Peak Intersection Analysis (Construction Phase)

Intersection	Control Type	Approach	Build-out Level of Service PM Peak-hour (Case 1)	Build-out Level of Service PM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0 sec/veh) A(0.1 sec/veh) - F(58.2 sec/veh)	A(0.0 sec/veh) A(0.1 sec/veh) - F(402.7 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(1.0 sec/veh) -	- A(9.1 sec/veh) A(1.0 sec/veh) -

Note: Case 1 shows the Build-Out condition of the intersection when a peak of 500 employees are on-site. Case 2 shows the Build-Out condition of the intersection when the 500 employees plus an add'l 500 employees are on-site.

Table 10A

Background Year 2022 AM Peak Intersection Analysis

Intersection	Control Type	Approach	Background Level of Service AM Peak-hour (Case 1)	Background Level of Service AM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(9.7 sec/veh) A(8.1 sec/veh) - B(13.8 sec/veh)	A(9.7 sec/veh) A(9.7 sec/veh) - C(23.1 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(1.4 sec/veh) -	- A(9.1 sec/veh) A(1.4 sec/veh) -

Table 10B
Background Year 2022 PM Peak Intersection Analysis

Intersection	Control Type	Approach	Background Level of Service PM Peak-hour (Case 1)	Background Level of Service PM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0 sec/veh) A(0.1 sec/veh) - B(14.3 sec/veh)	A(0.0 sec/veh) A(0.1 sec/veh) - F(84.0 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.0 sec/veh) A(0.9 sec/veh) -	- A(9.0 sec/veh) A(0.9 sec/veh) -

Table 11A
Future Year 2022 AM Peak Intersection Analysis (Operation Phase)

Intersection	Control Type	Approach	Build-out Level of Service AM Peak-hour (Case 1)	Build-out Level of Service AM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(9.7 sec/veh) A(8.1 sec/veh) - B(13.8 sec/veh)	A(9.7 sec/veh) A(9.7 sec/veh) - C(23.1 sec/veh)
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(3.7 sec/veh) -	- A(9.1 sec/veh) A(3.7 sec/veh) -

Note: Case 1 shows the Build-Out condition of the intersection with 30 new employees are on-site.
Case 2 shows the Build-Out condition of the intersection when the 30 employees plus an additional 500 outage employees are on-site.

Table 11B
Future Year 2022 PM Peak Intersection Analysis (Operation Phase)

Note: Case 1 shows the Build-Out condition of the intersection with 30 new employees are on-site.

Intersection	Control Type	Approach	Build-out Level of Service PM Peak-hour (Case 1)	Build-out Level of Service PM Peak-hour (Case 2)
North Access & U.S.17	Two-Way Stop Control	NB SB EB WB	A(0.0 sec/veh) A(0.1 sec/veh) - B(14.3 sec/veh)	A(0.0 sec/veh) A(0.1 sec/veh) - <i>F(91.6 sec/veh)</i>
South Access & W. River Rd	Two-Way Stop Control	NB SB EB WB	- A(9.1 sec/veh) A(0.9 sec/veh) -	- A(9.1 sec/veh) A(0.9 sec/veh) -

Case 2 shows the Build-Out condition of the intersection when the 30 employees plus an additional 500 outage employees are on-site.

6.0 RESULTS AND CONCLUSIONS

This Traffic Impact Analysis for the Seminole Generating Station has been performed in accordance with FDOT and Putnam County's *TIA Procedures & Requirements* in order to assess the traffic impacts associated with the proposed Project. The roadway segments and intersections were analyzed for both the Year 2021 Construction Phase and the Year 2022 Operation Phase conditions. The following conclusions can be made based on the traffic analysis presented:

- **Existing Conditions**
 - All roadway segments currently operate at acceptable adopted LOS C conditions.
 - Existing intersection operations meet acceptable LOS E conditions for Year 2017, with the exception of the U.S. 17 and North Access intersection westbound approach which has LOS F (67.8 sec/veh) for the PM peak hour during outage conditions.
- **Construction Phase (2021)**
 - All roadway segments are forecast to operate at acceptable adopted LOS C conditions.
 - Background intersections are forecast to continue to meet acceptable LOS E for all but the U.S. 17 and North Access intersection westbound approach which experiences delay during the PM peak hour conditions (80.9 sec/veh).
 - With added Project trips, the intersection operations are forecast to continue to meet acceptable LOS E for all but the U.S. 17 and North Access intersection westbound approach which now experiences delay for the with outage conditions for both the PM peak hour (402.7 sec/veh) and the AM peak hour (101.4 sec/veh). During standard operations, without outage conditions, the PM peak hour experiences is forecast to exceed LOS E for the PM peak hour (58.2 sec/veh).
 - It is recommended that a police officer directing traffic be considered at the North Access during the AM and PM outage conditions to assist traffic moving into and out of the site (e.g. the southbound left, the northbound right, and the westbound right and left). An officer is also recommended for the standard conditions, without outage, for the PM peak hour. It is not recommended that the officer interfere with the northbound and the southbound U.S. 17 through traffic. Portable changeable message signs, or similar signage is also recommended southbound and northbound along U.S. 17 to alert drivers to conditions ahead.
- **Operation Phase (2022)**
 - All roadway segments are forecast to operate at acceptable adopted LOS C conditions.
 - Background intersection operations are forecast to continue to meet acceptable LOS E for all but the U.S. 17 and North Access intersection westbound approach which experiences further delay over time during the outage conditions (84.0 sec/veh).
 - With added Project trips, the intersection operations are forecast to continue to meet acceptable LOS E for all but the U.S. 17 and North Access intersection westbound approach which returns to experienced delay for the with outage conditions (91.6 sec/veh) during the PM peak hour.

- Since the delay experienced is of a smaller magnitude than during the Construction Phase, this may be mitigated by instructing some employees to use the South Access in place of their regularly used North Access. **Appendix D** includes an HCS analysis of the maximum traffic which can be accommodated to achieve LOS E for the westbound approach. The corresponding traffic reduction needed represents approximately a difference between 335 and 270 PM exiting westbound left turns for the Year 2022 Operation Phase PM peak hour outage conditions (e.g. reduction of 65 vehicle trips). Alternatively, it is recommended that a police officer directing traffic into and out of the site during Operation outage conditions be considered at the North Access until such time as the number of exiting westbound left turn vehicles during the PM peak hour is reduced by 65. Again, the officer will not interfere with the northbound and the southbound through traffic on U.S. 17. Portable changeable message signs, or similar signage, are also recommended until such time as a reduction in vehicles using the North Access is achieved.

APPENDICES

- A. Growth and Historic Regression**
- B. FDOT Historical AADT counts**
- C. FDOT Generalized LOS Tables**
- D. Intersection Data**
- E. Project Distribution Plot**

APPENDIX A:
Roadways 1 % Growth and Historic Regression

Traffic Volume Forecasts			Historic Volumes						Existing	BACKGROUND 2021			BACKGROUND 2022		
(1% Growth vs Historic Regression)									Final 2016	2021	2021	Final 2017	2022	2022	Final 2017
Count ID	Roadway	Description	2011	2012	2013	2014	2015	2016	Daily Traffic Volume	1% Growth	5Y Forecast	Daily Traffic Volume	1% Growth	6Y Forecast	Daily Traffic Volume
760252	US 17	North of Northern Project Access	7,500	7,800	7,400	7,900	7,400	9,000	9,000	9,459	9,290	9,459	9,554	9,485	9,554
760086		From Northern Project Access to W River Rd	9,500	8,600	8,700	8,800	9,500	10,200	10,200	10,720	10,567	10,720	10,828	10,747	10,828
760012		South of W River Rd	11,200	11,600	10,800	11,100	12,000	12,700	12,700	13,348	13,495	13,495	13,481	13,752	13,752
769108	West River Road	East of US 17	2,400	2,300	2,200	2,200	2,200	2,300	2,300	2,417	2,095	2,417	2,441	2,072	2,441

Note: A one percent annual growth rate is applied for the intersection and roadway link analyses.

APPENDIX B:
FDOT Historical AADT Counts

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 76 - PUTNAM

SITE: 0252 - SR 15 .2 MI. NW OF CR 209(BOSTWICK)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2016	9000 C	N	4600	S	4400	9.50	61.90	11.90
2015	7400 C	N	4100	S	3300	9.50	61.30	11.80
2014	7900 C	N	4000	S	3900	9.50	60.80	12.80
2013	7400 C	N	3700	S	3700	9.50	60.30	13.10
2012	7800 C	N	3800	S	4000	9.50	60.60	12.60
2011	7500 C	N	3900	S	3600	9.50	61.00	13.10
2010	8000 C	N	4200	S	3800	9.43	56.38	12.80
2009	7800 C	N	4000	S	3800	9.64	57.68	11.80
2008	8500 C	N	4400	S	4100	9.72	63.03	14.50
2007	9000 C	N	4600	S	4400	9.49	61.24	12.50
2006	11300 F	N	5700	S	5600	9.18	58.58	15.50
2005	11100 C	N	5600	S	5500	9.40	60.70	19.60
2004	8000 C	N	4100	S	3900	9.30	59.40	16.70
2003	11100 C	N	5600	S	5500	9.30	62.30	20.00
2002	9700 C	N	4900	S	4800	9.30	61.10	20.90
2001	9800 C	N	5000	S	4800	9.40	59.40	19.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 76 - PUTNAM

SITE: 0086 - SR 15 (US17) .2 MI. N. OF CR 209

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2016	10200	C	N 5200		S 5000	9.50	61.90	13.20
2015	9500	C	N 4800		S 4700	9.50	61.30	12.40
2014	8800	C	N 4400		S 4400	9.50	60.80	14.70
2013	8700	C	N 4400		S 4300	9.50	60.30	13.80
2012	8600	C	N 4400		S 4200	9.50	60.60	14.00
2011	9500	C	N 4800		S 4700	9.50	61.00	14.40
2010	9700	C	N 4800		S 4900	9.43	56.38	14.50
2009	9100	C	N 4600		S 4500	9.64	57.68	12.80
2008	9900	C	N 5000		S 4900	9.72	63.03	16.00
2007	10600	F	N 4800		S 5800	9.49	61.24	15.50
2006	10300	C	N 4700		S 5600	9.18	58.58	15.50
2005	11900	F	N 6000		S 5900	9.40	60.70	16.70
2004	11700	C	N 5900		S 5800	9.30	59.40	16.70
2003	12000	C	N 5800		S 6200	9.30	62.30	20.00
2002	10800	C	N 5500		S 5300	9.30	61.10	20.90
2001	10200	C	N 5200		S 5000	9.40	59.40	19.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 76 - PUTNAM

SITE: 0012 - SR 15 (US17) 3.3 MI. N. OF SR 100 .

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2016	12700	C	N 6500		S 6200	9.50	61.90	11.90
2015	12000	C	N 6100		S 5900	9.50	61.30	11.80
2014	11100	C	N 5600		S 5500	9.50	60.80	12.80
2013	10800	C	N 5500		S 5300	9.50	60.30	13.10
2012	11600	C	N 5700		S 5900	9.50	60.60	12.60
2011	11200	C	N 5700		S 5500	9.50	61.00	13.10
2010	11900	C	N 6000		S 5900	9.43	56.38	12.80
2009	11700	C	N 5900		S 5800	9.64	57.68	11.80
2008	12500	C	N 6400		S 6100	9.72	63.03	14.50
2007	13100	C	N 6600		S 6500	9.49	61.24	12.50
2006	13400	C	N 6800		S 6600	9.18	58.58	15.50
2005	15900	F	N 8200		S 7700	9.40	60.70	19.60
2004	15700	C	N 8100		S 7600	9.30	59.40	16.70
2003	14000	C	N 7100		S 6900	9.30	62.30	20.00
2002	12100	C	N 5900		S 6200	9.30	61.10	20.90
2001	13200	C	N 6700		S 6500	9.40	59.40	19.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 76 - PUTNAM

SITE: 9108 - WEST RIVER RD. .1 MI. E. OF US 17

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2016	2300 F		0		0	9.50	61.90	5.70
2015	2200 C	E	0	W	0	9.50	61.30	6.20
2014	2200 T					9.50	60.80	4.50
2013	2200 S		0		0	9.50	60.30	7.20
2012	2300 F		0		0	9.50	60.60	5.50
2011	2400 C	E	0	W	0	9.50	61.00	5.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
 *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

APPENDIX C:
FDOT Generalized LOS Table

Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas¹

TABLE 7

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)											
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
1	Undivided	*	830	880	**	2	2,260	3,020	3,660	3,940	
2	Divided	*	1,910	2,000	**	3	3,360	4,580	5,500	6,080	
3	Divided	*	2,940	3,020	**	4	4,500	6,080	7,320	8,220	
4	Divided	*	3,970	4,040	**	5	5,660	7,680	9,220	10,360	
						6	7,900	10,320	12,060	12,500	
Class II (35 mph or slower posted speed limit)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lane		Ramp Metering			
1	Undivided	*	370	750	800	+ 1,000		+ 5%			
2	Divided	*	730	1,630	1,700						
3	Divided	*	1,170	2,520	2,560						
4	Divided	*	1,610	3,390	3,420						
Non-State Signalized Roadway Adjustments											
(Alter corresponding state volumes by the indicated percent.)											
Non-State Signalized Roadways - 10%											
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
1	Divided	Yes	No	+5%		1	Undivided	420	840	1,190	1,640
1	Undivided	No	No	-20%		2	Divided	1,810	2,560	3,240	3,590
Multi	Undivided	Yes	No	-5%		3	Divided	2,720	3,840	4,860	5,380
Multi	Undivided	No	No	-25%							
—	—	—	Yes	+ 5%		Uninterrupted Flow Highway Adjustments					
One-Way Facility Adjustment						Lanes	Median	Exclusive left lanes		Adjustment factors	
Multiply the corresponding directional volumes in this table by 1.2						1	Divided	Yes		+5%	
						Multi	Undivided	Yes		-5%	
						Multi	Undivided	No		-25%	

BICYCLE MODE ²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Paved Shoulder/Bicycle					
Lane Coverage	B	C	D	E	
0-49%	*	150	390	1,000	
50-84%	110	340	1,000	>1,000	
85-100%	470	1,000	>1,000	**	
PEDESTRIAN MODE ²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Sidewalk Coverage	B	C	D	E	
0-49%	*	*	140	480	
50-84%	*	80	440	800	
85-100%	200	540	880	>1,000	
BUS MODE (Scheduled Fixed Route) ³					
(Buses in peak hour in peak direction)					
Sidewalk Coverage	B	C	D	E	
0-84%	> 5	≥ 4	≥ 3	≥ 2	
85-100%	> 4	≥ 3	≥ 2	≥ 1	

¹Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

¹Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

APPENDIX D:

Intersection Data

Appendix D1: Existing Intersection TMCs

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd AM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Car

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
07:00 AM	53	4	0	57	1	14	0	15	9	73	0	82	154
07:15 AM	96	8	0	104	1	6	0	7	5	60	0	65	176
07:30 AM	104	3	0	107	1	5	0	6	5	70	0	75	188
07:45 AM	115	5	0	120	0	2	0	2	4	62	0	66	188
Total	368	20	0	388	3	27	0	30	23	265	0	288	706
08:00 AM	65	0	0	65	0	3	0	3	4	74	0	78	146
08:15 AM	75	0	0	75	0	2	0	2	0	55	0	55	132
08:30 AM	69	1	0	70	0	2	0	2	1	64	0	65	137
08:45 AM	63	0	0	63	0	0	0	0	5	44	0	49	112
Total	272	1	0	273	0	7	0	7	10	237	0	247	527
Grand Total	640	21	0	661	3	34	0	37	33	502	0	535	1233
Apprch %	96.8	3.2	0		8.1	91.9	0		6.2	93.8	0		
Total %	51.9	1.7	0	53.6	0.2	2.8	0	3	2.7	40.7	0	43.4	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	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 07:00 AM										
07:00 AM	53	4	57	1	14	15	9	73	82	154
07:15 AM	96	8	104	1	6	7	5	60	65	176
07:30 AM	104	3	107	1	5	6	5	70	75	188
07:45 AM	115	5	120	0	2	2	4	62	66	188
Total Volume	368	20	388	3	27	30	23	265	288	706
% App. Total	94.8	5.2		10	90		8	92		
PHF	.800	.625	.808	.750	.482	.500	.639	.908	.878	.939

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd AM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Truck

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
07:00 AM	6	0	0	6	1	2	0	3	7	10	0	17	26
07:15 AM	8	1	0	9	0	8	0	8	0	6	0	6	23
07:30 AM	9	0	0	9	0	2	0	2	2	12	0	14	25
07:45 AM	12	1	0	13	0	1	0	1	2	7	0	9	23
Total	35	2	0	37	1	13	0	14	11	35	0	46	97
08:00 AM	10	1	0	11	0	0	0	0	1	8	0	9	20
08:15 AM	12	0	0	12	1	4	0	5	0	8	0	8	25
08:30 AM	8	1	0	9	3	2	0	5	1	5	0	6	20
08:45 AM	7	0	0	7	0	1	0	1	3	17	0	20	28
Total	37	2	0	39	4	7	0	11	5	38	0	43	93
Grand Total	72	4	0	76	5	20	0	25	16	73	0	89	190
Apprch %	94.7	5.3	0		20	80	0		18	82	0		
Total %	37.9	2.1	0	40	2.6	10.5	0	13.2	8.4	38.4	0	46.8	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	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 07:00 AM										
07:00 AM	6	0	6	1	2	3	7	10	17	26
07:15 AM	8	1	9	0	8	8	0	6	6	23
07:30 AM	9	0	9	0	2	2	2	12	14	25
07:45 AM	12	1	13	0	1	1	2	7	9	23
Total Volume	35	2	37	1	13	14	11	35	46	97
% App. Total	94.6	5.4		7.1	92.9		23.9	76.1		
PHF	.729	.500	.712	.250	.406	.438	.393	.729	.676	.933

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd AM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Combined

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
07:00 AM	59	4	0	63	2	16	0	18	16	83	0	99	180
07:15 AM	104	9	0	113	1	14	0	15	5	66	0	71	199
07:30 AM	113	3	0	116	1	7	0	8	7	82	0	89	213
07:45 AM	127	6	0	133	0	3	0	3	6	69	0	75	211
Total	403	22	0	425	4	40	0	44	34	300	0	334	803
08:00 AM	75	1	0	76	0	3	0	3	5	82	0	87	166
08:15 AM	87	0	0	87	1	6	0	7	0	63	0	63	157
08:30 AM	77	2	0	79	3	4	0	7	2	69	0	71	157
08:45 AM	70	0	0	70	0	1	0	1	8	61	0	69	140
Total	309	3	0	312	4	14	0	18	15	275	0	290	620
Grand Total	712	25	0	737	8	54	0	62	49	575	0	624	1423
Apprch %	96.6	3.4	0		12.9	87.1	0		7.9	92.1	0		
Total %	50	1.8	0	51.8	0.6	3.8	0	4.4	3.4	40.4	0	43.9	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	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 07:00 AM										
07:00 AM	59	4	63	2	16	18	16	83	99	180
07:15 AM	104	9	113	1	14	15	5	66	71	199
07:30 AM	113	3	116	1	7	8	7	82	89	213
07:45 AM	127	6	133	0	3	3	6	69	75	211
Total Volume	403	22	425	4	40	44	34	300	334	803
% App. Total	94.8	5.2		9.1	90.9		10.2	89.8		
PHF	.793	.611	.799	.500	.625	.611	.531	.904	.843	.942

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd PM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Car

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:00 PM	60	0	0	60	6	11	0	17	1	91	0	92	169
04:15 PM	84	0	0	84	4	9	0	13	0	91	0	91	188
04:30 PM	79	0	0	79	5	6	0	11	0	103	0	103	193
04:45 PM	104	0	0	104	4	6	0	10	3	65	0	68	182
Total	327	0	0	327	19	32	0	51	4	350	0	354	732
05:00 PM	86	0	0	86	2	12	0	14	0	97	0	97	197
05:15 PM	85	0	0	85	3	14	0	17	1	95	0	96	198
05:30 PM	86	1	0	87	6	16	0	22	1	93	0	94	203
05:45 PM	107	1	0	108	4	3	0	7	1	81	0	82	197
Total	364	2	0	366	15	45	0	60	3	366	0	369	795
Grand Total	691	2	0	693	34	77	0	111	7	716	0	723	1527
Apprch %	99.7	0.3	0		30.6	69.4	0		1	99	0		
Total %	45.3	0.1	0	45.4	2.2	5	0	7.3	0.5	46.9	0	47.3	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	86	0	86	2	12	14	0	97	97	197
05:15 PM	85	0	85	3	14	17	1	95	96	198
05:30 PM	86	1	87	6	16	22	1	93	94	203
05:45 PM	107	1	108	4	3	7	1	81	82	197
Total Volume	364	2	366	15	45	60	3	366	369	795
% App. Total	99.5	0.5		25	75		0.8	99.2		
PHF	.850	.500	.847	.625	.703	.682	.750	.943	.951	.979

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd PM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Truck

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:00 PM	8	0	0	8	1	4	0	5	1	13	0	14	27
04:15 PM	6	1	0	7	1	3	0	4	1	10	0	11	22
04:30 PM	7	0	0	7	2	3	0	5	1	9	0	10	22
04:45 PM	8	0	0	8	0	2	0	2	1	9	0	10	20
Total	29	1	0	30	4	12	0	16	4	41	0	45	91
05:00 PM	5	0	0	5	1	1	0	2	0	8	0	8	15
05:15 PM	5	0	0	5	0	1	0	1	1	9	0	10	16
05:30 PM	5	0	0	5	1	1	0	2	1	4	0	5	12
05:45 PM	3	0	0	3	0	3	0	3	3	6	0	9	15
Total	18	0	0	18	2	6	0	8	5	27	0	32	58
Grand Total	47	1	0	48	6	18	0	24	9	68	0	77	149
Apprch %	97.9	2.1	0		25	75	0		11.7	88.3	0		
Total %	31.5	0.7	0	32.2	4	12.1	0	16.1	6	45.6	0	51.7	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	8	0	8	1	4	5	1	13	14	27
04:15 PM	6	1	7	1	3	4	1	10	11	22
04:30 PM	7	0	7	2	3	5	1	9	10	22
04:45 PM	8	0	8	0	2	2	1	9	10	20
Total Volume	29	1	30	4	12	16	4	41	45	91
% App. Total	96.7	3.3		25	75		8.9	91.1		
PHF	.906	.250	.938	.500	.750	.800	1.00	.788	.804	.843

Peggy Malone & Associates

(888) 247-8602

File Name : 1-US17 & Continental Rd PM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Combined

	US17 Southbound				Continental Rd Westbound				US17 Northbound				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
04:00 PM	68	0	0	68	7	15	0	22	2	104	0	106	196
04:15 PM	90	1	0	91	5	12	0	17	1	101	0	102	210
04:30 PM	86	0	0	86	7	9	0	16	1	112	0	113	215
04:45 PM	112	0	0	112	4	8	0	12	4	74	0	78	202
Total	356	1	0	357	23	44	0	67	8	391	0	399	823
05:00 PM	91	0	0	91	3	13	0	16	0	105	0	105	212
05:15 PM	90	0	0	90	3	15	0	18	2	104	0	106	214
05:30 PM	91	1	0	92	7	17	0	24	2	97	0	99	215
05:45 PM	110	1	0	111	4	6	0	10	4	87	0	91	212
Total	382	2	0	384	17	51	0	68	8	393	0	401	853
Grand Total	738	3	0	741	40	95	0	135	16	784	0	800	1676
Apprch %	99.6	0.4	0		29.6	70.4	0		2	98	0		
Total %	44	0.2	0	44.2	2.4	5.7	0	8.1	1	46.8	0	47.7	

	US17 Southbound			Continental Rd Westbound			US17 Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	91	0	91	3	13	16	0	105	105	212
05:15 PM	90	0	90	3	15	18	2	104	106	214
05:30 PM	91	1	92	7	17	24	2	97	99	215
05:45 PM	110	1	111	4	6	10	4	87	91	212
Total Volume	382	2	384	17	51	68	8	393	401	853
% App. Total	99.5	0.5		25	75		2	98		
PHF	.868	.500	.865	.607	.750	.708	.500	.936	.946	.992

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. AM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Car

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	1	0	12	0	19	0	19	3	2	0	5	36
07:15 AM	2	0	0	2	0	29	0	29	14	2	0	16	47
07:30 AM	6	0	0	6	0	47	0	47	7	2	0	9	62
07:45 AM	0	0	0	0	0	15	0	15	8	1	0	9	24
Total	19	1	0	20	0	110	0	110	32	7	0	39	169
08:00 AM	1	0	0	1	0	28	0	28	4	1	0	5	34
08:15 AM	1	0	0	1	0	24	0	24	12	0	0	12	37
08:30 AM	0	0	0	0	1	17	0	18	5	0	0	5	23
08:45 AM	0	0	0	0	0	16	0	16	7	0	0	7	23
Total	2	0	0	2	1	85	0	86	28	1	0	29	117
Grand Total	21	1	0	22	1	195	0	196	60	8	0	68	286
Apprch %	95.5	4.5	0		0.5	99.5	0		88.2	11.8	0		
Total %	7.3	0.3	0	7.7	0.3	68.2	0	68.5	21	2.8	0	23.8	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	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 07:00 AM										
07:00 AM	11	1	12	0	19	19	3	2	5	36
07:15 AM	2	0	2	0	29	29	14	2	16	47
07:30 AM	6	0	6	0	47	47	7	2	9	62
07:45 AM	0	0	0	0	15	15	8	1	9	24
Total Volume	19	1	20	0	110	110	32	7	39	169
% App. Total	95	5		0	100		82.1	17.9		
PHF	.432	.250	.417	.000	.585	.585	.571	.875	.609	.681

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. AM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Truck

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	2	0	2	2	0	0	2	4
08:00 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	2	0	2	3	0	0	3	5
Grand Total	0	0	0	0	0	4	0	4	5	0	0	5	9
Apprch %	0	0	0		0	100	0		100	0	0		
Total %	0	0	0		0	44.4	0	44.4	55.6	0	0	55.6	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	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 07:15 AM										
07:15 AM	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	1	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	1	1	2	0	2	3
Total Volume	0	0	0	0	2	2	4	0	4	6
% App. Total	0	0		0	100		100	0		
PHF	.000	.000	.000	.000	.500	.500	.500	.000	.500	.500

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. AM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Combined

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	1	0	12	0	20	0	20	3	2	0	5	37
07:15 AM	2	0	0	2	0	29	0	29	15	2	0	17	48
07:30 AM	6	0	0	6	0	48	0	48	7	2	0	9	63
07:45 AM	0	0	0	0	0	15	0	15	9	1	0	10	25
Total	19	1	0	20	0	112	0	112	34	7	0	41	173
08:00 AM	1	0	0	1	0	29	0	29	6	1	0	7	37
08:15 AM	1	0	0	1	0	25	0	25	12	0	0	12	38
08:30 AM	0	0	0	0	1	17	0	18	5	0	0	5	23
08:45 AM	0	0	0	0	0	16	0	16	8	0	0	8	24
Total	2	0	0	2	1	87	0	88	31	1	0	32	122
Grand Total	21	1	0	22	1	199	0	200	65	8	0	73	295
Apprch %	95.5	4.5	0		0.5	99.5	0		89	11	0		
Total %	7.1	0.3	0	7.5	0.3	67.5	0	67.8	22	2.7	0	24.7	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	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 07:00 AM										
07:00 AM	11	1	12	0	20	20	3	2	5	37
07:15 AM	2	0	2	0	29	29	15	2	17	48
07:30 AM	6	0	6	0	48	48	7	2	9	63
07:45 AM	0	0	0	0	15	15	9	1	10	25
Total Volume	19	1	20	0	112	112	34	7	41	173
% App. Total	95	5		0	100		82.9	17.1		
PHF	.432	.250	.417	.000	.583	.583	.567	.875	.603	.687

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. PM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Car

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	7	0	0	7	0	20	0	20	17	0	0	17	44
04:15 PM	2	0	0	2	0	11	0	11	24	0	0	24	37
04:30 PM	3	0	0	3	0	13	0	13	27	1	0	28	44
04:45 PM	1	0	0	1	0	14	0	14	23	2	0	25	40
Total	13	0	0	13	0	58	0	58	91	3	0	94	165
05:00 PM	3	1	0	4	0	17	0	17	27	0	0	27	48
05:15 PM	2	0	0	2	1	20	0	21	34	3	0	37	60
05:30 PM	31	2	0	33	0	15	0	15	27	7	0	34	82
05:45 PM	2	0	0	2	0	14	0	14	24	5	0	29	45
Total	38	3	0	41	1	66	0	67	112	15	0	127	235
Grand Total	51	3	0	54	1	124	0	125	203	18	0	221	400
Apprch %	94.4	5.6	0		0.8	99.2	0		91.9	8.1	0		
Total %	12.8	0.8	0	13.5	0.2	31	0	31.2	50.8	4.5	0	55.2	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	3	1	4	0	17	17	27	0	27	48
05:15 PM	2	0	2	1	20	21	34	3	37	60
05:30 PM	31	2	33	0	15	15	27	7	34	82
05:45 PM	2	0	2	0	14	14	24	5	29	45
Total Volume	38	3	41	1	66	67	112	15	127	235
% App. Total	92.7	7.3		1.5	98.5		88.2	11.8		
PHF	.306	.375	.311	.250	.825	.798	.824	.536	.858	.716

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. PM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Truck

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	1	0	0	1	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	2	0	2	1	0	0	1	3
Apprch %	0	0	0		0	100	0		100	0	0		
Total %	0	0	0		0	66.7	0	66.7	33.3	0	0	33.3	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	1	1	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	1	0	1	2
% App. Total	0	0		0	100		100	0		
PHF	.000	.000	.000	.000	.250	.250	.250	.000	.250	.500

Peggy Malone & Associates

(888) 247-8602

File Name : 2-Electric Rd & W. River Rd. PM
 Site Code :
 Start Date : 10/10/2017
 Page No : 1

Groups Printed- Combined

	S. Electric Ave Southbound				W. River Rd Westbound				W. River Rd Eastbound				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	7	0	0	7	0	21	0	21	17	0	0	17	45
04:15 PM	2	0	0	2	0	11	0	11	25	0	0	25	38
04:30 PM	3	0	0	3	0	13	0	13	27	1	0	28	44
04:45 PM	1	0	0	1	0	14	0	14	23	2	0	25	40
Total	13	0	0	13	0	59	0	59	92	3	0	95	167
05:00 PM	3	1	0	4	0	18	0	18	27	0	0	27	49
05:15 PM	2	0	0	2	1	20	0	21	34	3	0	37	60
05:30 PM	31	2	0	33	0	15	0	15	27	7	0	34	82
05:45 PM	2	0	0	2	0	14	0	14	24	5	0	29	45
Total	38	3	0	41	1	67	0	68	112	15	0	127	236
Grand Total	51	3	0	54	1	126	0	127	204	18	0	222	403
Apprch %	94.4	5.6	0		0.8	99.2	0		91.9	8.1	0		
Total %	12.7	0.7	0	13.4	0.2	31.3	0	31.5	50.6	4.5	0	55.1	

	S. Electric Ave Southbound			W. River Rd Westbound			W. River Rd Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	3	1	4	0	18	18	27	0	27	49
05:15 PM	2	0	2	1	20	21	34	3	37	60
05:30 PM	31	2	33	0	15	15	27	7	34	82
05:45 PM	2	0	2	0	14	14	24	5	29	45
Total Volume	38	3	41	1	67	68	112	15	127	236
% App. Total	92.7	7.3		1.5	98.5		88.2	11.8		
PHF	.306	.375	.311	.250	.838	.810	.824	.536	.858	.720

***Appendix D2: Addt'l 8-Hour Intersection TMCs
(for Review of Truck Percentages)***

Peggy Malone & Associates, Inc.

(904) 992-8072

File Name : US 17 and Continental Rd AM

Site Code :

Start Date : 1/10/2017

Page No : 1

Groups Printed- Car

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	25	6	0	31	1	2	0	3	15	55	0	0	70	104
06:15 AM	45	9	0	54	0	3	0	3	43	74	0	0	117	174
06:30 AM	83	13	0	96	2	5	0	7	39	82	0	0	121	224
06:45 AM	55	12	0	67	2	2	0	4	41	47	0	0	88	159
Total	208	40	0	248	5	12	0	17	138	258	0	0	396	661
07:00 AM	88	4	0	92	3	12	0	15	6	45	0	0	51	158
07:15 AM	89	3	0	92	2	9	0	11	4	65	0	0	69	172
07:30 AM	94	0	0	94	0	3	0	3	8	69	0	0	77	174
07:45 AM	96	2	0	98	0	1	0	1	2	54	0	0	56	155
Total	367	9	0	376	5	25	0	30	20	233	0	0	253	659
08:00 AM	68	3	0	71	0	1	0	1	2	51	0	0	53	125
08:15 AM	74	0	0	74	0	2	0	2	2	46	0	0	48	124
08:30 AM	88	1	0	89	0	1	0	1	6	59	0	0	65	155
08:45 AM	72	3	0	75	0	2	0	2	2	52	0	0	54	131
Total	302	7	0	309	0	6	0	6	12	208	0	0	220	535
Grand Total	877	56	0	933	10	43	0	53	170	699	0	0	869	1855
Apprch %	94	6	0		18.9	81.1	0		19.6	80.4	0	0		
Total %	47.3	3	0	50.3	0.5	2.3	0	2.9	9.2	37.7	0	0	46.8	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:15 AM											
06:15 AM	45	9	54	0	3	3	43	74	0	117	174
06:30 AM	83	13	96	2	5	7	39	82	0	121	224
06:45 AM	55	12	67	2	2	4	41	47	0	88	159
07:00 AM	88	4	92	3	12	15	6	45	0	51	158
Total Volume	271	38	309	7	22	29	129	248	0	377	715
% App. Total	87.7	12.3		24.1	75.9		34.2	65.8	0		
PHF	.770	.731	.805	.583	.458	.483	.750	.756	.000	.779	.798

Peggy Malone & Associates, Inc.

(904) 992-8072

File Name : US 17 and Continental Rd AM

Site Code :

Start Date : 1/10/2017

Page No : 1

Groups Printed: **Truck**

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	6	0	0	6	0	1	0	1	0	8	0	0	8	15
06:15 AM	3	0	0	3	1	1	0	2	3	2	0	0	5	10
06:30 AM	4	0	0	4	0	3	0	3	5	3	0	0	8	15
06:45 AM	6	1	0	7	0	2	0	2	2	7	0	0	9	18
Total	19	1	0	20	1	7	0	8	10	20	0	0	30	58
07:00 AM	8	1	0	9	0	3	0	3	10	5	0	0	15	27
07:15 AM	6	2	0	8	0	5	0	5	13	10	0	0	23	36
07:30 AM	8	0	0	8	0	5	0	5	5	11	0	0	16	29
07:45 AM	5	1	0	6	1	10	0	11	5	9	0	0	14	31
Total	27	4	0	31	1	23	0	24	33	35	0	0	68	123
08:00 AM	7	0	0	7	0	10	0	10	6	15	0	0	21	38
08:15 AM	7	0	0	7	1	8	0	9	2	8	0	0	10	26
08:30 AM	7	1	0	8	0	5	0	5	0	4	0	0	4	17
08:45 AM	13	0	0	13	0	1	0	1	0	7	0	0	7	21
Total	34	1	0	35	1	24	0	25	8	34	0	0	42	102
Grand Total	80	6	0	86	3	54	0	57	51	89	0	0	140	283
Apprch %	93	7	0		5.3	94.7	0		36.4	63.6	0	0		
Total %	28.3	2.1	0	30.4	1.1	19.1	0	20.1	18	31.4	0	0	49.5	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	6	2	8	0	5	5	13	10	0	23	36
07:30 AM	8	0	8	0	5	5	5	11	0	16	29
07:45 AM	5	1	6	1	10	11	5	9	0	14	31
08:00 AM	7	0	7	0	10	10	6	15	0	21	38
Total Volume	26	3	29	1	30	31	29	45	0	74	134
% App. Total	89.7	10.3		3.2	96.8		39.2	60.8	0		
PHF	.813	.375	.906	.250	.750	.705	.558	.750	.000	.804	.882

Peggy Malone & Associates, Inc.

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File Name : US 17 and Continental Rd AM

Site Code :

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Groups Printed **Combined**

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	31	6	0	37	1	3	0	4	15	63	0	0	78	119
06:15 AM	48	9	0	57	1	4	0	5	46	76	0	0	122	184
06:30 AM	87	13	0	100	2	8	0	10	44	85	0	0	129	239
06:45 AM	61	13	0	74	2	4	0	6	43	54	0	0	97	177
Total	227	41	0	268	6	19	0	25	148	278	0	0	426	719
07:00 AM	96	5	0	101	3	15	0	18	16	50	0	0	66	185
07:15 AM	95	5	0	100	2	14	0	16	17	75	0	0	92	208
07:30 AM	102	0	0	102	0	8	0	8	13	80	0	0	93	203
07:45 AM	101	3	0	104	1	11	0	12	7	63	0	0	70	186
Total	394	13	0	407	6	48	0	54	53	268	0	0	321	782
08:00 AM	75	3	0	78	0	11	0	11	8	66	0	0	74	163
08:15 AM	81	0	0	81	1	10	0	11	4	54	0	0	58	150
08:30 AM	95	2	0	97	0	6	0	6	6	63	0	0	69	172
08:45 AM	85	3	0	88	0	3	0	3	2	59	0	0	61	152
Total	336	8	0	344	1	30	0	31	20	242	0	0	262	637
Grand Total	957	62	0	1019	13	97	0	110	221	788	0	0	1009	2138
Apprch %	93.9	6.1	0		11.8	88.2	0		21.9	78.1	0	0		
Total %	44.8	2.9	0	47.7	0.6	4.5	0	5.1	10.3	36.9	0	0	47.2	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 06:30 AM											
06:30 AM	87	13	100	2	8	10	44	85	0	129	239
06:45 AM	61	13	74	2	4	6	43	54	0	97	177
07:00 AM	96	5	101	3	15	18	16	50	0	66	185
07:15 AM	95	5	100	2	14	16	17	75	0	92	208
Total Volume	339	36	375	9	41	50	120	264	0	384	809
% App. Total	90.4	9.6		18	82		31.2	68.8	0		
PHF	.883	.692	.928	.750	.683	.694	.682	.776	.000	.744	.846

Peggy Malone & Associates, Inc.

(904) 992-8072

File Name : US 17 and Continental Rd PM

Site Code :

Start Date : 1/10/2017

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Groups Printed- Car

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	42	0	0	42	2	9	0	11	2	51	1	0	54	107
02:15 PM	49	1	0	50	0	1	0	1	7	67	0	0	74	125
02:30 PM	56	1	0	57	13	6	0	19	3	64	0	0	67	143
02:45 PM	58	1	0	59	1	8	0	9	2	68	0	0	70	138
Total	205	3	0	208	16	24	0	40	14	250	1	0	265	513
03:00 PM	68	0	0	68	1	8	0	9	2	59	0	0	61	138
03:15 PM	48	0	0	48	3	12	0	15	2	60	0	0	62	125
03:30 PM	60	2	0	62	10	27	0	37	1	86	0	0	87	186
03:45 PM	85	0	0	85	1	8	0	9	0	74	0	0	74	168
Total	261	2	0	263	15	55	0	70	5	279	0	0	284	617
04:00 PM	69	0	0	69	7	11	0	18	1	79	0	0	80	167
04:15 PM	70	0	0	70	6	4	0	10	1	82	0	0	83	163
04:30 PM	77	1	0	78	2	4	0	6	2	95	0	0	97	181
04:45 PM	86	0	0	86	5	15	0	20	0	97	1	0	98	204
Total	302	1	0	303	20	34	0	54	4	353	1	0	358	715
05:00 PM	73	0	0	73	2	11	0	13	0	102	0	0	102	188
05:15 PM	93	0	0	93	6	18	0	24	0	98	0	0	98	215
05:30 PM	95	2	0	97	5	17	0	22	3	103	0	0	106	225
05:45 PM	94	2	0	96	1	6	0	7	2	68	0	0	70	173
Total	355	4	0	359	14	52	0	66	5	371	0	0	376	801
06:00 PM	63	0	0	63	4	1	0	5	4	65	0	0	69	137
06:15 PM	60	2	0	62	1	1	0	2	8	66	0	0	74	138
06:30 PM	55	1	0	56	0	1	0	1	8	69	0	0	77	134
06:45 PM	36	1	0	37	1	0	0	1	2	49	0	0	51	89
Total	214	4	0	218	6	3	0	9	22	249	0	0	271	498
Grand Total	1337	14	0	1351	71	168	0	239	50	1502	2	0	1554	3144
Apprch %	99	1	0		29.7	70.3	0		3.2	96.7	0.1	0		
Total %	42.5	0.4	0	43	2.3	5.3	0	7.6	1.6	47.8	0.1	0	49.4	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	86	0	86	5	15	20	0	97	1	98	204
05:00 PM	73	0	73	2	11	13	0	102	0	102	188
05:15 PM	93	0	93	6	18	24	0	98	0	98	215
05:30 PM	95	2	97	5	17	22	3	103	0	106	225
Total Volume	347	2	349	18	61	79	3	400	1	404	832
% App. Total	99.4	0.6		22.8	77.2		0.7	99	0.2		
PHF	.913	.250	.899	.750	.847	.823	.250	.971	.250	.953	.924

Peggy Malone & Associates, Inc.

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File Name : US 17 and Continental Rd PM

Site Code :

Start Date : 1/10/2017

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Groups Printed: **Truck**

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	15	0	0	15	1	7	0	8	7	5	0	0	12	35
02:15 PM	10	1	0	11	0	10	0	10	3	10	0	0	13	34
02:30 PM	13	0	0	13	0	8	0	8	9	12	0	0	21	42
02:45 PM	13	1	0	14	2	7	0	9	1	14	0	0	15	38
Total	51	2	0	53	3	32	0	35	20	41	0	0	61	149
03:00 PM	11	0	0	11	1	1	0	2	4	15	0	0	19	32
03:15 PM	17	1	0	18	1	7	0	8	8	10	0	0	18	44
03:30 PM	5	0	0	5	1	6	0	7	5	13	0	0	18	30
03:45 PM	14	0	0	14	0	6	0	6	6	10	0	0	16	36
Total	47	1	0	48	3	20	0	23	23	48	0	0	71	142
04:00 PM	8	0	0	8	2	2	0	4	1	9	0	0	10	22
04:15 PM	13	1	0	14	0	4	0	4	11	11	0	0	22	40
04:30 PM	7	0	0	7	2	2	0	4	2	12	0	0	14	25
04:45 PM	3	0	0	3	0	2	0	2	1	4	0	0	5	10
Total	31	1	0	32	4	10	0	14	15	36	0	0	51	97
05:00 PM	3	0	0	3	1	5	0	6	5	9	0	0	14	23
05:15 PM	7	0	0	7	1	3	0	4	2	5	0	0	7	18
05:30 PM	5	0	0	5	0	1	0	1	3	5	0	0	8	14
05:45 PM	4	0	0	4	1	3	0	4	2	2	0	0	4	12
Total	19	0	0	19	3	12	0	15	12	21	0	0	33	67
06:00 PM	4	0	0	4	1	1	0	2	1	7	0	0	8	14
06:15 PM	4	0	0	4	0	2	0	2	2	2	0	0	4	10
06:30 PM	2	1	0	3	0	1	0	1	3	2	0	0	5	9
06:45 PM	6	0	0	6	0	0	0	0	1	3	0	0	4	10
Total	16	1	0	17	1	4	0	5	7	14	0	0	21	43
Grand Total	164	5	0	169	14	78	0	92	77	160	0	0	237	498
Apprch %	97	3	0		15.2	84.8	0		32.5	67.5	0	0		
Total %	32.9	1	0	33.9	2.8	15.7	0	18.5	15.5	32.1	0	0	47.6	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 02:30 PM											
02:30 PM	13	0	13	0	8	8	9	12	0	21	42
02:45 PM	13	1	14	2	7	9	1	14	0	15	38
03:00 PM	11	0	11	1	1	2	4	15	0	19	32
03:15 PM	17	1	18	1	7	8	8	10	0	18	44
Total Volume	54	2	56	4	23	27	22	51	0	73	156
% App. Total	96.4	3.6		14.8	85.2		30.1	69.9	0		
PHF	.794	.500	.778	.500	.719	.750	.611	.850	.000	.869	.886

Peggy Malone & Associates, Inc.

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File Name : US 17 and Continental Rd PM

Site Code :

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Groups Printed **Combined**

	US 17 Southbound				Continental Rd Westbound				US 17 Northbound					
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	57	0	0	57	3	16	0	19	9	56	1	0	66	142
02:15 PM	59	2	0	61	0	11	0	11	10	77	0	0	87	159
02:30 PM	69	1	0	70	13	14	0	27	12	76	0	0	88	185
02:45 PM	71	2	0	73	3	15	0	18	3	82	0	0	85	176
Total	256	5	0	261	19	56	0	75	34	291	1	0	326	662
03:00 PM	79	0	0	79	2	9	0	11	6	74	0	0	80	170
03:15 PM	65	1	0	66	4	19	0	23	10	70	0	0	80	169
03:30 PM	65	2	0	67	11	33	0	44	6	99	0	0	105	216
03:45 PM	99	0	0	99	1	14	0	15	6	84	0	0	90	204
Total	308	3	0	311	18	75	0	93	28	327	0	0	355	759
04:00 PM	77	0	0	77	9	13	0	22	2	88	0	0	90	189
04:15 PM	83	1	0	84	6	8	0	14	12	93	0	0	105	203
04:30 PM	84	1	0	85	4	6	0	10	4	107	0	0	111	206
04:45 PM	89	0	0	89	5	17	0	22	1	101	1	0	103	214
Total	333	2	0	335	24	44	0	68	19	389	1	0	409	812
05:00 PM	76	0	0	76	3	16	0	19	5	111	0	0	116	211
05:15 PM	100	0	0	100	7	21	0	28	2	103	0	0	105	233
05:30 PM	100	2	0	102	5	18	0	23	6	108	0	0	114	239
05:45 PM	98	2	0	100	2	9	0	11	4	70	0	0	74	185
Total	374	4	0	378	17	64	0	81	17	392	0	0	409	868
06:00 PM	67	0	0	67	5	2	0	7	5	72	0	0	77	151
06:15 PM	64	2	0	66	1	3	0	4	10	68	0	0	78	148
06:30 PM	57	2	0	59	0	2	0	2	11	71	0	0	82	143
06:45 PM	42	1	0	43	1	0	0	1	3	52	0	0	55	99
Total	230	5	0	235	7	7	0	14	29	263	0	0	292	541
Grand Total	1501	19	0	1520	85	246	0	331	127	1662	2	0	1791	3642
Apprch %	98.8	1.2	0		25.7	74.3	0		7.1	92.8	0.1	0		
Total %	41.2	0.5	0	41.7	2.3	6.8	0	9.1	3.5	45.6	0.1	0	49.2	

	US 17 Southbound			Continental Rd Westbound			US 17 Northbound				
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	89	0	89	5	17	22	1	101	1	103	214
05:00 PM	76	0	76	3	16	19	5	111	0	116	211
05:15 PM	100	0	100	7	21	28	2	103	0	105	233
05:30 PM	100	2	102	5	18	23	6	108	0	114	239
Total Volume	365	2	367	20	72	92	14	423	1	438	897
% App. Total	99.5	0.5		21.7	78.3		3.2	96.6	0.2		
PHF	.913	.250	.900	.714	.857	.821	.583	.953	.250	.944	.938

***Appendix D3: Future Year TMV Worksheets
and HCS Outputs - AM Peak Hour Intersection 1***

Seminole Generating Station

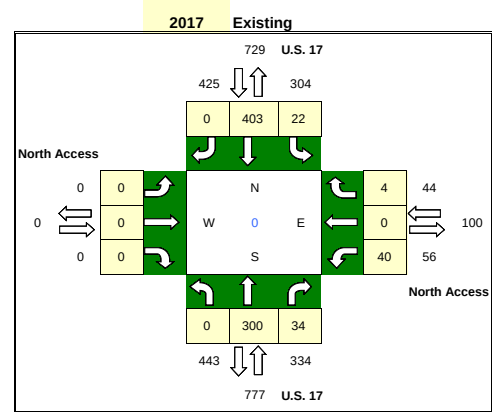
Turning Movement Volumes

(AM)

N/S Roadway: U.S. 17

E/W Roadway: North Access

Date Taken: 10/25/2017

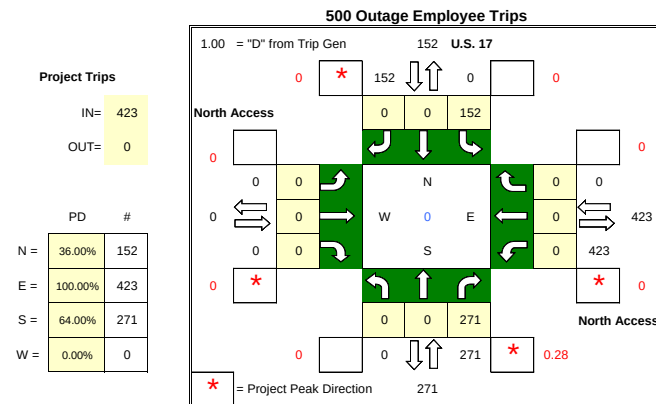
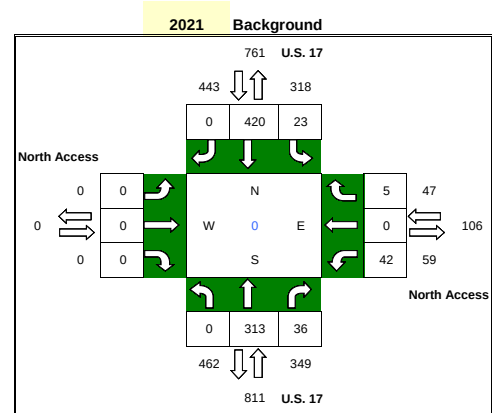


Existing and Background Worksheet Baseline Conditions 2017 and 2021

Auto
Occupancy= 1.2

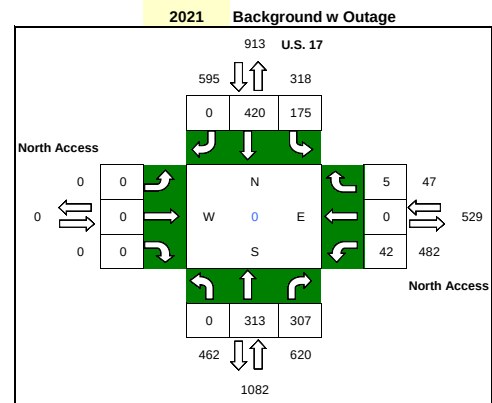
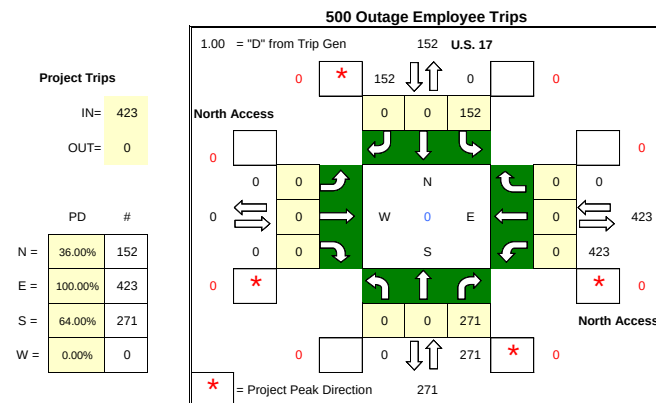
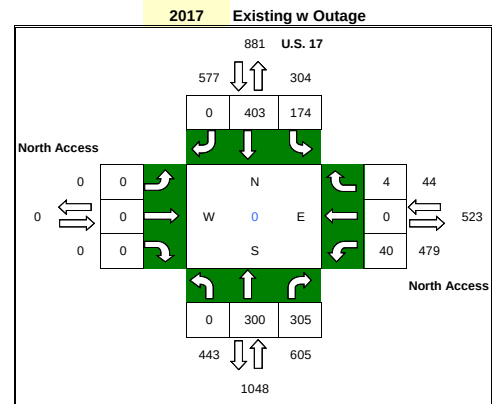
Outage : 100% use North Access

Case 2 : General Condition plus Outage



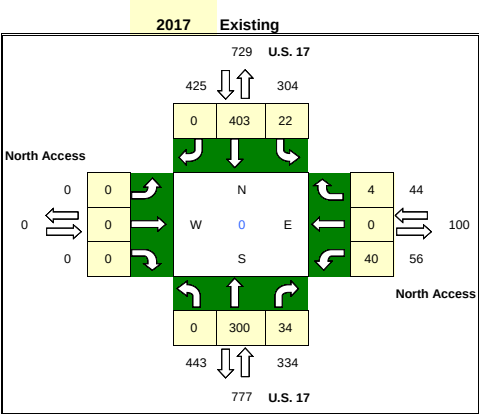
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (AM)

N/S Roadway: U.S. 17
E/W Roadway: North Access
Date Taken: 10/25/2017

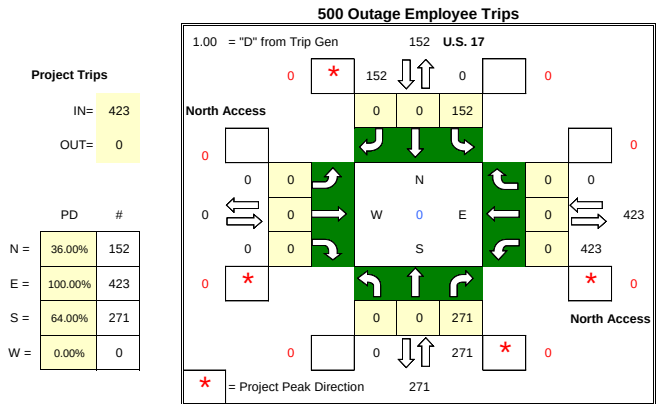
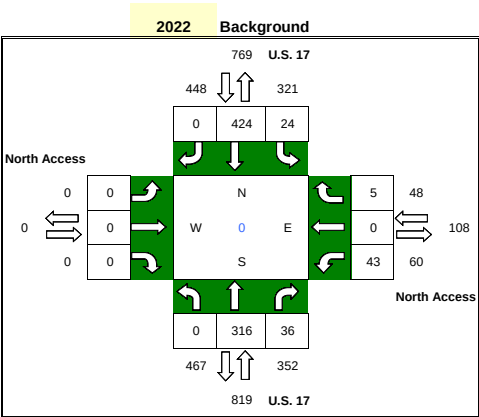


Existing and Background Worksheet
Baseline Conditions 2017 and 2022

Auto
Occupancy= 1.2

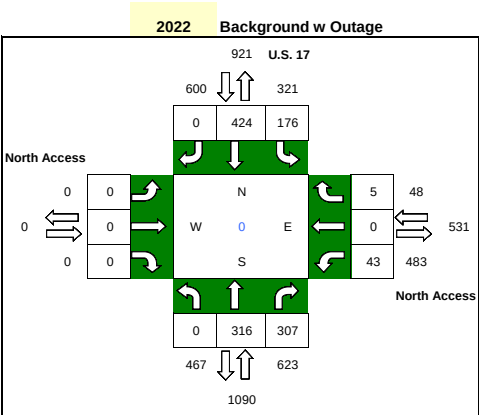
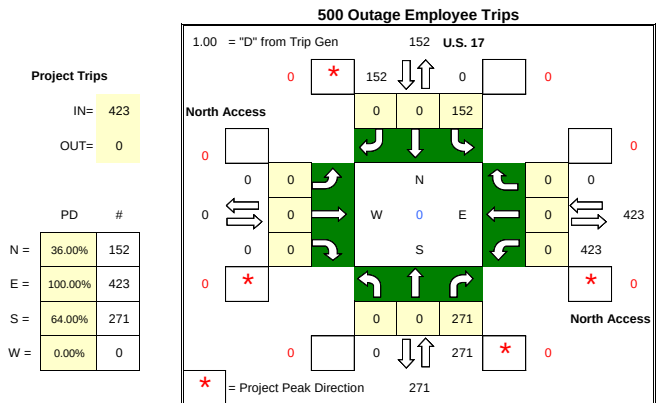
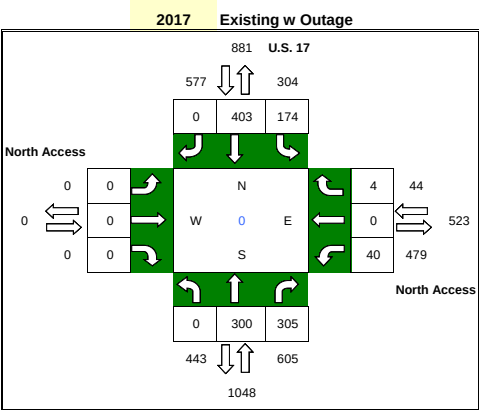
Outage : 100% use North Access

Case 2 : General Condition plus Outage



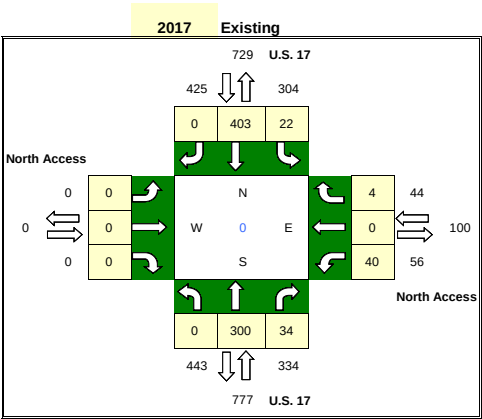
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (AM)

N/S Roadway: U.S. 17
E/W Roadway: North Access
Date Taken: 10/25/2017

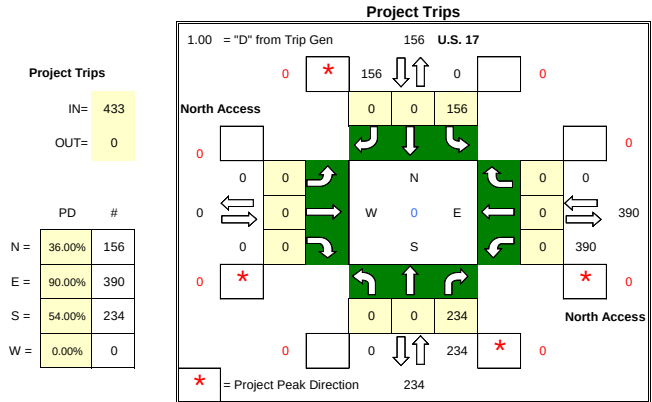


Future Total Worksheet
Construction Phase 2021

Auto
Occupancy= 1.2

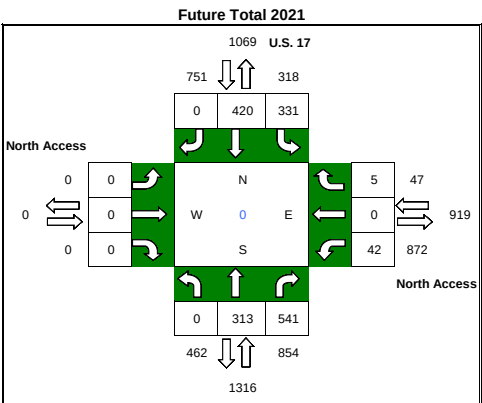
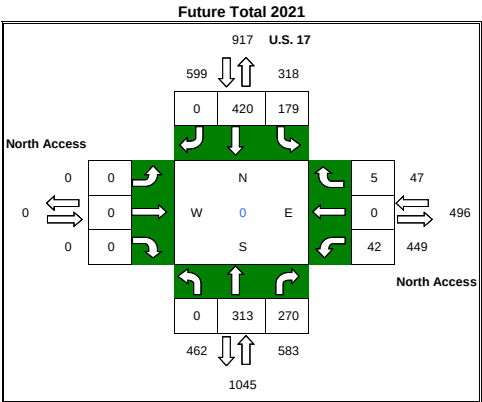
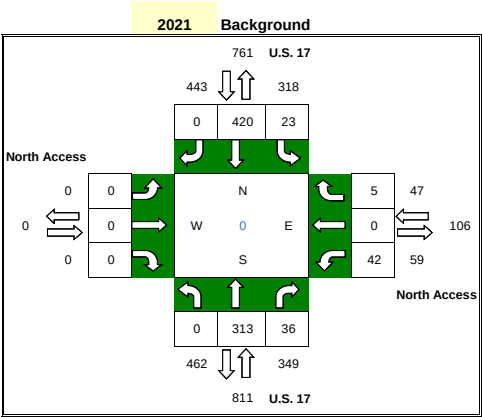
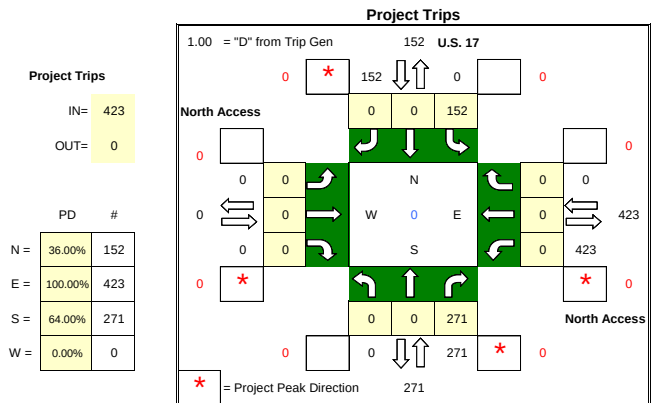
Construction: 90% use US17 AND 10% use W River Road; trucks 100% use US17

Case 1 : General Condition



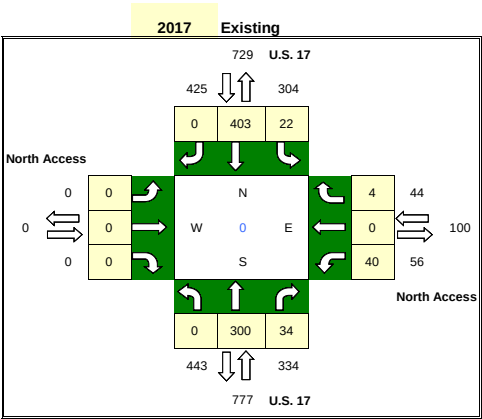
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (AM)

N/S Roadway: U.S. 17
E/W Roadway: North Access
Date Taken: 10/25/2017

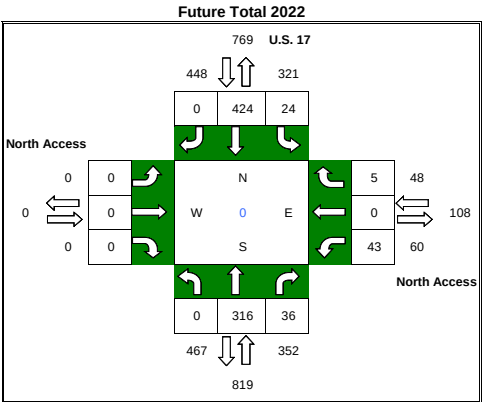
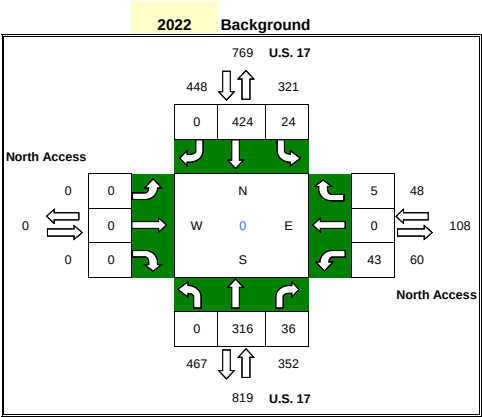
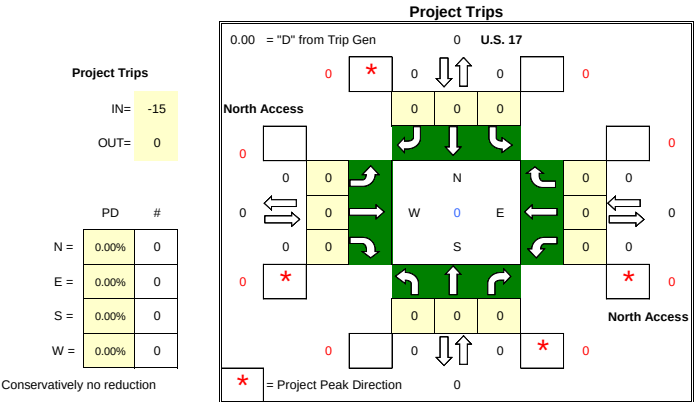


Future Total Worksheet
Operation Phase 2022

Auto
Occupancy= 1.2

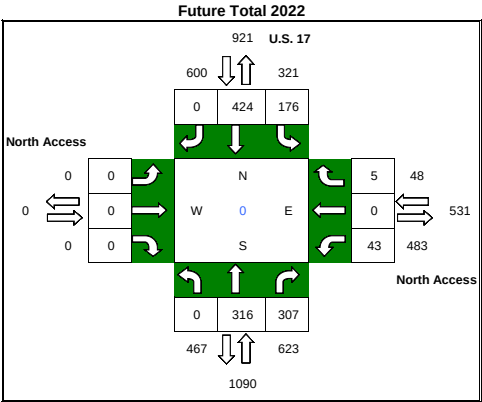
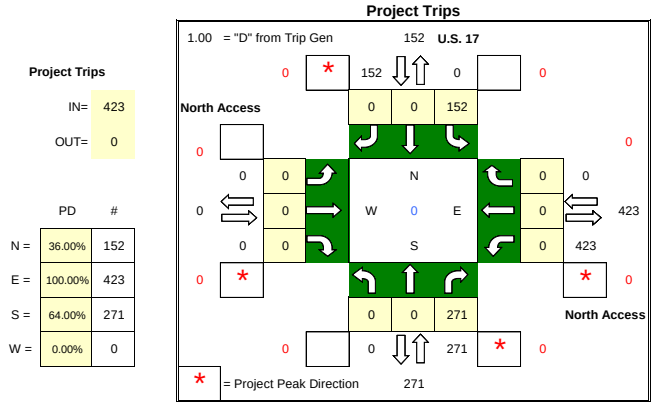
Operation : 100% use South Access; trucks use 100% US17 Access

Case 1 : General Condition



Outage : 100% use North Access

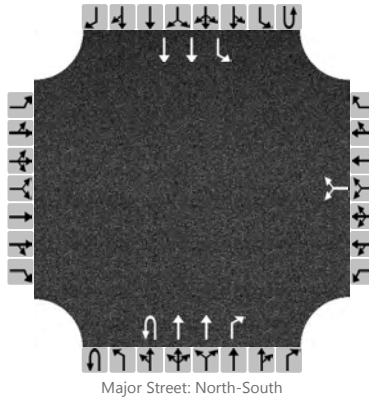
Case 2 : General Condition plus Outage



HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_ExistAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/7/2017	East/West Street	North Access
Analysis Year	2017	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						42		4	0		300	34		22	403	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

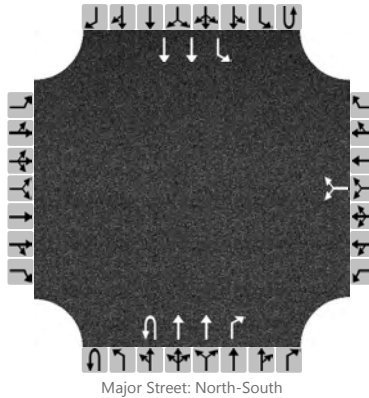
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							46							22		
Capacity							474		788					1212		
v/c Ratio							0.10							0.02		
95% Queue Length							0.3							0.1		
Control Delay (s/veh)							13.4		9.6					8.0		
Level of Service (LOS)							B		A					A		
Approach Delay (s/veh)					13.4								0.4			
Approach LOS					B								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_ExistAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2017	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						40		4	0		300	305		174	403	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

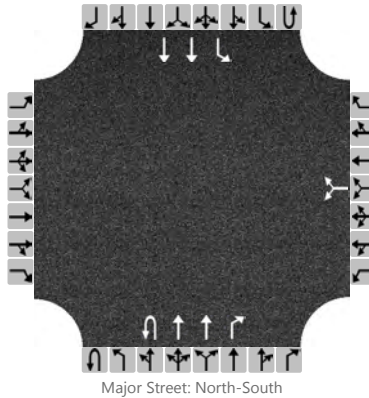
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							44							176		
Capacity							231		733					874		
v/c Ratio							0.19							0.20		
95% Queue Length							0.7							0.7		
Control Delay (s/veh)							24.2		9.9					10.2		
Level of Service (LOS)							C		A					B		
Approach Delay (s/veh)					24.2								3.1			
Approach LOS					C								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2021BGAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2021	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						42		5	0		313	36		23	420	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

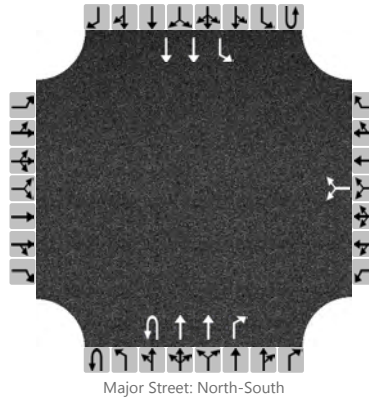
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						47								23		
Capacity						462			769					1196		
v/c Ratio						0.10								0.02		
95% Queue Length						0.3								0.1		
Control Delay (s/veh)						13.7			9.7					8.1		
Level of Service (LOS)						B			A					A		
Approach Delay (s/veh)					13.7								0.4			
Approach LOS					B								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_BackgroundAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2017	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						42		5	0		313	307		175	420	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

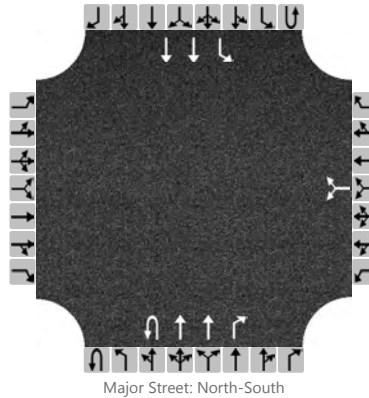
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							47							177		
Capacity							250		769					945		
v/c Ratio							0.19							0.19		
95% Queue Length							0.7							0.7		
Control Delay (s/veh)							22.7		9.7					9.7		
Level of Service (LOS)							C		A					A		
Approach Delay (s/veh)					22.7								2.9			
Approach LOS					C								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2021TotalAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2021	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						42		5	0		313	270		179	420	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

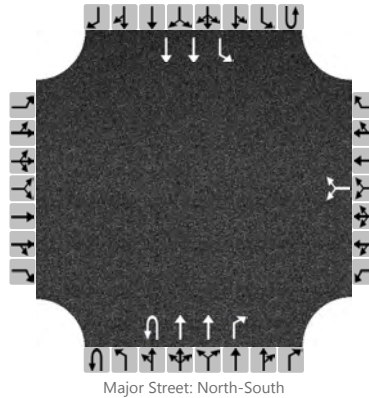
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							47							181		
Capacity							248		769					976		
v/c Ratio							0.19							0.19		
95% Queue Length							0.7							0.7		
Control Delay (s/veh)							22.9		9.7					9.5		
Level of Service (LOS)							C		A					A		
Approach Delay (s/veh)					22.9								2.9			
Approach LOS					C								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2021TotalAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2021	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						42		5	0		313	541		391	420	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

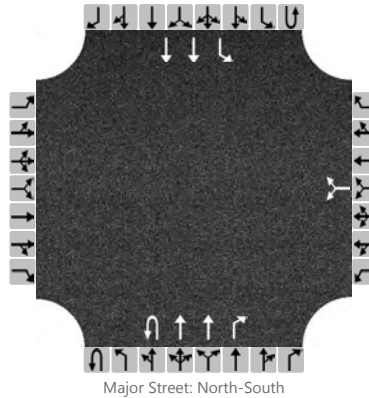
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						47								395		
Capacity						80		769						770		
v/c Ratio						0.59								0.51		
95% Queue Length						2.6								3.0		
Control Delay (s/veh)						101.4		9.7						14.5		
Level of Service (LOS)						F		A						B		
Approach Delay (s/veh)					101.4								7.0			
Approach LOS					F								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2022BGAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2022	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						43		5	0		316	36		24	424	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

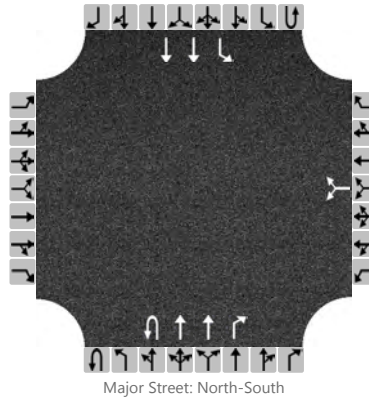
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						48								24		
Capacity						457			765					1193		
v/c Ratio						0.11								0.02		
95% Queue Length						0.3								0.1		
Control Delay (s/veh)						13.8			9.7					8.1		
Level of Service (LOS)						B			A					A		
Approach Delay (s/veh)					13.8								0.4			
Approach LOS					B								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2022BGCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2022	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						43		5	0		316	307		176	424	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

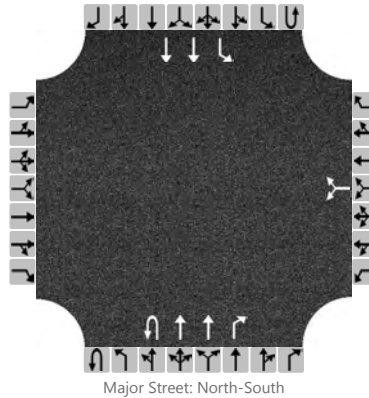
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							48							178		
Capacity							247		765					942		
v/c Ratio							0.19							0.19		
95% Queue Length							0.7							0.7		
Control Delay (s/veh)							23.1		9.7					9.7		
Level of Service (LOS)							C		A					A		
Approach Delay (s/veh)					23.1								2.9			
Approach LOS					C								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2022TotalAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	02/14/2017	East/West Street	North Access
Analysis Year	2022	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						43		5	0		316	36		24	424	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

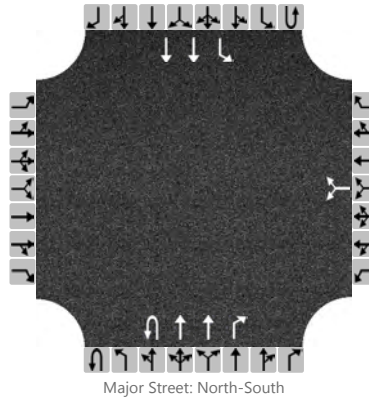
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						48								24		
Capacity						457			765					1193		
v/c Ratio						0.11								0.02		
95% Queue Length						0.3								0.1		
Control Delay (s/veh)						13.8			9.7					8.1		
Level of Service (LOS)						B			A					A		
Approach Delay (s/veh)					13.8								0.4			
Approach LOS					B								A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No1_2022TotalAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	North Access
Analysis Year	2022	North/South Street	US 17
Time Analyzed	AM	Peak Hour Factor	0.99
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						43		5	0		316	307		176	424	
Percent Heavy Vehicles						16		16	16					16		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							48							178		
Capacity							247		765					942		
v/c Ratio							0.19							0.19		
95% Queue Length							0.7							0.7		
Control Delay (s/veh)							23.1		9.7					9.7		
Level of Service (LOS)							C		A					A		
Approach Delay (s/veh)					23.1								2.9			
Approach LOS					C								A			

***Appendix D4: Future Year TMV Worksheets
and HCS Outputs - PM Peak Hour Intersection 1***

Seminole Generating Station

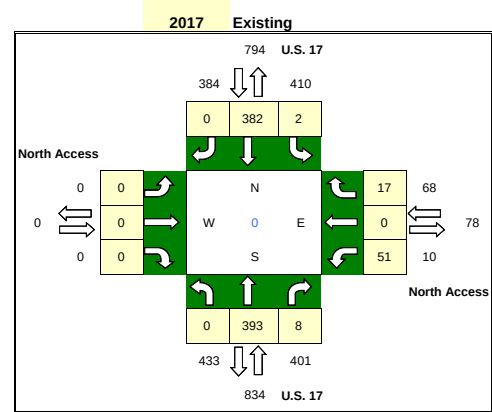
Turning Movement Volumes

(PM)

N/S Roadway: U.S. 17

E/W Roadway: North Access

Date Taken: 10/25/2017

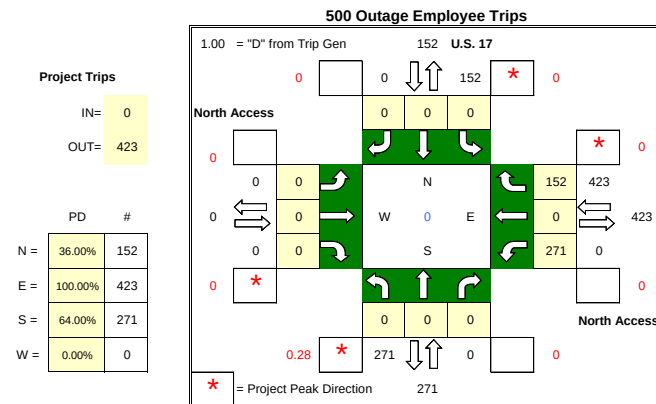
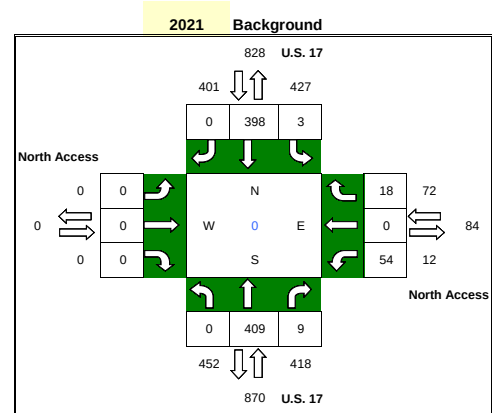


Existing and Background Worksheet Baseline Conditions 2017 and 2021

Auto
Occupancy= 1.2

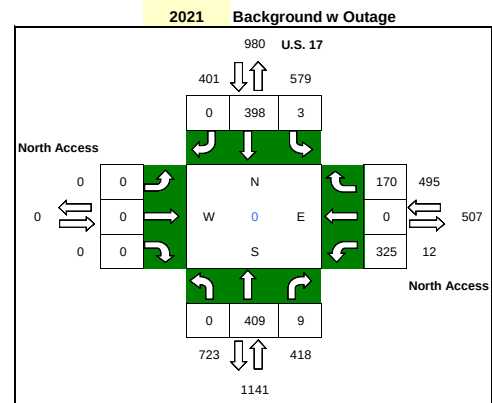
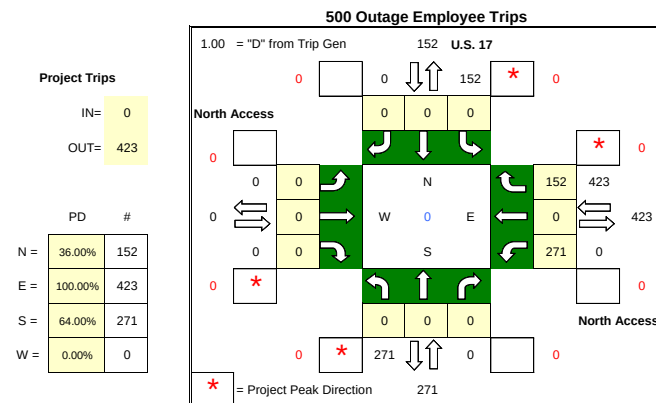
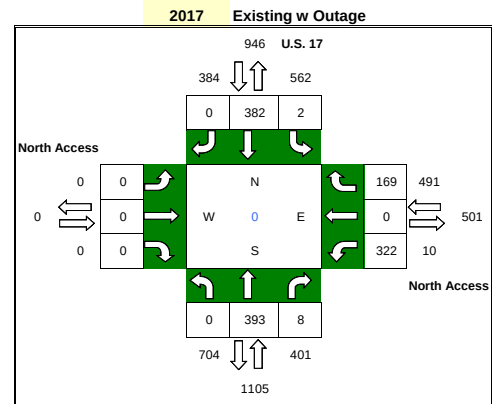
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station

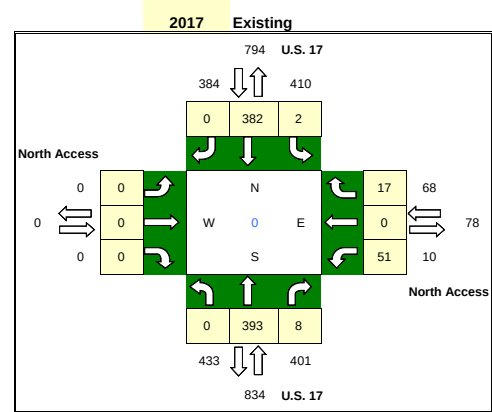
Turning Movement Volumes

(PM)

N/S Roadway: U.S. 17

E/W Roadway: North Access

Date Taken: 10/25/2017

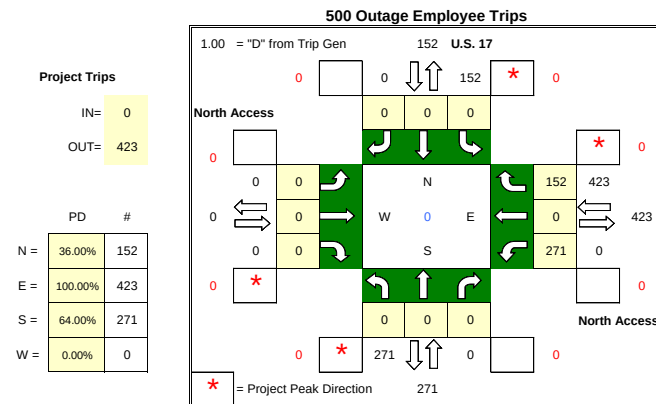
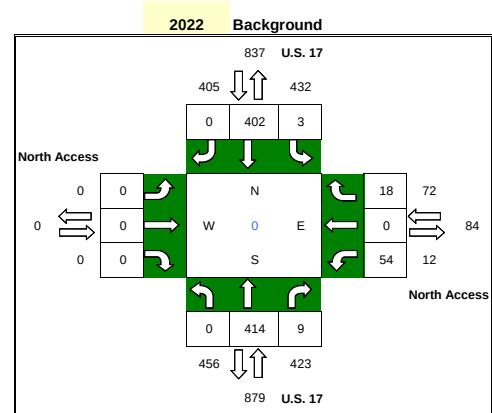


Existing and Background Worksheet Baseline Conditions 2017 and 2022

Auto
Occupancy= 1.2

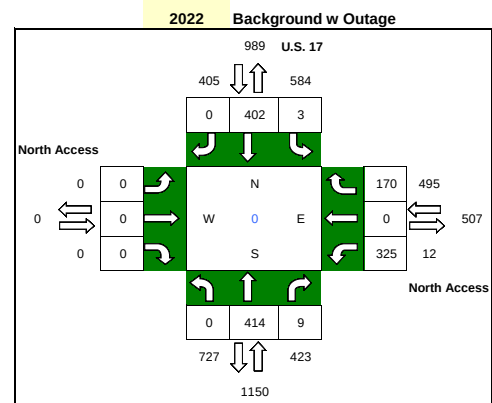
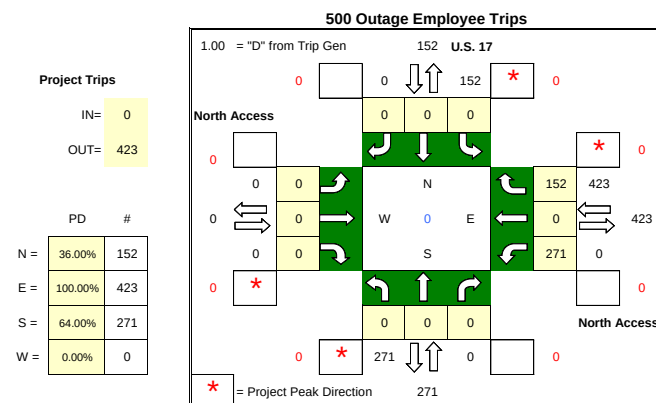
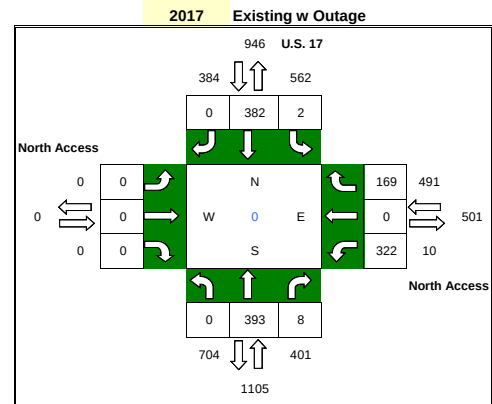
Outage : 100% use North Access

Case 2 : General Condition plus Outage



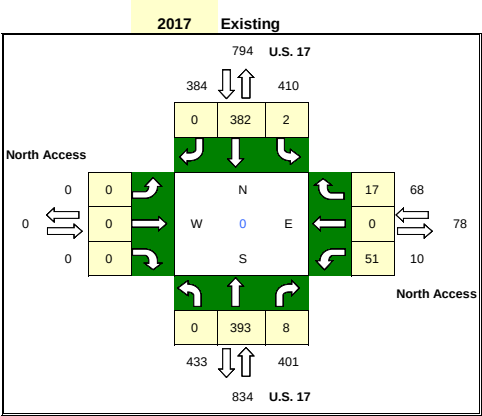
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (PM)

N/S Roadway: U.S. 17
EW Roadway: North Access
Date Taken: 10/25/2017

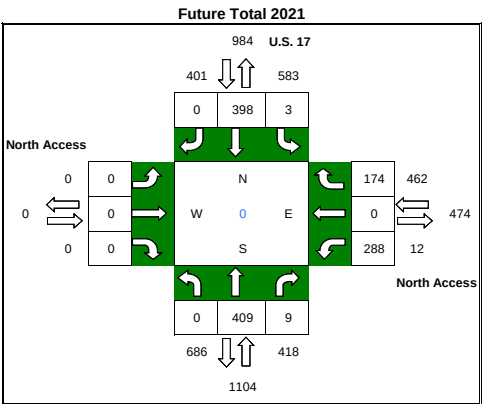
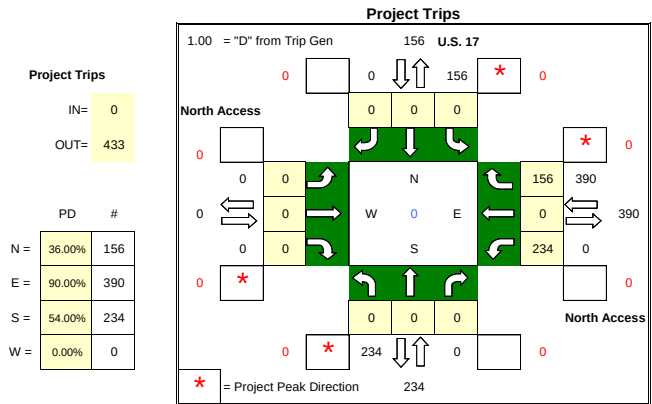


Future Total Worksheet
Construction Phase 2021

Auto
Occupancy= 1.2

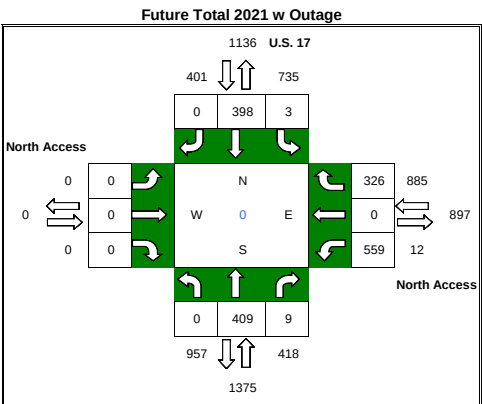
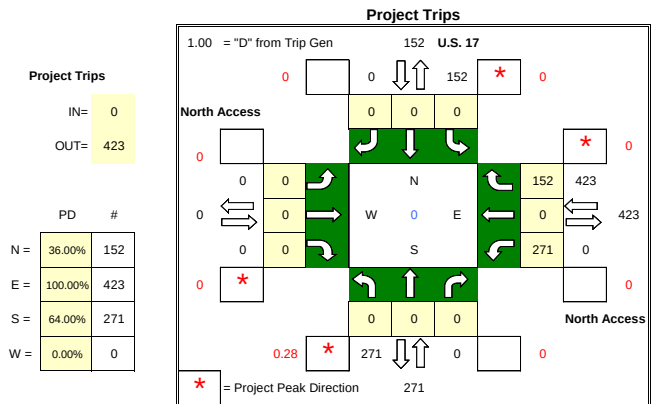
Construction: 90% use US17 AND 10% use W River Road; trucks 100% use US17

Case 1 : General Condition



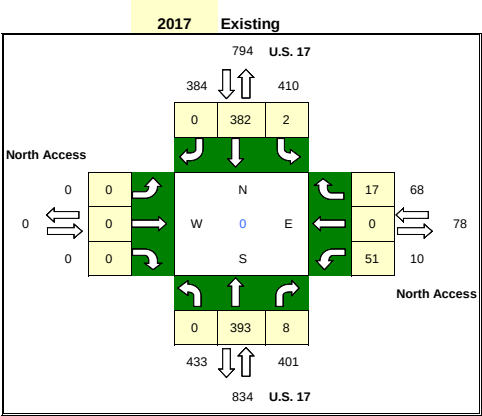
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (PM)

N/S Roadway: U.S. 17
EW Roadway: North Access
Date Taken: 10/25/2017

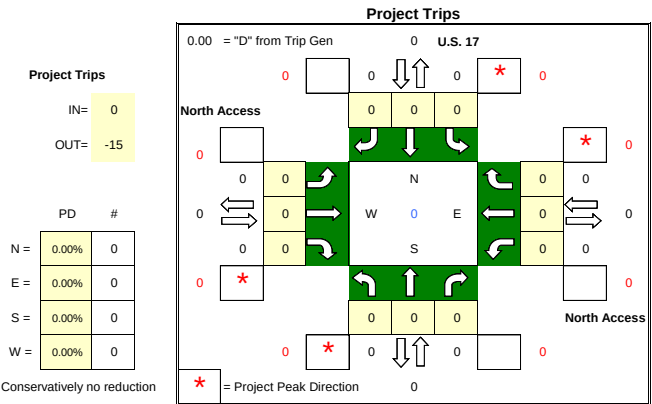


Future Total Worksheet
Operation Phase 2022

Auto
Occupancy= 1.2

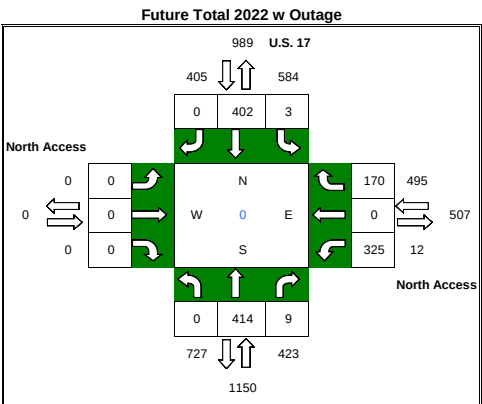
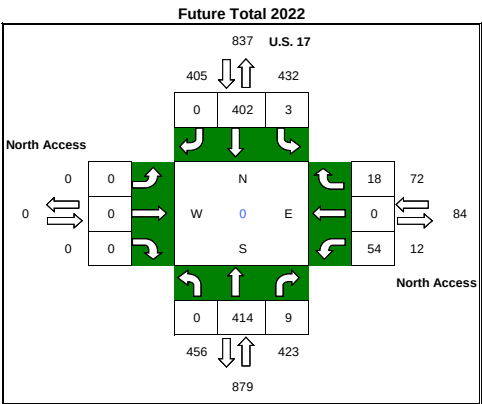
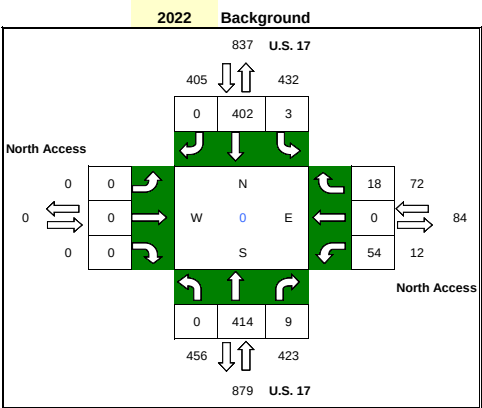
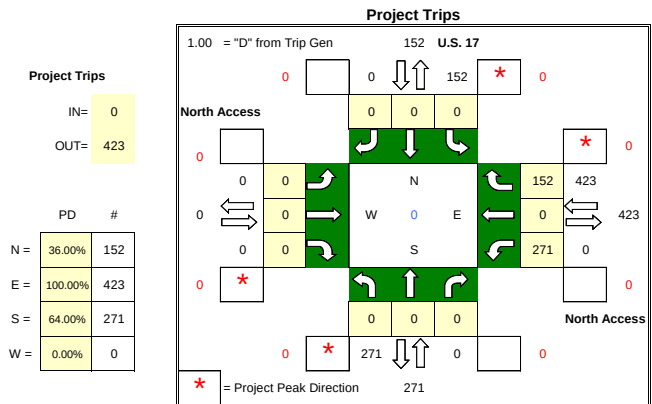
Operation : 100% use South Access; trucks use 100% US17 Access

Case 1 : General Condition



Outage : 100% use North Access

Case 2 : General Condition plus Outage



HCS 2010 Two-Way Stop Control Summary Report

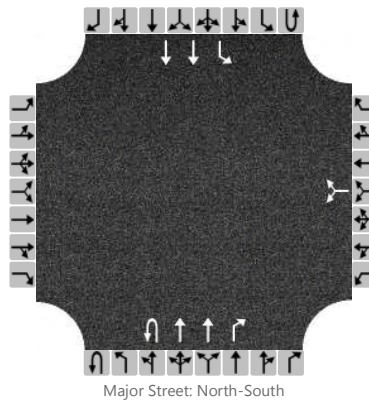
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2017
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_ExistPMCase1
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						51		17	0		393	8		2	382	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							71		0					2		
Capacity							483		803					1135		
v/c Ratio							0.15		0.00					0.00		
95% Queue Length							0.5		0.0					0.0		
Control Delay (s/veh)							13.7		9.5					8.2		
Level of Service (LOS)							B		A					A		
Approach Delay (s/veh)					13.7				0.0				0.0			
Approach LOS					B											

HCS 2010 Two-Way Stop Control Summary Report

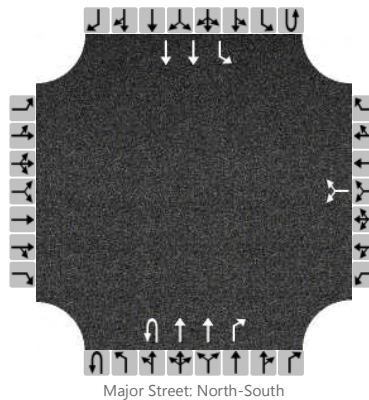
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2017
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_ExistPMCase2
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						322		169	0		393	8		2	382	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							506		0					2		
Capacity							508		803					1135		
v/c Ratio							1.00		0.00					0.00		
95% Queue Length							13.7		0.0					0.0		
Control Delay (s/veh)							67.8		9.5					8.2		
Level of Service (LOS)							F		A					A		
Approach Delay (s/veh)					67.8				0.0				0.0			
Approach LOS					F											

HCS 2010 Two-Way Stop Control Summary Report

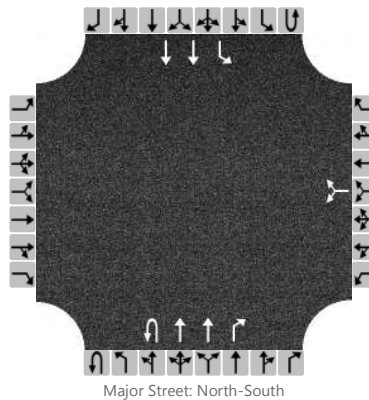
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	Intersection 1_Background
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						54		18	0		409	9		3	398	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							75		0					3		
Capacity							466		785					1118		
v/c Ratio							0.16		0.00					0.00		
95% Queue Length							0.6		0.0					0.0		
Control Delay (s/veh)							14.2		9.6					8.2		
Level of Service (LOS)							B		A					A		
Approach Delay (s/veh)					14.2				0.0				0.1			
Approach LOS					B											

HCS 2010 Two-Way Stop Control Summary Report

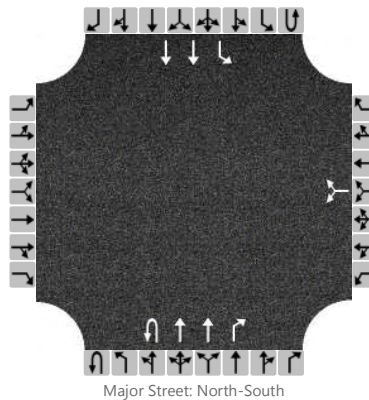
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_BGPMCase2
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						325		170	0		409	9		3	398	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							510		0					3		
Capacity							490		785					1118		
v/c Ratio							1.04		0.00					0.00		
95% Queue Length							15.1		0.0					0.0		
Control Delay (s/veh)							80.9		9.6					8.2		
Level of Service (LOS)							F		A					A		
Approach Delay (s/veh)					80.9				0.0				0.1			
Approach LOS					F											

HCS 2010 Two-Way Stop Control Summary Report

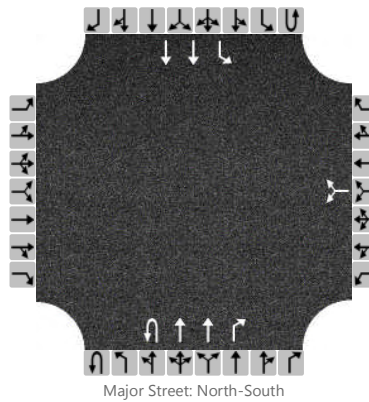
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2021BGPMCase1
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						288		174	0		409	9		3	398	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						476		0						3		
Capacity						500		785						1118		
v/c Ratio						0.95		0.00						0.00		
95% Queue Length						12.0		0.0						0.0		
Control Delay (s/veh)						58.2		9.6						8.2		
Level of Service (LOS)						F		A						A		
Approach Delay (s/veh)					58.2				0.0				0.1			
Approach LOS					F											

HCS 2010 Two-Way Stop Control Summary Report

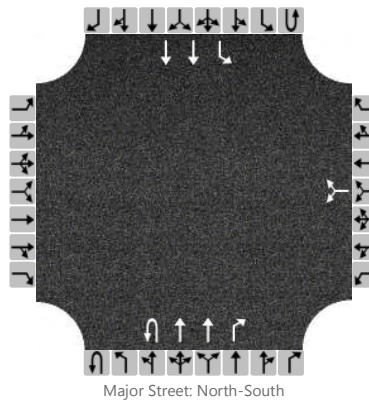
General Information

Analyst	
Agency/Co.	LCE
Date Performed	02/14/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2021TotalPMCase 2
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						559		326	0		409	9		3	398	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						912		0						3		
Capacity						497		785						1118		
v/c Ratio						1.83		0.00						0.00		
95% Queue Length						57.8		0.0						0.0		
Control Delay (s/veh)						402.7		9.6						8.2		
Level of Service (LOS)						F		A						A		
Approach Delay (s/veh)					402.7				0.0				0.1			
Approach LOS					F											

HCS 2010 Two-Way Stop Control Summary Report

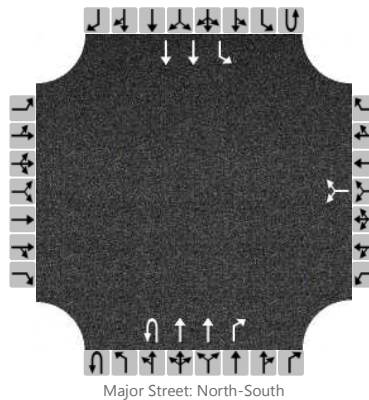
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2022BGPMCase1
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						54		18	0		414	9		3	402	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						75		0					3		
Capacity						461		780					1113		
v/c Ratio						0.16		0.00					0.00		
95% Queue Length						0.6		0.0					0.0		
Control Delay (s/veh)						14.3		9.6					8.2		
Level of Service (LOS)						B		A					A		
Approach Delay (s/veh)					14.3			0.0				0.1			
Approach LOS					B										

HCS 2010 Two-Way Stop Control Summary Report

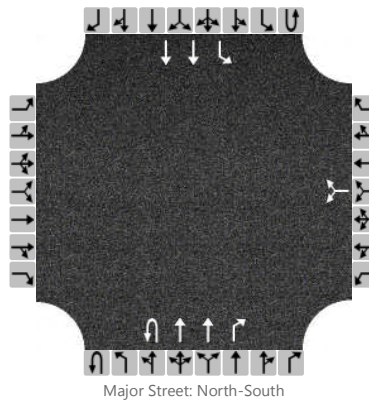
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2022BGPMCase2
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						325		170	0		414	9		3	402	
Percent Heavy Vehicles						10		10	10					10		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						510		0						3		
Capacity						486		780						1113		
v/c Ratio						1.05		0.00						0.00		
95% Queue Length						15.4		0.0						0.0		
Control Delay (s/veh)						84.0		9.6						8.2		
Level of Service (LOS)						F		A						A		
Approach Delay (s/veh)					84.0				0.0				0.1			
Approach LOS					F											

HCS 2010 Two-Way Stop Control Summary Report

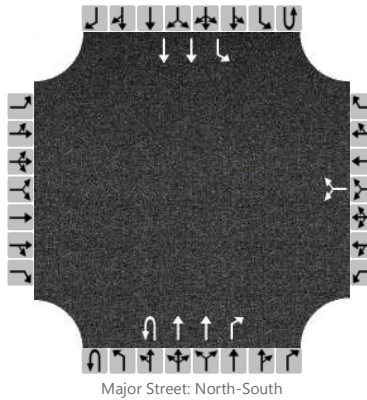
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2022TotalPMCase 1
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						54		18	0		414	9		3	402	
Percent Heavy Vehicles						8		8	8					8		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							75		0						3	
Capacity							461		780						1113	
v/c Ratio							0.16		0.00						0.00	
95% Queue Length							0.6		0.0						0.0	
Control Delay (s/veh)							14.3		9.6						8.2	
Level of Service (LOS)							B		A						A	
Approach Delay (s/veh)					14.3				0.0				0.1			
Approach LOS					B											

HCS 2010 Two-Way Stop Control Summary Report

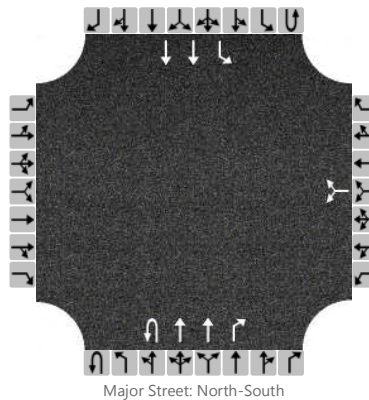
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2022TotalPMCase2
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						335		170	0		414	9		3	402	
Percent Heavy Vehicles						8		8	8					8		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						520		0						3		
Capacity						484		780						1113		
v/c Ratio						1.07		0.00						0.00		
95% Queue Length						16.4		0.0						0.0		
Control Delay (s/veh)						91.6		9.6						8.2		
Level of Service (LOS)						F		A						A		
Approach Delay (s/veh)					91.6				0.0				0.1			
Approach LOS					F											

***Appendix D5: Future Year TMV Worksheets
and HCS Outputs - AM Peak Hour Intersection 2***

Seminole Generating Station

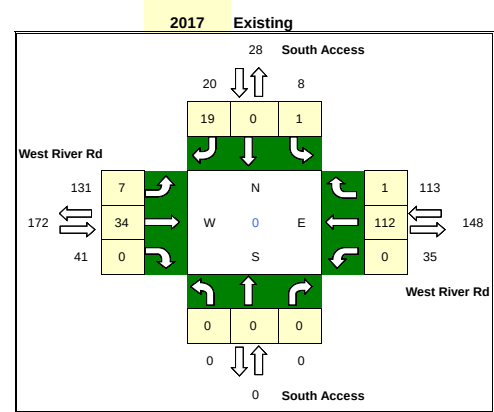
Turning Movement Volumes

(AM)

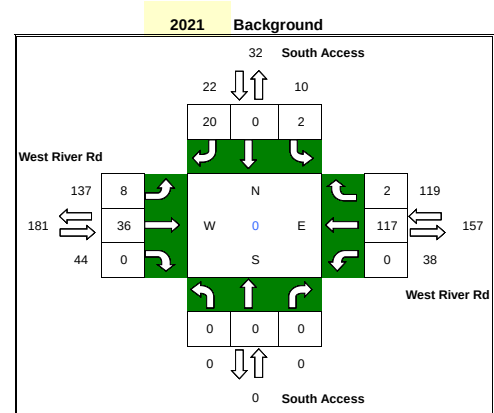
N/S Roadway: South Access

E/W Roadway: West River Rd

Date Taken: 10/25/2017



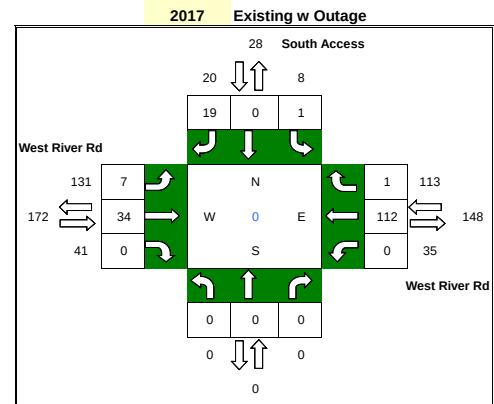
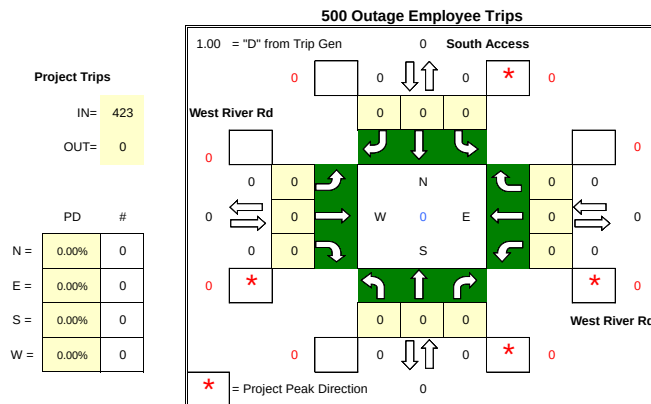
Existing and Background Worksheet Baseline Conditions 2017 and 2021



Auto
Occupancy= 1.2

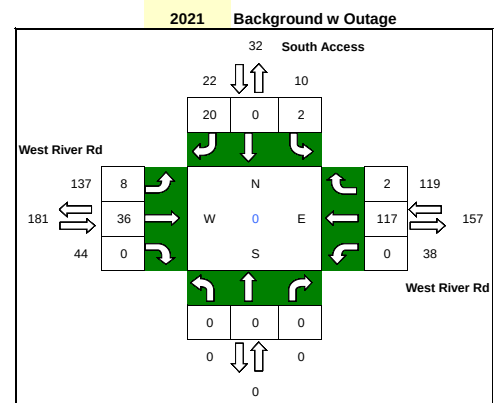
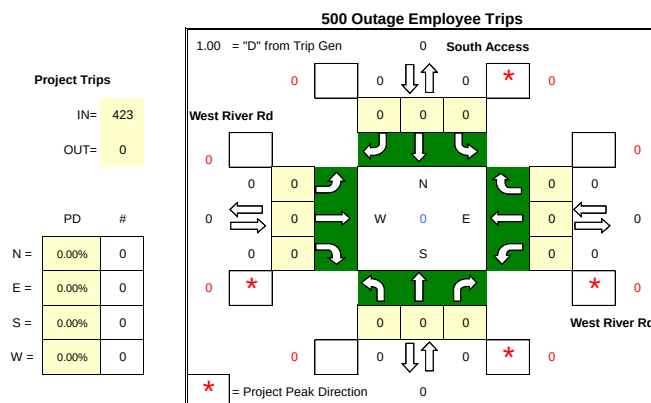
Outage : 100% use North Access

Case 2 : General Condition plus Outage



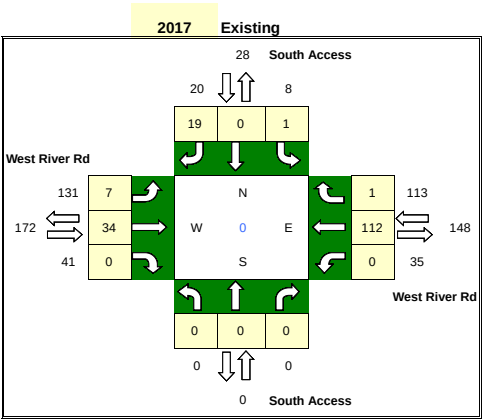
Outage : 100% use North Access

Case 2 : General Condition plus Outage

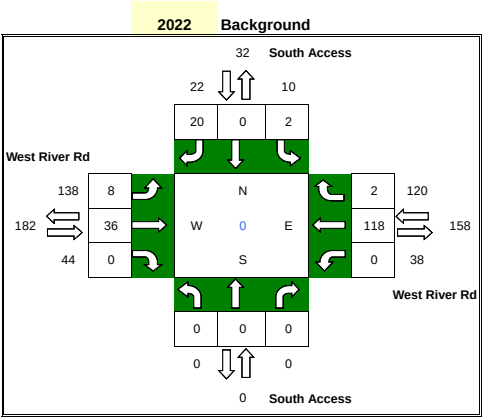


Seminole Generating Station
Turning Movement Volumes (AM)

N/S Roadway: South Access
E/W Roadway: West River Rd
Date Taken: 10/25/2017



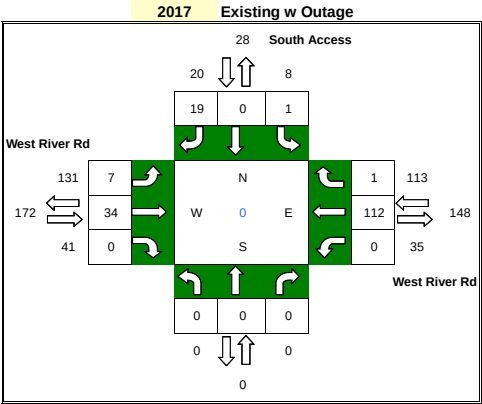
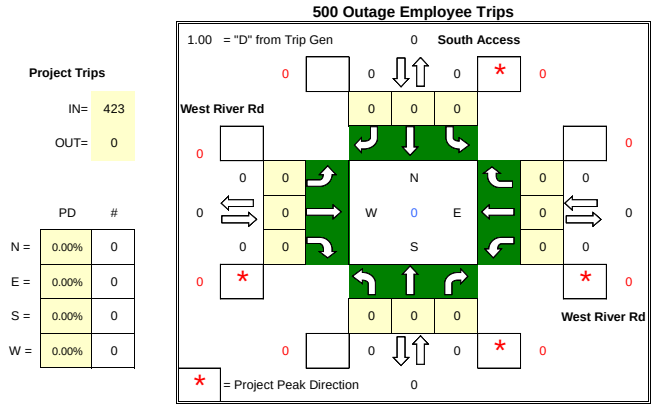
Existing and Background Worksheet
Baseline Conditions 2017 and 2022



Auto
Occupancy= 1.2

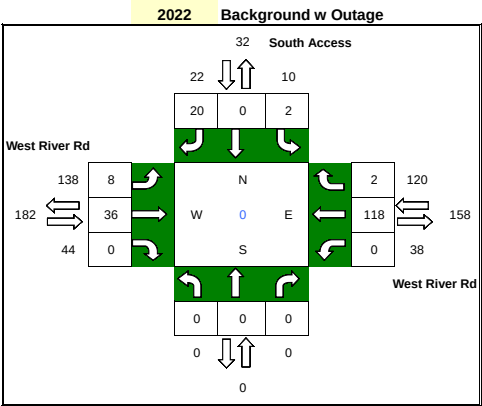
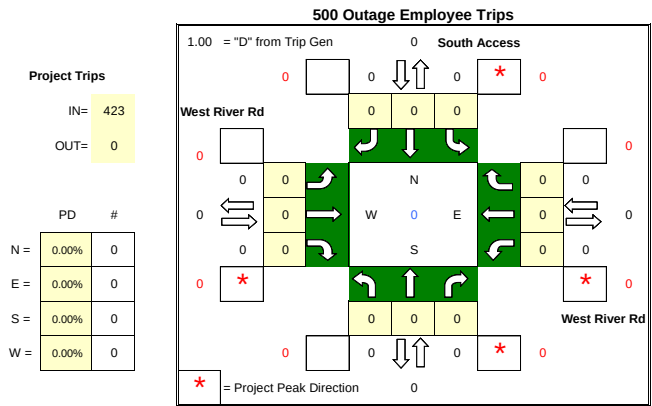
Outage : 100% use North Access

Case 2 : General Condition plus Outage



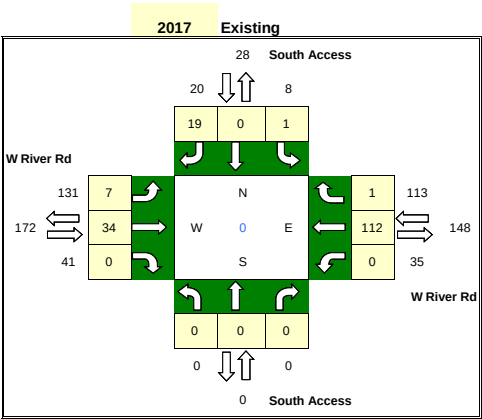
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (AM)

N/S Roadway: South Access
E/W Roadway: W River Rd
Date Taken: 10/25/2017

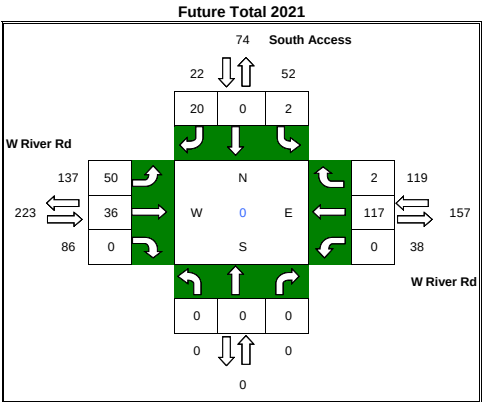
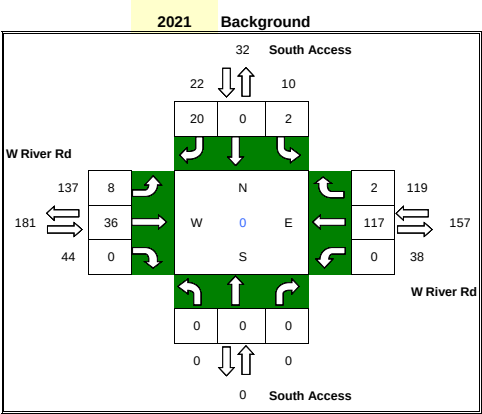
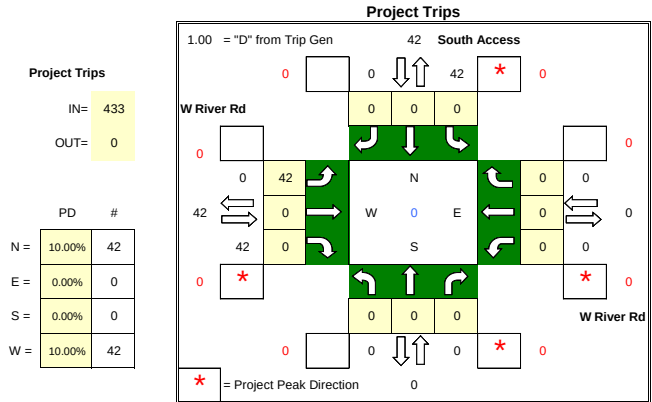


Future Total Worksheet
Construction Phase 2021

Auto
Occupancy= 1.2

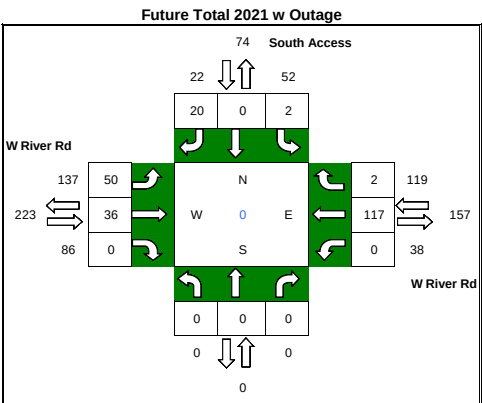
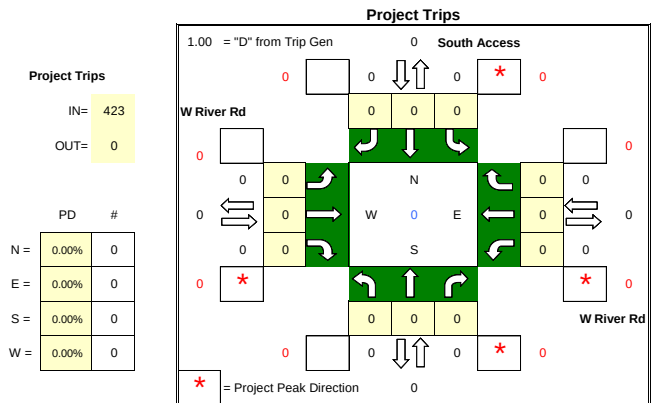
Construction: 90% use US17 AND 10% use W River Road; trucks 100% use US17

Case 1 : General Condition



Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station

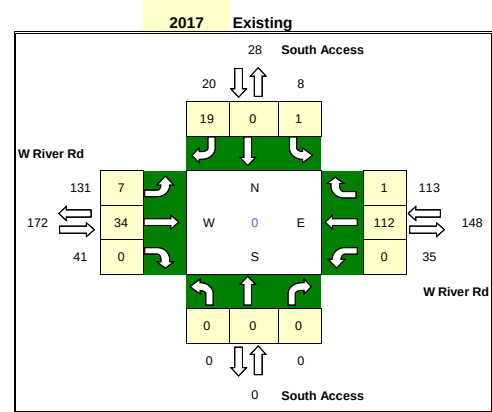
Turning Movement Volumes

(AM)

N/S Roadway: South Access

E/W Roadway: W River Rd

Date Taken: 10/25/2017

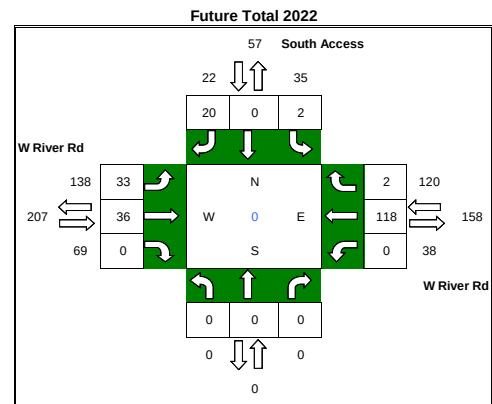
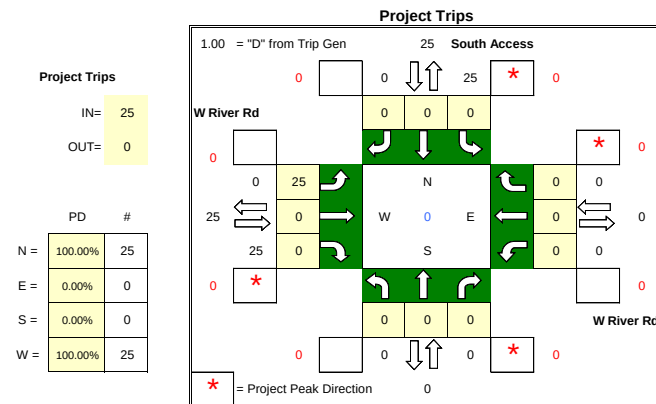
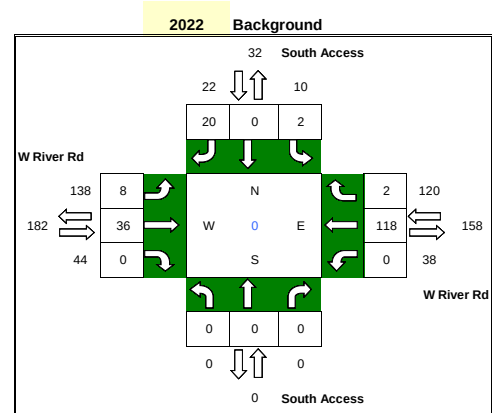


Future Total Worksheet Operation Phase 2022

Auto
Occupancy= 1.2

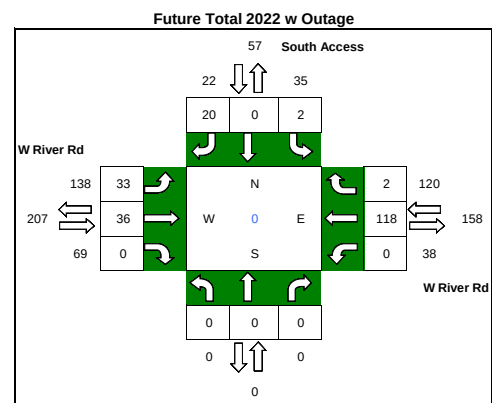
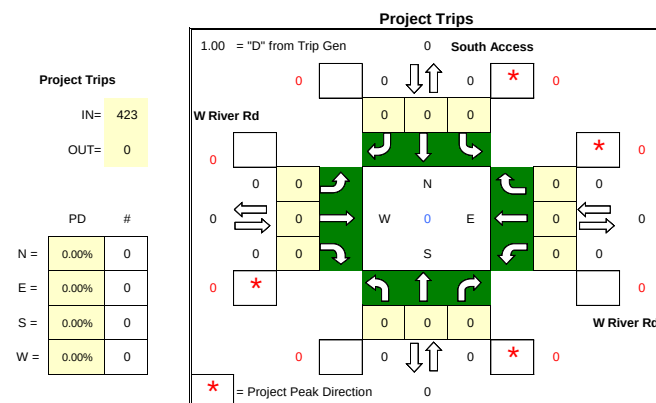
Operation : 100% use South Access; trucks use 100% US17 Access

Case 1 : General Condition



Outage : 100% use North Access

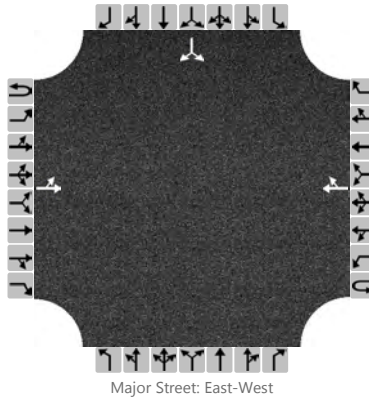
Case 2 : General Condition plus Outage



HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_ExistAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2017	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		7	34				112	1						1		19
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

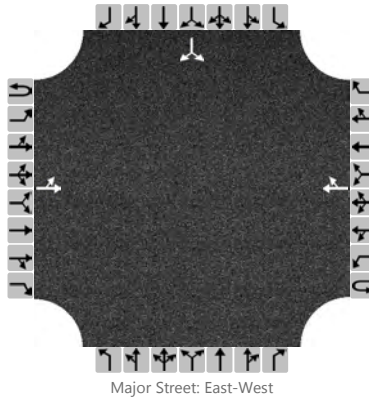
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		45													22	
Capacity		1456													920	
v/c Ratio		0.03													0.02	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.0			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_ExistAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2017	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		7	34				112	1						1		19
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

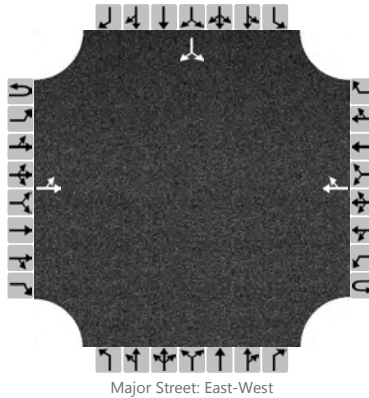
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		45													22	
Capacity		1456													920	
v/c Ratio		0.03													0.02	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.0			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2021BGAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	02/14/2017	East/West Street	W River Rd
Analysis Year	2021	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	36				117	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

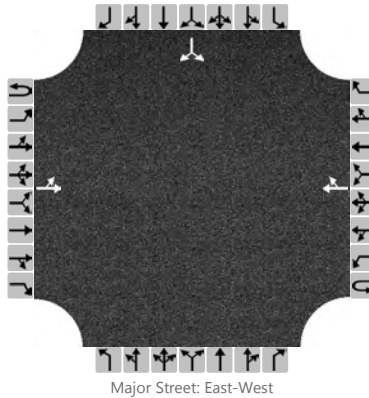
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		48													24	
Capacity		1449													907	
v/c Ratio		0.03													0.03	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2021BGAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2021	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	36				117	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

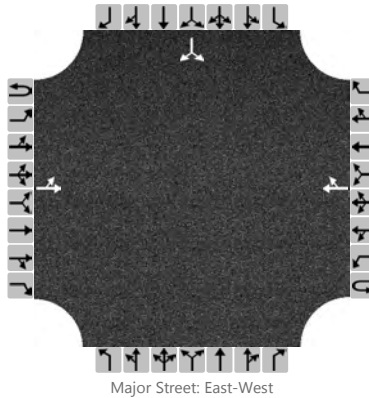
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		48													24	
Capacity		1449													907	
v/c Ratio		0.03													0.03	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2021TotalAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	02/14/2017	East/West Street	W River Rd
Analysis Year	2021	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		50	36				117	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

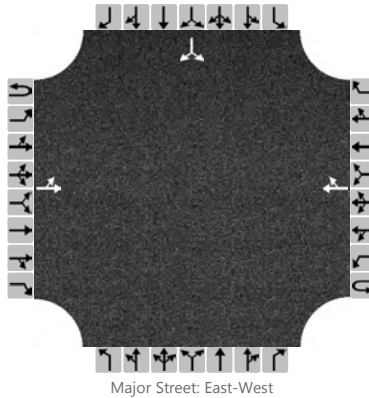
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		93													24	
Capacity		1449													893	
v/c Ratio		0.06													0.03	
95% Queue Length		0.1													0.1	
Control Delay (s/veh)		7.6													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	4.5												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2021TotalAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	02/14/2017	East/West Street	W River Rd
Analysis Year	2021	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		50	36				117	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

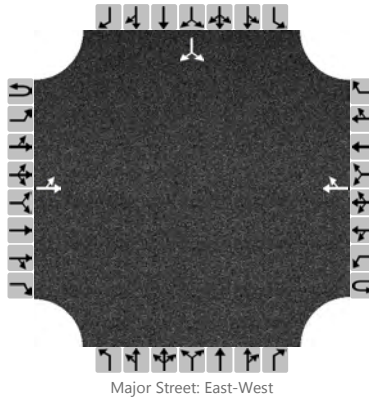
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		93													24	
Capacity		1449													893	
v/c Ratio		0.06													0.03	
95% Queue Length		0.1													0.1	
Control Delay (s/veh)		7.6													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	4.5												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2022BGAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2022	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	36				118	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

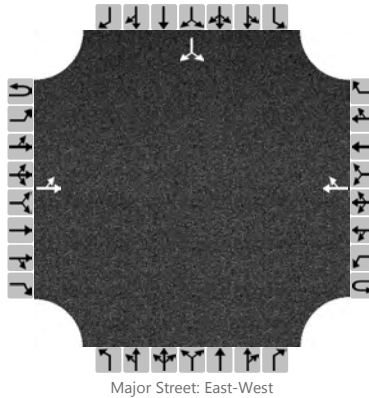
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		48													24	
Capacity		1448													906	
v/c Ratio		0.03													0.03	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2022BGCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2022	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	36				118	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

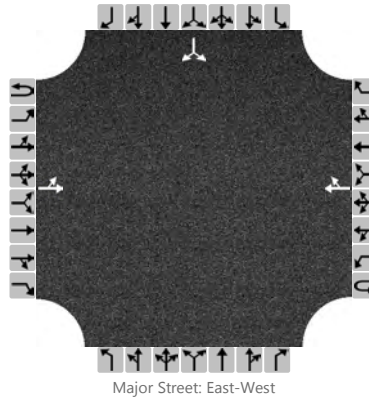
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		48													24	
Capacity		1448													906	
v/c Ratio		0.03													0.03	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.5													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.4												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2022TotalAMCase1
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2022	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		33	36				118	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

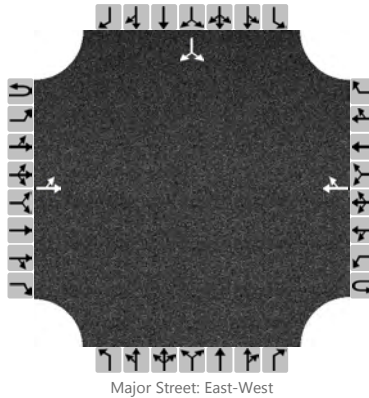
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		75													24	
Capacity		1448													898	
v/c Ratio		0.05													0.03	
95% Queue Length		0.1													0.1	
Control Delay (s/veh)		7.6													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	3.7												9.1			
Approach LOS	A												A			

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst		Intersection	No2_2022TotalAMCase2
Agency/Co.	LCE	Jurisdiction	
Date Performed	11/07/2017	East/West Street	W River Rd
Analysis Year	2022	North/South Street	S Electric Av
Time Analyzed	AM	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Seminole Generating Station		

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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		33	36				118	2						2		20
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

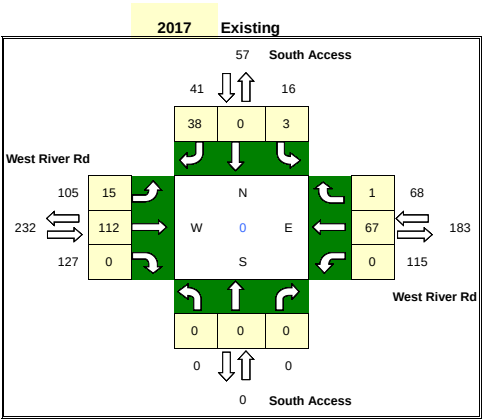
Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		75													24	
Capacity		1448													898	
v/c Ratio		0.05													0.03	
95% Queue Length		0.1													0.1	
Control Delay (s/veh)		7.6													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	3.7												9.1			
Approach LOS	A												A			

***Appendix D6: Future Year TMV Worksheets
and HCS Outputs - PM Peak Hour Intersection 2***

Seminole Generating Station
Turning Movement Volumes (PM)

N/S Roadway: South Access
E/W Roadway: West River Rd
Date Taken: 10/25/2017

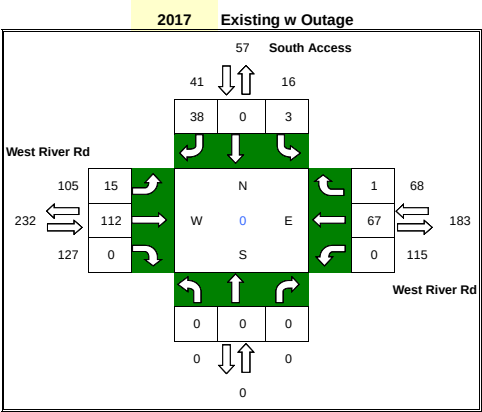
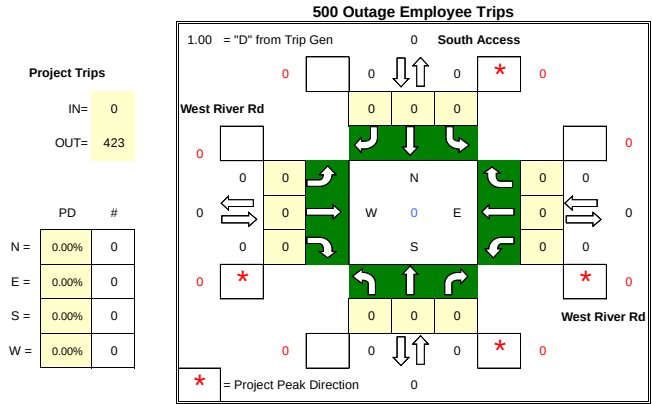
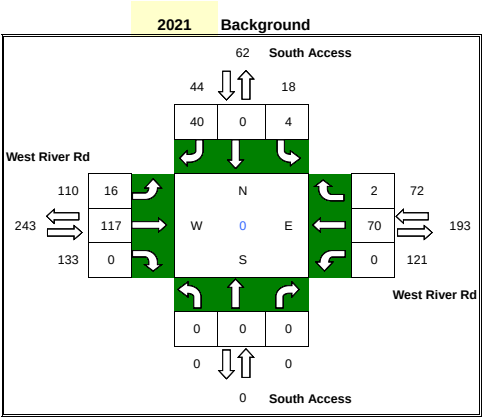


Existing and Background Worksheet
Baseline Conditions 2017 and 2021

Auto
Occupancy= 1.2

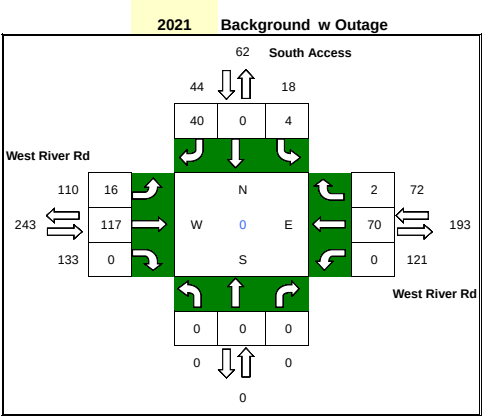
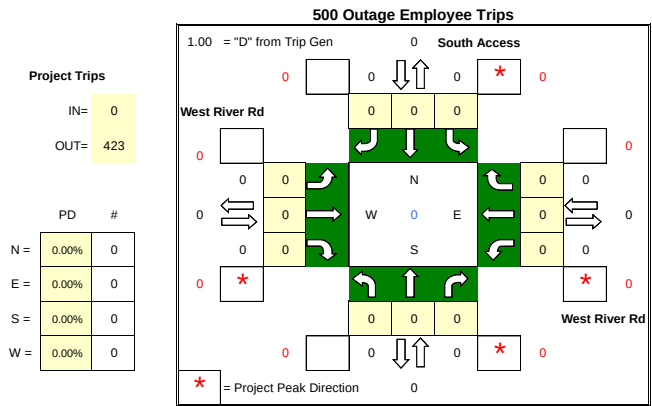
Outage : 100% use North Access

Case 2 : General Condition plus Outage



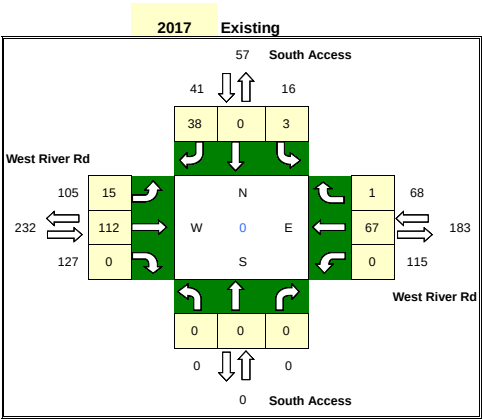
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (PM)

N/S Roadway: South Access
E/W Roadway: West River Rd
Date Taken: 10/25/2017

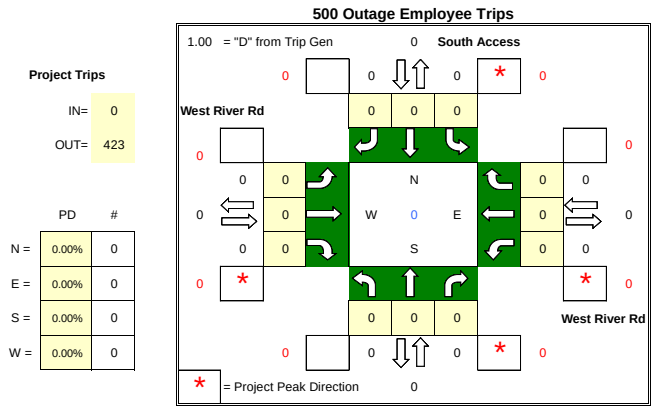
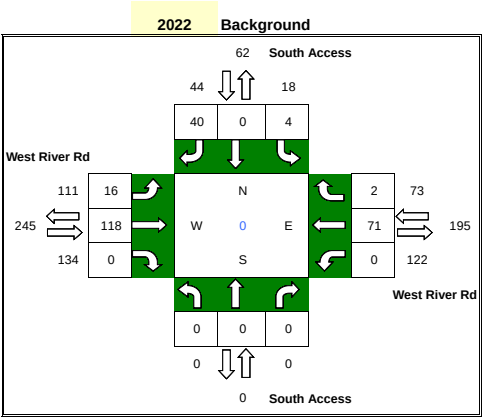


Existing and Background Worksheet
Baseline Conditions 2017 and 2022

Auto
Occupancy= 1.2

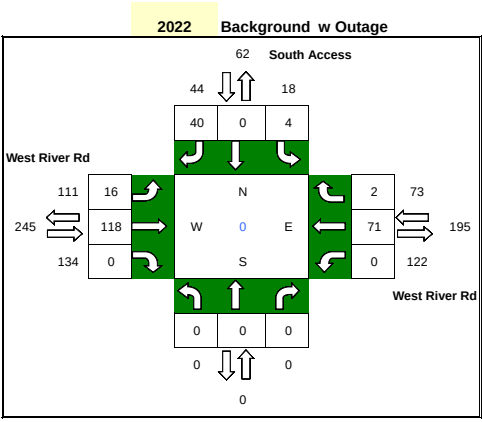
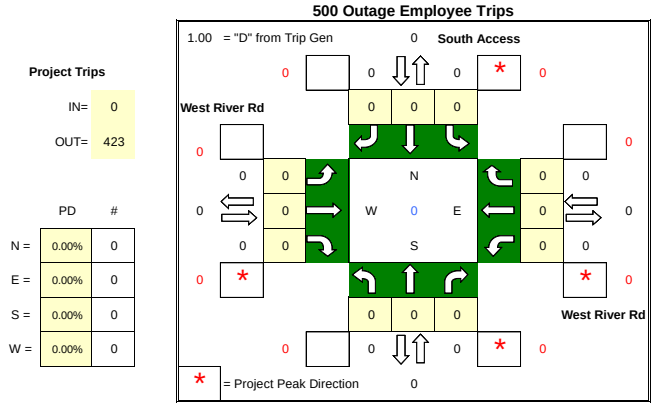
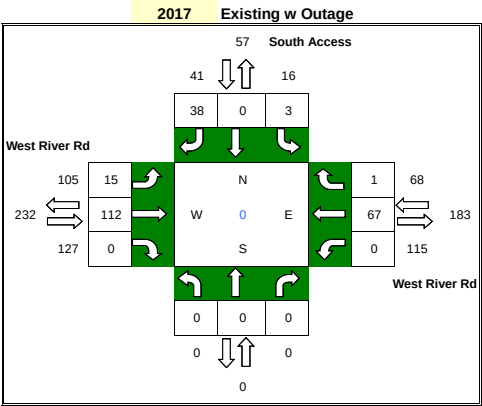
Outage : 100% use North Access

Case 2 : General Condition plus Outage



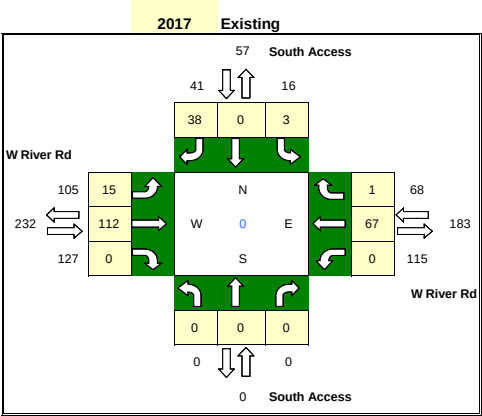
Outage : 100% use North Access

Case 2 : General Condition plus Outage



Seminole Generating Station
Turning Movement Volumes (PM)

N/S Roadway: South Access
E/W Roadway: W River Rd
Date Taken: 10/25/2017

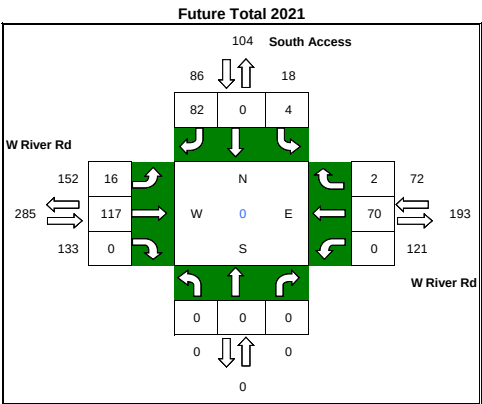
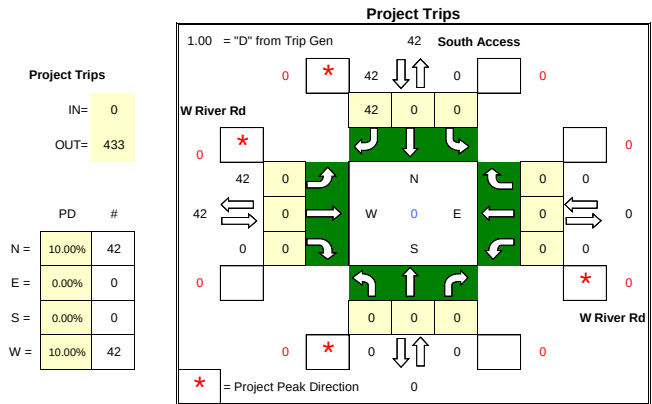
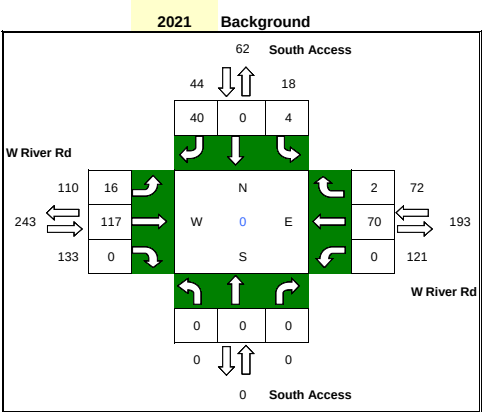


Future Total Worksheet
Construction Phase 2021

Auto
Occupancy= 1.2

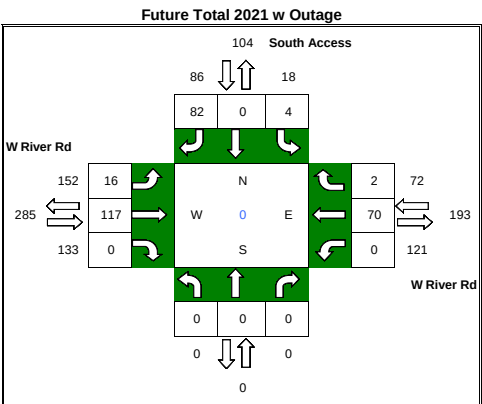
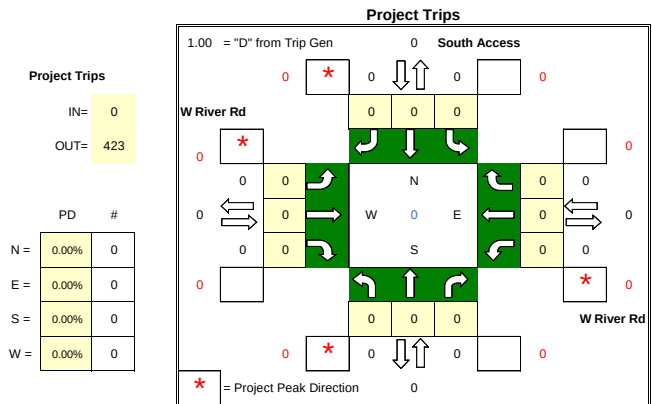
Construction: 90% use US17 AND 10% use W River Road; trucks 100% use US17

Case 1 : General Condition



Outage : 100% use North Access

Case 2 : General Condition plus Outage

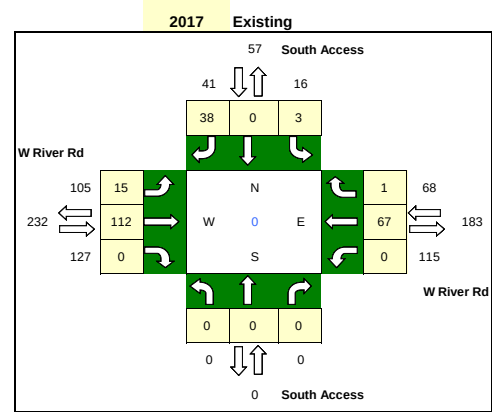


(PM)

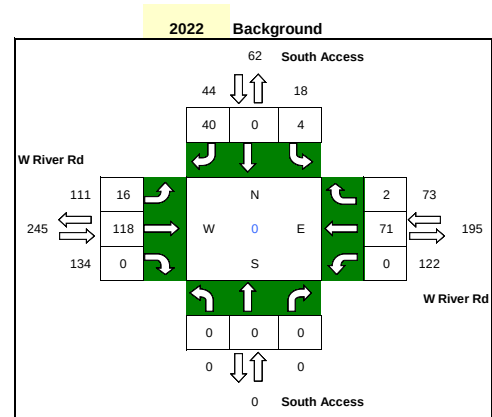
N/S Roadway: South Access

E/W Roadway: W River Rd

Date Taken: 10/25/2017



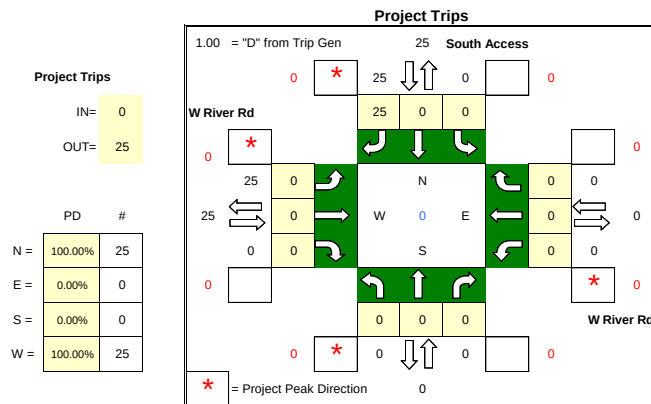
***Future Total Worksheet
Operation Phase 2022***



Auto
Occupancy= 1.2

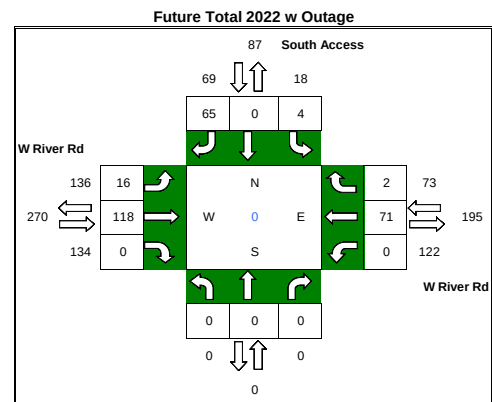
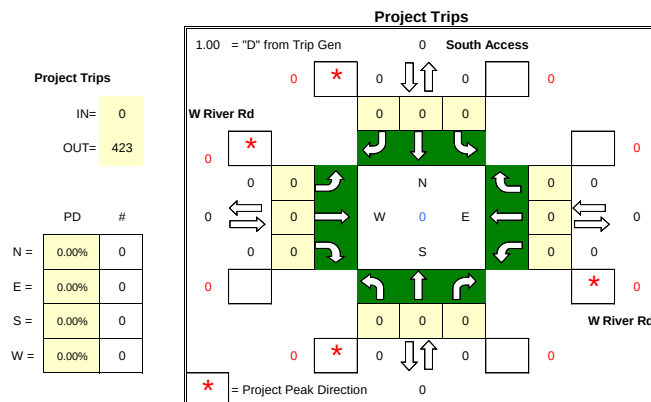
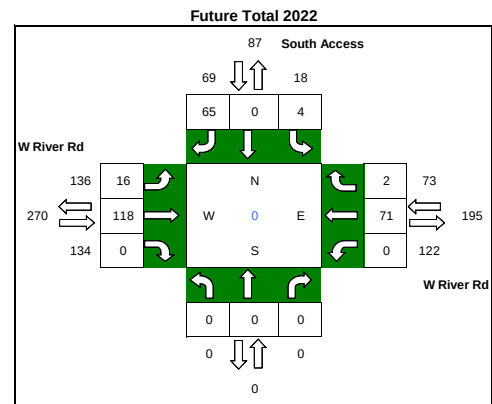
Operation : 100% use South Access; trucks use 100% US17 Access

Case 1 : General Condition



Outage : 100% use North Access

Case 2 : General Condition plus Outage



HCS 2010 Two-Way Stop Control Summary Report

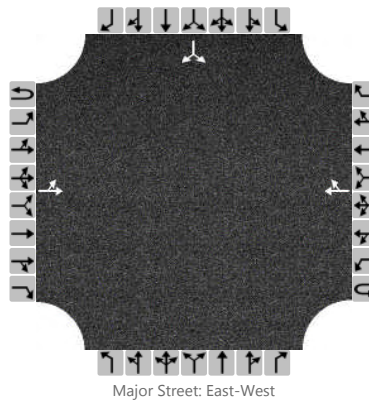
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2017
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_ExistPMCase1
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		15	112				67	1						3		38
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		16													44	
Capacity		1517													964	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.4													8.9	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												8.9			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

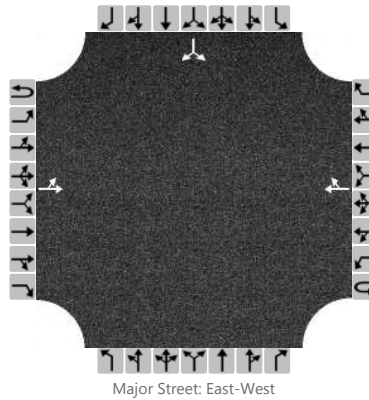
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2017
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_ExistPMCase2
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		15	112				67	1						3		38
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		16													44	
Capacity		1517													964	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.1	
Control Delay (s/veh)		7.4													8.9	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												8.9			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

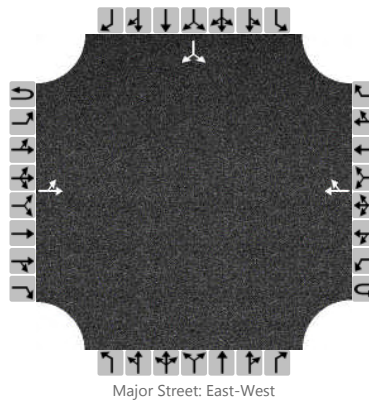
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2021BGPMCase1
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	117				70	2						4		40
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													47	
Capacity		1512													954	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.2	
Control Delay (s/veh)		7.4													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.0												9.0			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

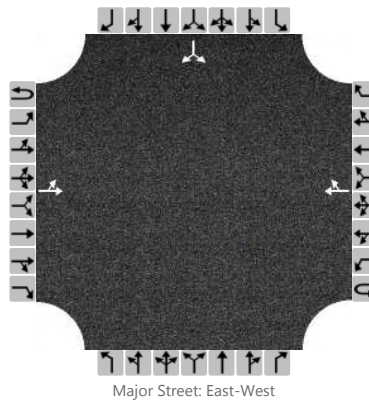
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2021BGPMCCase2
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	117				70	2						4		40
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													47	
Capacity		1512													954	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.2	
Control Delay (s/veh)		7.4													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.0												9.0			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

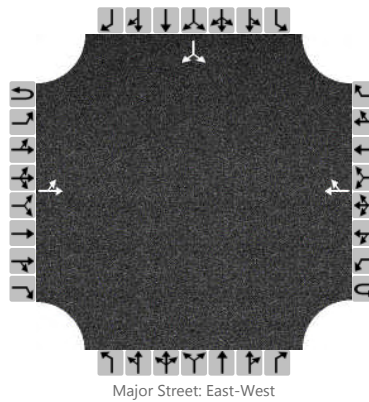
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2021TotalPMCase1
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	117				70	2						4		82
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													93	
Capacity		1512													967	
v/c Ratio		0.01													0.10	
95% Queue Length		0.0													0.3	
Control Delay (s/veh)		7.4													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.0												9.1			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

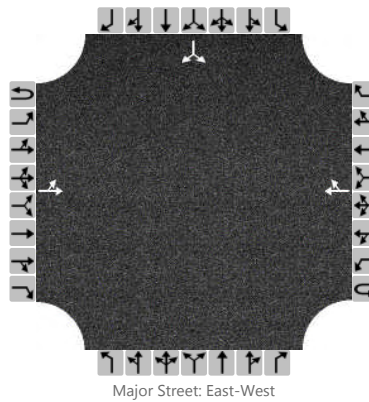
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2021
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2021TotalPMCase 2
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	117				70	2						4		82
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													93	
Capacity		1512													967	
v/c Ratio		0.01													0.10	
95% Queue Length		0.0													0.3	
Control Delay (s/veh)		7.4													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	1.0												9.1			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

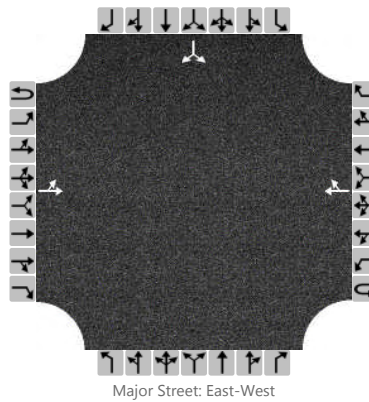
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2022BGPMCase1
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	118				71	2						4		40
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													47	
Capacity		1511													953	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.2	
Control Delay (s/veh)		7.4													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												9.0			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

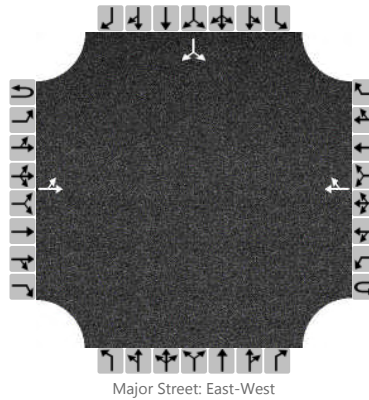
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2022BGPMCase2
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	118				71	2						4		40
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													47	
Capacity		1511													953	
v/c Ratio		0.01													0.05	
95% Queue Length		0.0													0.2	
Control Delay (s/veh)		7.4													9.0	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												9.0			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

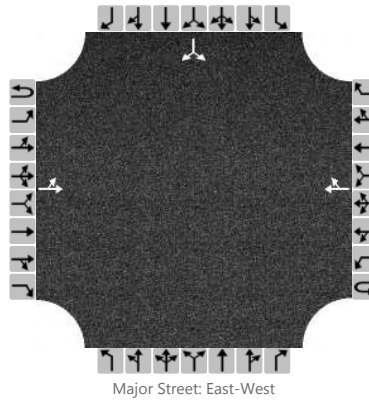
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2022TotalPMCase1
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	118				71	2						4		65
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													75	
Capacity		1511													962	
v/c Ratio		0.01													0.08	
95% Queue Length		0.0													0.3	
Control Delay (s/veh)		7.4													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												9.1			
Approach LOS													A			

HCS 2010 Two-Way Stop Control Summary Report

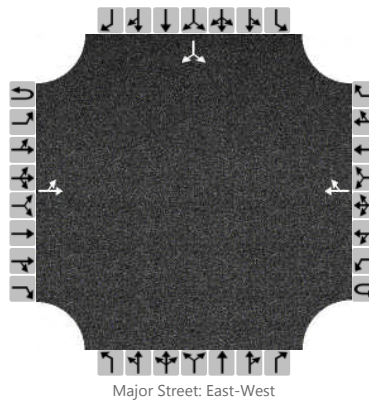
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Seminole Generating Station

Site Information

Intersection	No2_2022TotalPMCase2
Jurisdiction	
East/West Street	W River Rd
North/South Street	S Electric Av
Peak Hour Factor	0.92
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	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	118				71	2						4		65
Percent Heavy Vehicles		3												3		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		17													75	
Capacity		1511													962	
v/c Ratio		0.01													0.08	
95% Queue Length		0.0													0.3	
Control Delay (s/veh)		7.4													9.1	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.9												9.1			
Approach LOS													A			

***Appendix D7: Future Year HCS Analysis for Maximum
Westbound Left Turns - PM Peak Hour Intersection 1***

HCS 2010 Two-Way Stop Control Summary Report

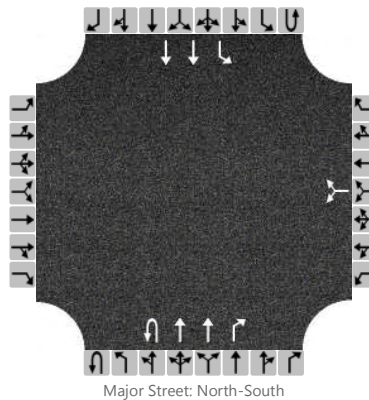
General Information

Analyst	
Agency/Co.	LCE
Date Performed	10/26/2017
Analysis Year	2022
Time Analyzed	PM
Intersection Orientation	North-South
Project Description	Seminole Generating Station

Site Information

Intersection	No1_2022TotalPMCase2 TEST
Jurisdiction	
East/West Street	North Access
North/South Street	US 17
Peak Hour Factor	0.97
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	0	0		0	0	0	1	0	2	1	0	1	2	0
Configuration							LR		U		T	R		L	T	
Volume (veh/h)						270		170	0		414	9		3	402	
Percent Heavy Vehicles						8		8	8					8		
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)							453		0					3		
Capacity							498		780					1113		
v/c Ratio							0.91		0.00					0.00		
95% Queue Length							10.5		0.0					0.0		
Control Delay (s/veh)							49.9		9.6					8.2		
Level of Service (LOS)							E		A					A		
Approach Delay (s/veh)					49.9				0.0				0.1			
Approach LOS					E											

APPENDIX E: Project Distribution Model Plots

