

APENDICE H

Estudio de Tránsito

Noviembre 2010

Declaración de Impacto Ambiental – Preliminar

Planta de Generación de Energía Renovable y Recuperación de Recursos



Traffic Study

Preliminary Environmental Impact Statement Renewable Power Generation and Resources Recovery Facility

CAMBALACHE - ARECIBO



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1 EXECUTIVE SUMMARY

Energy Answers International requested CSA Group (CSA) to perform a traffic study to determine the vehicular impact that the construction of the new Renewable Power Generation and Resources Recovery Facility will have to the surrounding area. The survey was prepared and organized according to the parameters set in the Department of Transportation and Public Works (DTPW) official document, "Puerto Rico Guidelines for the Preparation of Traffic and Access Operational Studies". The main purpose for the preparation of this technical document was to analyze and determine the existing and future traffic conditions in the area near the development. The proposed project will be built on the parcel of land where the Arecibo Paper Mill was formerly located. The area to be developed is approximately 82 acres. The current entrance to the estate is located on Highway PR-2, km. 73.1 in the Cambalache Ward of the Municipality of Arecibo.



Figure 1. Aerial View of Puerto Rico

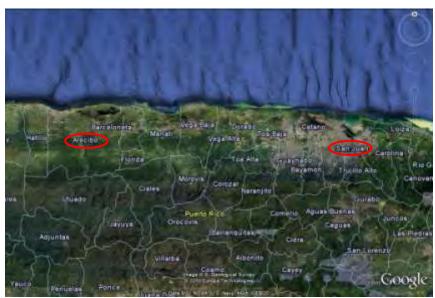


Figure 2. Aerial View of Arecibo in reference to San Juan



Figure 3. Project Location



Figure 4. Project Location Map

The vehicular flow generated by the Renewable Power Generation and Resources Recovery Facility as presented in this study, will not adversely affect the vehicular circulation of the area if changes in pavement markings in order to add right turning lanes and traffic signal reprogramming are done according to the study recommendations. During the project construction and as part of the construction of the proposed accesses to the site, a Maintenance of Traffic (MOT) plan shall be deployed and maintained, according to the DTPW guidelines. Once the project is completed, permanent pavement markings and traffic signing shall be installed according to established DTPW guidelines.

2 INTRODUCTION

Energy Answers International proposes the construction of the new Renewable Power Generation and Resources Recovery Facility. The project will be located on Highway PR-2, km. 73.1 in the Cambalache Ward of the Municipality of Arecibo. This location houses the remains of the former Arecibo Paper Mill.

The area to be developed is approximately 82 acres. The property is bordered on the north and south by property of the Puerto Rico Land Authority, on the west by the Río Grande de Arecibo, and on the east by Highway PR-2. As part of the proposed development, two accesses to the project are proposed, one exclusively for heavy vehicles and the second one for visitor/employee access.

This traffic study will evaluate the project's potential impact to the principal intersections surrounding the site and determine if improvements are needed, as a result of any possible impact the proposed development might have on said intersections.

3 PROJECT DESCRIPTION

The proposed project consists of the construction of a facility where municipal solid waste (MSW) will be used to produce nominal 80 megawatts of electricity and a number of by-products, including Boiler AggregateTM, conditioned fly ash, and recovered ferrous and nonferrous metals. The area to be developed is approximately 82 acres and will include:

- MSW Receiving and Processing Building
- Warehouse
- Processed Refuse FuelTM (PRF) Storage Building
- Cafeteria, Training, and Lockers Building
- Boiler Building
- Power Block
- Ash Process Building
- Concrete Products Building
- Administration Building



Figure 5. Northwest View of Project



Figure 6. Northwest Street View of Storage Building

Two accesses to the project are proposed: a heavy vehicle access and a visitor/employee access. Each access will have two lanes, an entrance and an exit lane. Deceleration and acceleration lanes are proposed for both accesses in order to provide safety for those entering and exiting the project, as well as reduce conflicts with oncoming traffic on Highway PR-2.

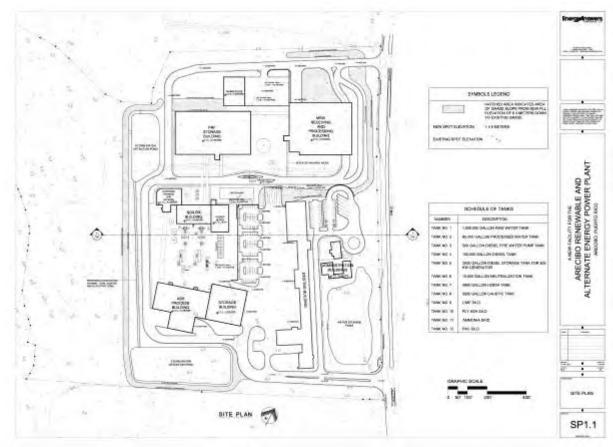


Figure 7. Schematic Site Plan

4 CONDITIONS OF THE ROAD NETWORK

The road network of the Municipality of Arecibo consists of a toll road, and several primary and secondary main highways of Puerto Rico. Among these are Highways PR-22, PR-2, and PR-10, which provide direct access and connect different state roads to the tertiary road network of the island.

4.1 HIGHWAY PR-22

Highway PR-22 is a toll road which begins in the Municipality of San Juan and extends from east to west to the Municipality of Hatillo. In the vicinity of the proposed development it consists of four lanes separated by a grassy median. Along the entire route, there are six alternating one-way toll plazas. Highway PR-22 connects the municipalities of the northern region of Puerto Rico.

4.2 HIGHWAY PR-2

Highway PR-2 is the longest road in the island's network system. It begins in its intersection with Ponce de León Avenue in the Santurce Sector of the Municipality of San Juan, and extends from east to west connecting all the municipalities of the north region. From the Municipality of Aguadilla, it extends from north to south through the western part of the island, and ends in the Municipality of Ponce.

In the area near the project, Highway PR-2 consists of four lanes divided by a concrete median barrier. There are several left turning lanes at the center of the road, protected by median barriers. In the area of this traffic study, there are two intersections with uncoordinated actuated traffic signals.

4.3 HIGHWAY PR-10

Highway PR-10 begins in the Municipality of Ponce and extends from south to north, ending in the Municipality of Arecibo. In the intersection included in this traffic study, it consists of four lanes with no median barrier.

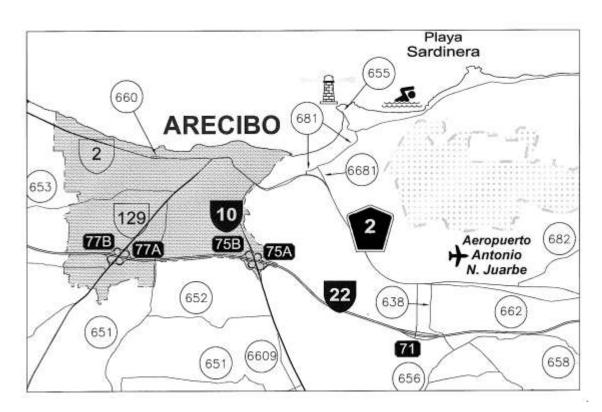


Figure 8. Arecibo Road Network

5 METHODOLOGY

This study assessed the capacity and the operation of the current and future traffic in the area near the proposed site for the new Renewable Power Generation and Resources Recovery Facility to determine if the proposed development will have an impact on the surrounding road network, and if geometric improvements are needed to mitigate any possible impact on the road system. For this purpose, the following procedures were used:

- Several field inspections were made in order to observe traffic patterns in the area. Also, no highway projects were observed under construction in the surrounding area.
- Proposed project developments in the area were searched in the Access Control Office of the Puerto Rico Highway and Transportation Authority (PRHTA), the Puerto Rico Planning Board (PRPB), and the Puerto Rico Regulations and Permits Administration (PRRPA). From the above mentioned research, the following project was identified; the Oceania residential project, located on Highway PR-681 km. 3.2 in the Islote Ward of Arecibo, was found in the PRPB database. A field inspection confirmed that the project was built and is in full operation. No other proposed projects that have approved construction permits or are under construction were found in the area.

Two proposed projects, located approximately 7 kilometers from the Renewable Power Generation and Resources Recovery Facility, were identified in the PRHTA and the PRPB databases; but, both are still in the permitting process. The Island Cove Hotel and Condo Hotel proposed project will be located in Highway PR-681 km. 7.0 in the Islote Ward of Arecibo. This project is in the process of getting its Environmental Impact Assessment approved. The Corales Apartments proposed project will be located in Highway PR-681 km. 7.6 in the Islote Ward of Arecibo. This project is in the process of celebrating its public hearing.

In addition, a field inspection was performed and no proposed developments were observed under construction in the surrounding area.

- Geometric data and information about the traffic control devices were gathered at the following intersections and segments:
 - o PR-2 with PR-10, Llorens Torres Avenue and Juan Rosado Avenue
 - o PR-2 with Victor Rojas Avenue

- Linear traffic count at PR-2 km 73.1
 (See Appendix A)
- TeLPEG Engineering, traffic counting specialists, performed traffic data collection on Wednesday, January 27, 2010. Vehicle counting machines collected the data during a 24 hour period. (See Appendix B)
- The morning (AM) and afternoon (PM) peak hours were determined for all intersections being studied. The morning peak hour is from 7:15 AM to 8:15 AM, and the afternoon peak hour is from 2:15 PM to 3:15 PM. (See Appendix C)
- The annual traffic growth rate was analyzed, using the Highway Performance Monitoring System-2008 Classification Log of the Office of Highway Systems of the DTPW. According to this log, the growth rate in 20 years for the intersection of Highways PR-2 and PR-10, and for the intersection of Highway PR-2 and Victor Rojas Avenue, is 54%. The annual traffic growth rate was determined as follows:
 - o Growth rate: 54% / 20 years = 2.7% increase/year
- The Institute of Transportation Engineers Trip Generation Manual, 7th edition, and the Microtrans Trip Generation Version 5.0 Software were used to estimate the trips generated by the project. Using the expected traffic data provided by Energy Answers, which included the amount and type of truck trips per day and the number of employees, it was determined that the trip generation description which best matched these parameters was the General Light Industrial project description. The AM and PM peak hour entrances and exits were estimated using this data. (See Appendix D)
- Once the traffic data was collected and projected, the capacity of the intersections was analyzed under the current geometric conditions and the effectiveness of the existing traffic control devices was evaluated. The elements of the road network were studied under the following conditions:
 - Existing Condition (2010) current vehicular volumes were used for the AM and PM peak hours, according to the information gathered by TeLPEG Engineering.
 Geometric conditions, times and phase movements in the traffic signal systems were assessed. (See Appendix E)
 - o Future Condition Opening Year (2013) the project is presumed to be operating at full capacity by the year 2013. Vehicular volumes were projected to 2013

using the annual traffic growth rate computed above. The AM and PM peak hour flows were used. Geometric conditions, times and phase movements in the traffic signal systems were evaluated. (See Appendix F)

- Horizon Condition 5 years after opening (2018) Vehicular volumes were projected to 2018 using the annual traffic growth rate computed above. The AM and PM peak hour flows were used. Geometric conditions, times and phase movements in the traffic signal systems were evaluated. (See Appendix G)
- The traffic simulations were done using Trafficware's Synchro 6 Signal Timing, Capacity Analysis, and Simulation Software. The results were analyzed taking into account the Levels of Service (LOS) and delays at each intersection for each scenario studied. (see Appendix H)
- Conclusions and recommendations based on the results achieved were presented.
- The LOS was used as the main criteria for the assessment of the operating conditions of the road network.

This evaluation criterion includes different types of roads and its various components (ramps, intersections, etc.). The LOS "A" represents excellent and ideal traffic conditions, and LOS "F" represents the worst conditions and vehicular congestion in the facilities. The LOS is based on average delays experienced by vehicles crossing intersections, both signalized and unsignalized.

The categories for each LOS are the following:

LOS A – Excellent (Free Flow)

This condition represents free flow accompanied by low volumes of traffic and high speeds. There is little or no restriction in the maneuvers of the driver, who can maintain desired speeds with little or no delay.

LOS B – Very Good (Reasonably free flow)

In this condition, operation speeds experience slight restrictions due to the traffic volume. Drivers still have a considerable amount of liberty for choosing their speed and lane used.

LOS C – Good (Stable flow)

Speed and maneuvering become more controlled due to higher traffic volumes. The driver's ability to choose their own speed, change lanes, or pass another driver is not always assured. At LOS C most experienced drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained.

LOS D – Acceptable (Approaching unstable flow)

This LOS approaches unstable flow, with tolerable operation speeds being maintained, although considerably affected by changes in operating conditions. Drivers experience more restrictions in maneuvering and choosing their own speed.

LOS E – Capacity (Unstable flow)

Traffic flow becomes unstable and sudden stops may occur. Vehicular congestion and delays increase considerably. Flow becomes irregular and speed varies rapidly, but rarely reaches the posted limit.

LOS F – Bad (Forced flow)

Flow is forced; every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required.

Table 1 demonstrates the relationship between LOS and average delays per vehicle in signalized and unsignalized intersections. These delays have two components: the delay while crossing the intersection and the delay while stopping at the intersection.

Table 1. Level of Service (LOS) Criteria for Intersections

	VEHICLE DELAYS (SECONDS)			
LOS	SIGNALIZED INTERSECTION AND ROUNDABOUTS	UNSIGNALIZED (STOP AND YIELD)		
A	d < 10	d < 10		
В	10 < d < 20	10 < d < 15		
С	20 < d < 35	15 < d < 25		
D	35 < d < 55	25 < d < 35		
Е	55 < d < 80	35 < d < 50		
F	80 < d	50 < d		

The processes used to complete this study are in accordance with the guidelines established by the PRHTA of the DTPW, the design standards of the American Association of State Highway and Transportation Officials (AASHTO), the Transportation Research Board (TRB), and the Institute of Transportation Engineers (ITE) manuals. To complete this traffic study, Trafficware's Synchro 6 Signal Timing, Capacity Analysis, and Simulation Software was used, as well as the TRB's Highway Capacity Manual 2000 (HCM2000) and the ITE traffic assessment guidelines.

6 TRIP GENERATION AND DISTRIBUTION

To determine the trips generated by the new Renewable Power Generation and Resources Recovery Facility, the Trip Generation Manual of the ITE (7th edition) and Microtrans Trip Generation Version 5.0 software were used. Energy Answers provided the expected traffic data, which included the amount and type of truck trips per day and the number of employees (see Appendix I). This traffic data represents the impact throughout one weekday. For the traffic study purpose, the morning and afternoon peak hours were evaluated, since they are the most critical.

The trip generation description which best matched the conditions of the project was the General Light Industrial project description. Table 2 shows the estimated trips generated by the project during the AM and PM peak hours, using the mentioned parameters and the Trip Generation Software.

Table 2. Trips Generated by the Resource Recovery Facility

Peak Hour	Volume (AM)	Peak Hour V	Volume (PM)
Enter Exit		Enter	Exit
56	11	14	50

According to the data provided by Energy Answers, it was determined that 30% of the trips generated are cars and 70% of the trips generated are heavy vehicles. Table 3 shows the vehicle type distribution for the trips generated during the AM and PM peak hours.

Table 3. Vehicle Type Distribution

Vehicle	Peak Hour	Volume (AM)	Peak Hour Volume (PM)	
Type	Enter	Exit	Enter	Exit
Cars	17	3	4	15
Heavy	39	8	10	35
vehicles	37	O	10	33
Total	56	11	14	50

Access #1, the north entrance, will be used for heavy vehicles only. Energy Answers estimates that 75% of the heavy vehicles will travel from the eastern part of the island, and 25% will travel from the west.

Access #2, the south entrance, will be mainly used as the employee/visitor entrance. For purposes of this traffic study, it was assumed that 50% of the cars will travel from the eastern part of the island, and 50% will travel from the west.

Tables 4 through 11 show the trip generation distributions for the AM and PM peak hours at each intersection.

Table 4. Intersection #1: PR-2, PR-10 and Juan Rosado Avenue

AM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
	EB-L			0
	EB-T			0
PR-2	EB-R			0
110-2	WB-L	1	2	3
	WB-T			0
	WB-R			0
	NB-L			0
PR-10	NB-T			0
	NB-R	8	10	18
Juan	SB-L			0

	Movement	Cars	Heavy vehicles	Total
Rosado	SB-T			0
Avenue	SB-R			0

Table 5. Intersection #2: PR-2 and Victor Rojas Avenue

AM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
	EB-L			0
PR-2	EB-T	8	10	18
1 K-2	WB-T	1	2	3
	WB-R			0
Victor	NB-T			0
Rojas				
Avenue	NB-R			0

Table 6. Intersection #3: PR-2 and Access #1

AM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
Access #1	EB-L		2	2
	EB-R		6	6
	NB-L		29	29
PR-2	NB-T	1		1
	SB-T	8		8
	SB-R		10	10

Table 7. Intersection #4: PR-2 and Access #2

AM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
Access #2	EB-L	1		1
1100055 112	EB-R	2		2
	NB-L	9		9
PR-2	NB-T		29	29
11(2	SB-T		6	6
	SB-R	8		8

Table 8. Intersection #1: PR-2, PR-10 and Juan Rosado Avenue
PM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
	EB-L			0
	EB-T			0
PR-2	EB-R			0
1102	WB-L	7	9	16
	WB-T			0
	WB-R			0
	NB-L			0
PR-10	NB-T			0
	NB-R	2	2	4
Juan	SB-L			0
Rosado	SB-T			0
Avenue	SB-R			0

Table 9. Intersection #2: PR-2 and Victor Rojas Avenue
PM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
	EB-L			0
PR-2	EB-T	2	2	4
110 2	WB-T	7	9	16
	WB-R			0
Victor	NB-T			0
Rojas				
Avenue	NB-R			0

Table 10. Intersection #3: PR-2 and Access #1
PM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
Access #1	EB-L		9	9
Access II 1	EB-R		26	26
PR-2	NB-L		8	8
	NB-T	7		7
	SB-T	2		2
	SB-R		2	2

Table 11. Intersection #4: PR-2 and Access #2
PM Peak Hour Trip Generation Distribution per Movement

	Movement	Cars	Heavy vehicles	Total
Access #2	EB-L	7		7
1100033 112	EB-R	8		8
PR-2	NB-L	2		2
	NB-T		8	8
	SB-T		26	26
	SB-R	2		2

7 OPERATIONAL ANALYSIS

The capacity analysis was completed using the HCM2000 guidelines. The traffic simulations were done using Trafficware's Synchro 6 Signal Timing, Capacity Analysis, and Simulation Software. Both signalized intersections (PR-2/PR-10/Juan Rosado Avenue and PR-2/Victor Rojas Avenue) were analyzed and optimized. The current and proposed geometric conditions of Highway PR-2 in front of the project were evaluated.

The area was studied under current conditions (2010), for future conditions in 2013 (the project is presumed to be operating at full capacity by this year), and for the horizon conditions in 2018, 5 years after opening day. Existing geometric conditions were evaluated for the AM and PM peak hours using the existing vehicular flows to establish the current LOS and delays. The current volumes were projected through 2013 and 2018. Using these volumes with the data gathered from the Trip Generation Software, the intersections were evaluated, compared and optimized (if necessary) in order to achieve or maintain adequate LOS and delays, according to the following guidelines established in the "Puerto Rico Guidelines for the Preparation of Traffic Access Operational Studies" of the DTPW, and shown in Tables 12 and 13.

Table 12. Average delay impact in a signalized intersection

Existing LOS	Average additional delay allowed with project	
A	20 sec/veh	
В	20 sec/veh	
С	15 sec/veh	
D	15 sec/veh	
Е	Average delay shall not be $\geq 80 \text{ sec/veh}$	
F	Automatically provide alternatives	

Table 13. Average delay impact in an unsignalized intersection

Existing LOS	Average additional delay allowed with project	
A	15 sec/veh	
В	15 sec/veh	
С	10 sec/veh	
D	10 sec/veh	
Е	Average delay shall not be ≥ 50 sec/veh	
F	Automatically provide alternatives	

In order not to exceed these allowed additional delays, exclusive right turning lanes were added for the northbound movement at Intersection #1 (PR-2, PR-10, and Juan Rosado Avenue), and for the westbound movement at Intersection #2 (PR-2 and Victor Rojas Avenue). At Intersection #1, the center lane, currently being used exclusively for the through eastbound movement, will be a shared lane for the left turn and through movements. Also at this intersection, the lane widths for the southbound movements were changed to accommodate an additional third lane. Traffic signal times at Intersections #1 and #2 were optimized.

Access #1, a heavy vehicle entrance, was first analyzed in the year 2013 as an unsignalized intersection. The LOS for the intersection was A (Excellent); the LOS for the northbound left turning movement was B (Very Good) and C (Good) for the AM and PM peak hours, respectively. For the vehicles exiting the premises (eastbound movement), delays of 124.2 seconds and 229.6 seconds were observed for both peak hours. However, the maximum queue for this access was two vehicles. This queue does not affect the operations of the proposed project or, more importantly, the traffic flow in Highway PR-2.

As per Energy Answers' request, CSA included as part of the improvements proposed for the project a traffic signal at Access #1, for ease of movement and safety precautions. After analyzing the intersection under this condition, a LOS of C (Good) or better was observed for all movements.

The results for the AM and PM peak hours at each intersection are shown in Tables 14 and 15.

Table 14. Intersection Results: AM Peak Hour

	LOS / Delay (sec)						
Intersection	Existing (2010)	2013	Difference (sec)	2013 with improvements	Difference (sec)	2018 with improvements	Difference (sec)
PR-2, PR- 10, & Juan Rosado Ave.	E/79.0	F/108.8	-29.80	D/51.6	27.4	D/53.9	25.1
PR-2 & Victor Rojas Ave.	F/185.1	F/230.5	-45.40	B/16.0	169.1	D/36.6	148.5
PR-2 & Access #1	N/A	A/0.4	N/A	B/10.7	N/A	C/28.5	N/A
PR-2 & Access #2	N/A	A/0.0	N/A	A/0.0	N/A	A/0.0	N/A

Table 15. Intersection Results: PM Peak Hour

				LOS / Delay	(sec)		
Intersection	Existing (2010)	2013	Difference (sec)	2013 with improvements	Difference (sec)	2018 with improvements	Difference (sec)
PR-2, PR-10, & Juan Rosado Ave.	D/45.9	E/58.2	-12.3	D/42.7	3.2	D/50.0	-4.1
PR-2 & Victor Rojas Ave.	E/61.6	F/97.6	-36.0	C/20.9	40.7	C/27.4	34.2
PR-2 & Access #1	N/A	A/2.9	N/A	A/4.3	N/A	A/5.2	N/A
PR-2 & Access #2	N/A	A/0.1	N/A	A/0.1	N/A	A/0.2	N/A

8 SUMMARY OF RESULTS

The results for the AM and PM peak hours for each movement are presented in Appendix J. The analysis was completed using SYNCHRO 6 for the existing and future conditions with the trips generated by the project.

Intersection #1: PR-2, PR-10, and Juan Rosado Avenue

At present, drivers are using the PR-10 shoulder as an exclusive right turning lane. In order to comply with the allowed delays for the northbound right turning movement, an exclusive right turning lane was added in PR-10 during the analysis. Other improvements proposed in this intersection are to change the current use for the center eastbound lane of PR-2, from being an exclusive through movement, to a shared lane for the left turn and through movements. Also, the lane widths for Juan Rosado Avenue have to be reduced in order to accommodate an additional third lane for the right turning southbound movement.

The traffic signal times should be changed for the AM and PM hours, as shown in Table 16.

Table 16. Changes in traffic signal times at Intersection #1

Movement	Existing Times (Green+Yellow+All Red), in seconds	Proposed Times (Green+Yellow+All Red) for AM hours, in seconds	Proposed Times (Green+Yellow+All Red) for PM hours, in seconds	
EB-L	24.5	14.0	29.0	
EB-T	59.5	31.0	63.5	
WB-L	24.5	36.0	39.0	
WB-T	59.5	53.0	73.5	
NB	44.5	37.0	51.0	
SB	24.5	16.0	23.5	

Intersection #2: PR-2 and Victor Rojas Avenue

At present, drivers are using the PR-2 westbound shoulder as an exclusive right turning lane. In order to comply with the allowed delays for this movement, an exclusive right turning lane was added in PR-2 during the analysis.

The traffic signal time for the eastbound left turning movement should be changed for the PM hours, as shown in Table 17.

Table 17. Changes in traffic signal times at Intersection #2

Movement	Existing Times (Green+Yellow+All Red), in seconds	Proposed Times (Green+Yellow+All Red) for AM hours, in seconds	Proposed Times (Green+Yellow+All Red) for PM hours, in seconds	
EB-L	24.0	24.0	26.0	
EB-T	64.0	64.0	64.0	
WB	40.0	40.0	40.0	
SB	55.0	55.0	55.0	

Intersection #3: PR-2 and Access #1

A traffic signal is proposed for this intersection. Table 18 shows the proposed times for the AM and PM hours.

Table 18. Traffic signal times proposed at Intersection #3

Movement	Proposed Times (Green+Yellow+All Red) for AM and PM hours, in seconds
EB	25.0
NB-L	20.0
NB-T	45.0
SB	25.0

Intersection #4: PR-2 and Access #2

Highway PR-2 runs freely at this intersection, except for the northbound left movement. Delays for this movement are not significant.

9 CONCLUSIONS AND RECOMMENDATIONS

This Traffic Study completed in the road network serving the new Renewable Power Generation and Resources Recovery Facility project has concluded that the vehicular flow generated by this project will not adversely affect traffic operations in the area. However, the following recommendations should be considered:

Intersection #1: PR-2, PR-10, and Juan Rosado Avenue

At present, drivers are using the PR-10 shoulder as an exclusive right turning lane. It is recommended that the shoulder pavement marking be erased and a right-only lane with a storage length of 18.3 m (60 ft) be marked. Traffic signs indicating this is a right-only lane should also be installed.

Another improvement proposed at this intersection is to change the current use for the center eastbound lane of PR-2, from being an exclusive through movement, to a shared lane for the left turn and through movements. Traffic signs and pavement marking symbols indicating the new lane uses should be installed.

At Juan Rosado Avenue, the lane widths should be reduced to 10 ft each in order to accommodate an additional third lane for the right turning southbound movement. Existing pavement markings should be erased and new markings should be painted at the final widths. The right turning lane should have a storage length of 18.3 m (60 ft). Traffic signs and pavement marking symbols indicating the new lane uses should be installed.

The traffic signal times should also be changed as previously discussed.

Intersection #2: PR-2 and Victor Rojas Avenue

At present, drivers are using the PR-2 westbound shoulder as an exclusive right turning lane. It is recommended that the shoulder pavement marking be erased and a right-only lane with a

storage length of 122 m (400 ft) be marked. Traffic signs and pavement marking symbols

indicating the new lane uses should be installed

The traffic signal times should also be changed as previously discussed.

Intersection #3: PR-2 and Access #1

The project proposes a 122 m (400 ft) deceleration lane and a 107 m (350 ft) acceleration lane to

enter and exit the project for southbound traffic. A 107 m (350 ft) left turning lane is proposed

for northbound entering traffic. Proper pavement markings and traffic signing should be

installed.

A traffic signal system will be installed at this intersection. Signal times were indicated in the

Summary of Results section of this study.

Intersection #4: PR-2 and Access #2

The project proposes a 122 m (400 ft) deceleration lane and a 107 m (350 ft) acceleration lane to

enter and exit the project for southbound traffic. A 107 m (350 ft) left turning lane is proposed

for northbound entering traffic. Proper pavement markings and traffic signing should be

installed. Drivers should be alerted with traffic signs that a truck crossing will be encountered

ahead.

During the project construction, a Maintenance of Traffic (MOT) plan shall be performed,

according to the DTPW guidelines. Once the project is completed, pavement markings and

traffic signing shall be placed according to the MUTCD 2009 Edition.

Appendix H: Traffic Study

27

10 REFERENCES

- Highway Capacity Manual 2000. Transportation Research Board, Washington, D.C., 2000.
- A Policy on Geometric Design of Highways and Streets. American Association of State Highway and Transportation Officials, Washington, D.C., 2001.
- Highway Design Manual. Departamento de Transportación y Obras Públicas, San Juan, PR, 1979.
- Transportation and Land Development. Institute of Transportation Engineering, Washington, D.C., 2002.
- http://www.dtop.gov.pr
- http://www.jp.gobierno.pr
- http://www.arpe.org
- Guías para la Preparación de Estudios Operacionales, Departamento de Transportación y Obras Públicas, San Juan, PR, 22 de diciembre de 2004
- Google Earth

11 CERTIFICATION

I, Ruth M. Vargas Vidal, married and resident of Trujillo Alto, Puerto Rico hereby certify that I am a professional member in good standing of the Professional Association of Engineers and Land Surveyors of Puerto Rico, with license PE 16565. I also certify that I have prepared and thoroughly reviewed the Renewable Power Generation and Resources Recovery Facility Traffic Study requested by Energy Answers International. All the information presented in this document is valid to this date.



Ruth M. Vargas Vidal

PE 16565

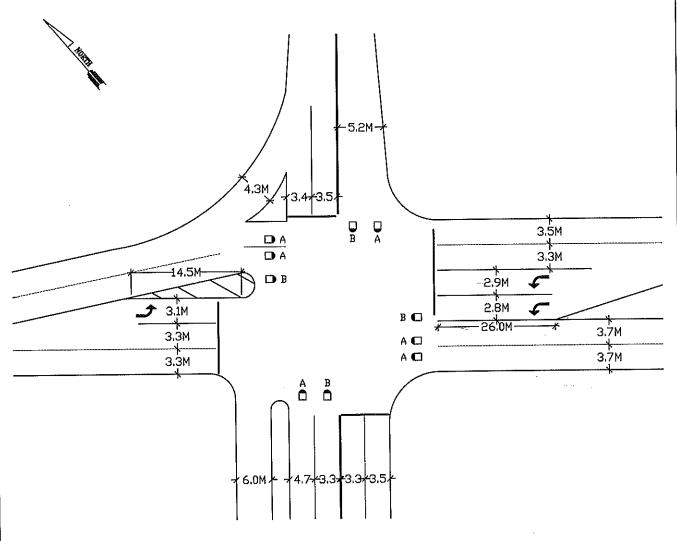
September 10, 2010

APPENDICES

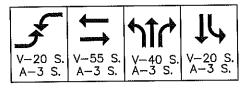


APPENDIX – A

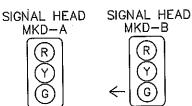
PR-2 & PR-10 AND JUAN ROSADO AVENUE



PHASE 1 PHASE 2 PHASE 3 PHASE 4



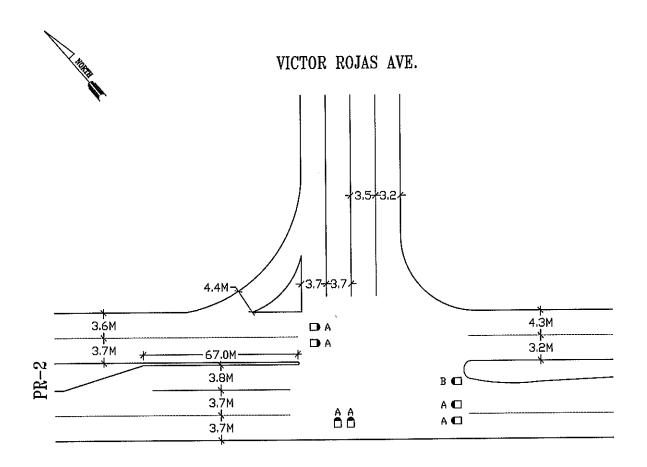
ALL RED = 1.5 S.



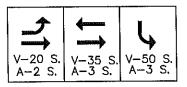
TELPEG ENGINEERING
TRAFFIC COUNTING SPECIALISTS

C: 787-366-1352 E: TELPEG@GMAIL.COM

PR-2 & VICTOR ROJAS AVENUE, ARECIBO, P.R.



PHASE 1 PHASE 2 PHASE 3



ALL RED = 2 S.

SIGNAL HEAD MKD-A

R S G SIGNAL HEAD

MKD-B



TELPEG ENGINEERING TRAFFIC COUNTING SPECIALISTS

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APPENDIX – B

INTERSECTION: PR-2 & PR-10 AND JUAN ROSADO AVE., ARECIBO, P.R. DATE: WEDNESDAY, JANUARY 27, 2010

TIME		PR-10		J RC	SADO	AVE.			PF	₹-2			TOTAL	TOTAL
PERIOD	NB-L	NB-T	NB-R	SB-L	SB-T	SB-R	EB-L	EB-T	EB-R	WB-L	WB-T	WB-R	15 MIN	60 MIN
12:00 AM	4	1	10	3	3	2	2	12	8	6	10	2	63	
12:15 AM	2	0	11	3	1	1	0	13	0	4	7	1	43	
12:30 AM	6	2	3	1	2	2	2	4	8	3	5	1	39	
12:45 AM	0	0	10	3	1	0	1	12	3	5	7	1	43	188
1:00 AM	1	Ö	8	2	2	1	0	10	2	3	5	1	35	160
1:15 AM	5	1	4	1	2	1	1	5	2	2	3	1	28	145
1:30 AM	2	1	6	2	2	2	1	8	5	1	2	0	32	138
1:45 AM	1	0	4	1	1	1	1	4	3	2	2	0	20	115
2:00 AM		ō	6	2	1	0	1	8	3	2	3	1	29	109
2:15 AM	2	1	2	0	2	2	2	2	6	2	4	1	26	107
2:30 AM	2	0	5	1	2	2	2	6	10	3	5	1	39	114
2:45 AM	2	1	2	1	1	0	2	3	9	3	4	1	29	123
3:00 AM	3	 i 	4	1	1	1	2	5	7	2	4	1	32	126
3:15 AM	1	0	4	1	1	0	5	5	18	3	4	1	43	143
3:30 AM	2	0	5	1	1	1	2	6	6	4	5	1	34	138
3:45 AM	11	4	4	1	2	1	4	5	14	4	5	1	56	165
4:00 AM	7	2	6	2	1	1	8	8	32	6	10	2	85	218
4:00 AM	4	1	13	4	1	1	4	16	18	7	10	2	81	256
4:15 AW	11	4	6	2	3	2	8	7	34	10	14	2	103	325
4:45 AM	14	5	6	2	2	1	6	7	24	16	24	4	111	380
5:00 AM	8	2	16	4	1	0	3	18	13	18	27	4	114	409
	11	3	16	4	3	2	6	19	22	20	31	5	142	470
5:15 AM	11	3	18	5	4	3	7	21	26	30	45	7	180	547
5:30 AM	24	8	12	3	4	4	9	14	34	28	43	7	190	626
5:45 AM	34	11	14	4	3	2	8	16	34	36	55	9	226	738
6:00 AM	52	17	16	4	4	4	6	19	25	60	89	15	311	907
6:15 AM	68	22	22	6	8	6	10	26	38	95	143	24	468	1195
6:30 AM	82	27	20	6	21	18	15	24	62	93	139	23	530	1535
6:45 AM 7:00 AM	92	30	28	8	13	10	15	33	62	133	199	33	656	1965
			35	10	19	16	12	41	47	156	233	39	746	2400
7:15 AM	104	34	37	10	23	18	12	43	46	124	185	31	694	2626
7:30 AM	124	41		11	31	26	14	46	56	118	177	29	687	2783
7:45 AM	105	35 28	39 47	13	21	18	13	55	54	130	194	32	689	2816
8:00 AM	84						23	55	90	106	158	26	662	2732
8:15 AM		28	47	13	18	15				105	158	26	684	2722
8:30 AM		30	38	11	28	22	26	45	105 95	87	131	22	674	2709
8:45 AM		34	48	13	33	27	24	57	102	91	136	23	632	2652
9:00 AM		27	41	11	26	22	25	48	90	71	107	18	621	2611
9:15 AM		32	53	15	31	25	22	62	89	83	124	21	638	2565
9:30 AM		25	60	17	28	23	22	71			106	18	633	2524
9:45 AM		27	60	17	30	24	25	71	101	71	124	21	641	2533
10:00 AM		25	59	16	28	23	23	70	92	83	115	19	641	2553
10:15 AM		26	66	18	26	22	23	78	91	71	107	18	604	2519
10:30 AM		24	62	17	24	19	23	72	93			17	622	2508
10:45 AM		19	78	21	25	20	25	92	99	68	101		632	2499
11:00 AM		21	68	19	32	26	23	80	90	76	113	19	650	2508
11:15 AM		23	70	19	31	26	21	82	85	82	122	20		2559
11:30 AM		27	66	18	28	23	27	77	106	74	110	18	655	
11:45 AM		25	67	18	40	32	27	79	107	70	104	17	662	2599
12:00 PM		24	74	20	27	22	22	87	88	78	118	19	650	2617
12:15 PM		21	70	19	26	21	22	82	86	83	124	20	636	2603
12:30 PM	77	25	78	21	31	25	21	92	84	84	126	21	685	2633

TIME		PR-10		J RO	SADO	AVE. I			PR	k-2			TOTAL	TOTAL
PERIOD	NB-L	NB-T	NB-R	SB-L	SB-T	SB-R	EB-L	EB-T	EB-R	WB-L	WB-T	WB-R	15 MIN	60 MIN
12:45 PM	77	26	75	21	30	25	22	88	87	91	136	22	700	2671
1:00 PM	68	22	74	20	20	16	23	87	92	78	117	19	636	2657
1:15 PM	65	21	74	20	26	22	22	86	87	83	125	21	652	2673
1:30 PM	71	23	68	19	36	29	26	80	106	80	121	20	679	2667
1:45 PM	84	28	68	19	30	24	25	80	101	81	121	20	681	2648
2:00 PM	77	25	72	20	29	23	24	85	94	90	134	22	695	2707
2:15 PM	86	28	73	20	32	27	22	86	86	90	134	22	706	2761
2:30 PM	65	21	82	23	37	30	23	97	90	86	129	21	704	2786
2:45 PM	52	17	72	20	29	24	27	85	108	96	144	24	698	2803
3:00 PM	59	20	83	23	 27	22	26	98	104	96	145	24	727	2835
3:15 PM	86	29	75	21	31	25	24	88	94	84	125	21	703	2832
3:30 PM	53	18	79	22	26	22	21	93	84	76	113	19	626	2754
3:45 PM	59	20	76	21	36	29	22	89	87	74	112	18	643	2699
4:00 PM	33	11	94	26	31	25	20	111	81	68	101	17	618	2590
4:15 PM	<u>56</u>	18	82	22	32	26	24	96	97	74	110	18	655	2542
4:30 PM	39	13	78	22	32	26	23	92	93	75	112	18	623	2539
4:45 PM	54	18	78	21	39	32	31	91	123	70	105	17	679	2575
5:00 PM	50	16	80	22	23	19	18	94	74	61	92	15	564	2521
5:15 PM	29	9	89	25	14	12	12	105	49	61	91	15	511	2377
5:30 PM	34	11	78	22	11	9	16	92	65	60	91	15	504	2258
5:45 PM	32	10	70	19	17	13	13	82	54	42	64	11	427	2006
6:00 PM	27	9	82	23	10	8	6	96	26	50	76	13	426	1868
6:15 PM	32	10	65	18	12	9	12	76	46	43	64	11	398	1755
6:30 PM	31	10	53	15	12	9	13	63	53	42	64	10	375	1626
6:45 PM	35	11	60	17	6	4	11	71	42	42	64	10	373	1572
7:00 PM	35	12	49	13	9	8	17	57	68	39	58	10	375	1521
7:15 PM	44	15	47	13	12	10	12	55	47	35	53	9	352	1475
7:30 PM	30	10	47	13	7	6	4	55	18	31	46	8	275	1375
7:45 PM	28	9	39	11	10	9	13	46	51	26	40	7	289	1291
8:00 PM		6	51	14	8	6	6	60	26	26	40	7	267	1183
8:15 PM	24	8	41	11	8	7	12	48	50	23	35	6	273	1104
8:30 PM	17	5	37	10	8	7	9	44	35	18	27	4	221	1050
8:45 PM	15	5	41	11	15	13	8	48	32	20	29	5	242	1003
9:00 PM	13	4	38	11	9	7	8	45	31	24	37	6	233	969
9:15 PM	11	3	34	9	9	7	5	40	22	21	32	5	198	894
9:30 PM	6	2	30	8	6	4	6	36	26	22	34	6	186	859
9:45 PM	8	2	28	8	7	6	12	32	47	18	27	4	199	816
10:00 PM	6	2	26	7	4	4	8	31	33	16	25	4	166	749
10:15 PM	5	1	29	8	6	4	3	34	11	21	32	5	159	710
10:30 PM	6	2	24	7	4	4	5	28	22	17	26	4	149	673
10:45 PM	9	3	29	8	2	2	3	34	10	9	14	2	125	599
11:00 PM	8	3	20	6	4	3	2	24	6	12	17	3	108	541
11:15 PM	2	0	22	6	4	4	0	26	1	14	21	4	104	486
11:30 PM	1 7	2	16	5	5	4	1	19	2	10	15	2	88	425
11:45 PM	4	1	17	5	2	2	1	20	3	10	14	2	81	381
TOTAL	3928	1287	4089	1130	1466	1193	1249	4814	4988	4794	7189	1192	_	

TELPEG ENGINEERING

TRAFFIC COUNTING SPECIALISTS

INTERSECTION: PR-2 & VICTOR ROJAS AVENUE, ARECIBO, P.R. DATE: WEDNESDAY, JANUARY 27, 2010

TIME	V. ROJA	S V/E		PR	_2		TOTAL	TOTAL
TIME		SB-R	EB-L	EB-T	WB-T	WB-R	15 MIN	60 MIN
PERIOD	SB-L 2	4	8	18	14	8	54	
12:00 AM	3	6	8	20	6	12	55	
12:15 AM	3	6	2	6	3	2	22	
12:30 AM		2	8	18	$\frac{3}{11}$	0	40	171
12:45 AM	1	3	6	15	6	2	33	150
1:00 AM	1	5	3	8	1	4	24	119
1:15 AM	3	1	5	11	2	0	20	117
1:30 AM	1 1		3	6	3	2	16	93
1:45 AM	1	1	5	11	2	4	28	88
2:00 AM	2	3	1	3	4	7	19	83
2:15 AM	1			9	6	7	30	93
2:30 AM	1	3	4		4	6	22	99
2:45 AM	2	4	2	4		4	25	96
3:00 AM	4	6	3	7	3	7	28	105
3:15 AM	3	5	3	7	3		37	112
3:30 AM	4	7	4	9		10	33	123
3:45 AM	3	4	3	7	6	10		155
4:00 AM	7	11	5	11	7	16	57	204
4:15 AM	6	10	10	23	9	19	77	204
4:30 AM	10	16	4	10	10	24	74	
4:45 AM	15	25	4	10	19	42	115	323
5:00 AM	18	31	12	27	18	26	132	398
5:15 AM	13	21	12	28	35	39	148	469
5:30 AM	20	34	13	31	48	67	213	608
5:45 AM	21	37	9	20	41	55	183	676
6:00 AM	24	40	10	24	60	57	215	759
6:15 AM	35	60	12	28	104	103	342	953
6:30 AM	39	67	17	39	195	238	595	1335
6:45 AM	58	100	15	35	155	197	560	1712
7:00 AM	54	93	21	50	272	239	729	2226
7:15 AM	50	84	26	62	344	290	856	2740
7:30 AM	49	84	28	64	256	166	647	2792
7:45 AM	44	74	29	68	250	173	638	2870
8:00 AM	44	74	35	82	282	228	745	2886
8:15 AM	44	74	35	82	216	179	630	2660
8:30 AM	43	73	29	67	216	191	619	2632
8:45 AM	59	71	36	85	169	134	554	2548
9:00 AM	46	56	31	71	194	172	570	2373
9:15 AM	64	78	40	92	118	138	530	2273
9:30 AM	67	82	45	105	146	122	567	2221
9:45 AM	59	73	45	106	122	101	506	2173
10:00 AM	68	62	44	104	166	153	597	2200
10:15 AM	66	61	50	116	150	121	564	2234
10:30 AM	79	73	46	108	123	128	557	2224
10:45 AM	82	76	59	136	110	115	578	2296
11:00 AM		72	51	119	136	114	571	2270
11:15 AM		84	52	122	140	124	614	2320
11:30 AM		80	49	115	122	125	577	2340
11:45 AM		70	50	118	121	92	527	2289
12:00 PM		78	56	129	137	126	622	2340
12:15 PM		72	52	122	155	121	610	2336
12:30 PM		67	59	136	164	127	635	2394
12.001 10	- VA	L						

Hour

TELPEG ENGINEERING

TOTAL

TRAFFIC COUNTING SPECIALISTS

C: 787-366-1352 E: TELPEG@GMAIL.COM

LOCATION: PR-2, EAST OF VICTOR ROSA AVENUE, ARECIBO DATE: WEDNESDAY, JANUARY 27, 2010

TIME	PF	R-2	TOTAL	TOTAL
PERIOD	EB	WB	15 MIN	60 MIN
12:00 AM	20	23	43	
12:15 AM	23	19	42	
12:30 AM	9	5	14	
12:45 AM	19	12	31	130
1:00 AM	16	8	24	111
1:15 AM	12	5	17	86
1:30 AM	12	2	14	86
1:45 AM	7	5	12	67
2:00 AM	13	6	19	62
2:15 AM	4	12	16	61
2:30 AM	10	14	24	71
2:45 AM	6	11	17	76
3:00 AM	11	5	16	73
3:15 AM	10	11	21	78
3:30 AM	13	14	27	81
3:45 AM	10	17	27	91
4:00 AM	18	24	42	117
4:15 AM	29	29	58	154
4:30 AM	20	36	56	183
4:45 AM	25	64	89	245
5:00 AM	44	46	90	293
5:15 AM	41	78	119	354
5:30 AM	51	121	172	470
5:45 AM	41	101	142	523
6:00 AM	48	123	171	604
6:15 AM	63	217	280	765
6:30 AM	78	455	533	1126
6:45 AM	93	370	463	1447
7:00 AM	104	537	641	1917
7:15 AM	112	666	778	2415
7:30 AM	113	443	556	2438
7:45 AM	112	444	556	2531
8:00 AM	126	536	662	2552
8:15 AM	126	415	541	2315
8:30 AM	110	427	537	2296
8:45 AM	144	318	462	2202
9:00 AM	117	384	501	2041
9:15 AM	156	269	425	1925
9:30 AM	172	281	453	1841
9:45 AM	165	234	399	1778
10:00 AM	172	335	507	1784
10:15 AM	182	285	467	1826
10:30 AM	187	264	451	1824
10:45 AM	217	236	453	1878
11:00 AM	198	263	461	1832
11:15 AM	214	277	491	1856
11:30 AM	201	259	460	1865
11:45 AM	195	224	419	1831
12:00 PM	225	276	501	1871
12:15 PM	210	290	500	1880

Peak Hour

12:30 PM	218	306	524	1944	
12:45 PM	218	340	558	2083	
1:00 PM	222	250	472	2054	
1:15 PM	208	281	489	2043	
1:30 PM	221	291	512	2031	
1:45 PM	213	285	498	1971	ļ
2:00 PM	217	331	548	2047	
2:15 PM	216	355	571	2129	5
2:30 PM	253	288	541	2158	Peak Hour
2:45 PM	218	333	551	2211	¥
3:00 PM	229	394	623	2286	<u> </u>
3:15 PM	236	314	550	2265	
3:30 PM	233	242	475	2199	
3:45 PM	223	268	491	2139	
4:00 PM	272	250	522	2038	
4:15 PM	228	278	506	1994	1
4:30 PM	236	303	539	2058	
4:45 PM	236	272	508	2075	
5:00 PM	220	196	416	1969	
5:15 PM	233	239	472	1935	1
5:30 PM	223	247	470	1866	1
5:45 PM	193	144	337	1695	1
6:00 PM	219	175	394	1673	
6:15 PM	176	156	332	1533	1
6:30 PM	172	148	320	1383	
6:45 PM	185	141	326	1372	1
7:00 PM	147	131	278	1256	1
7:15 PM	127	147	274	1198	1
7:30 PM	141	104	245	1123	7
7:45 PM	123	96	219	1016	
8:00 PM	151	91	242	980	
8:15 PM	126	87	213	919	7
8:30 PM	113	60	173	847	7
8:45 PM	117	44	161	789	7
9:00 PM	101	91	192	739	7
9:15 PM	99	87	186	712	1
9:30 PM	83	71	154	693	
9:45 PM	69	48	117	649	7
10:00 PM	53	59	112	569	1
10:15 PM	60	93	153	536	
10:30 PM	51	64	115	497	
10:45 PM	62	26	88	468	٦
11:00 PM	45	36	81	437	7
11:15 PM	46	55	101	385	7
11:30 PM	37	29	66	336	_
11:45 PM		45	83	331	
TOTAL	11811	17787			_

TELPEG ENGINEERING

TRAFFIC COUNTING SPECIALISTS

C: 787-366-1352 E: TELPEG@GMAIL.COM



APPENDIX – C

DATA SUMMARY

INTERSECTION: PR-2 & PR-10 AND JUAN ROSADO AVE., ARECIBO, P.R. DATE: WEDNESDAY, JANUARY 27, 2010

									2	9			TOTAL
DEAK HOLIR		PR-10		JUAN	JUAN ROSADO AVE.	AVE.			PR-Z	7-7			2
	- 014	T GN	NR.P	S.B.I	SB-T	SB-R	EB-L	EB-T	EB-R	WB-L	WB-T	WB-R	15 MIN
(A.M.)	1				,	Ç	45	7.4	77	156	233	30	746
7:15 - 7:30 AMI	104	34	જ	2	8	0	7	4-	j.	3	202	3	
7.20 7.45 AM	124	41	37	10	23	81	12	43	46	124	185	31	694
III 01:1 - 00:1	171				Š	90	7.4	31	56	118	177	29	687
7:45 - 8:00 AM	105	32	336	11	3.1	70	4	5	3	2		22	
8:00 - 8:15 AM	2	28	47	13	21	18	13	55	54	130	194	35	689
PEAK HOUR	,	7	710	77	6	78	7,	185	203	528	789	131	
VOLUME (A.M.)	417	150	001	ļ	t	2	;	3					
PEAK HOUR	70.0	700	700	30.0	0.76	0.75	0.91	0.84	0.91	0.85	0.85	0.84	
FACTOR (A.M.)	1.04	0.04	0.04	20.5	2) 	,						

0		00,00		NA I	IIIAN POSADO AVE	AVE			PR-2	-2			TOTAL
PEAK HOUR		בו-צו				i						!	1
(Se	NB-L	NB-T	NB-R	SB-L	SB-T	SB-R	EB-L	EB-T	EB-R	WB-L	WB-i	WB-K	NIM CL
2.45 2.30 PM	86	28	73	20	32	27	22	98	98	06	134	22	902
2.20 2.45 DM	8	24	8	23	37	30	23	97	66	98	129	21	704
2.30 - 2.43 MI	3 2	17	72	20	29	24	27	85	108	96	144	24	869
2.00 - 3.00 FIM	50 50	2 -	2,5	23	27	22	26	86	104	96	145	24	727
3.00 - 3.131 111	3	Ž	3										
PEAK HOUR	Ç	Ó	270	90	105	103	8	366	388	368	552	9	
VOLUME (P.M.)	707	00	010	8	140	3	3						
PEAK HOUR	1	1.1	000	0.03	V8 0	98 0	0 91	0.93	06.0	96.0	0.95	0.95	
FACTOR (P.M.)	٥٠/١٥	0.77	0.33	0.33	† 2	20.0		3					

		DR-40		INALI	N ROSADO AVE.	AVE.			PR-2	-7		
												!
HOUR	NB-L	NB-T	NB-R	SB-L	SB-T	SB-R	EB-L	EB-T	EB-R	WB-L	WB-1	¥B-K
			333	36,7	4 400	4402	9767	4844	886V	P64P	7189	1192
	3928	1287	4089	130	1400	1133	247	101	2004	5	3	

TELPEG ENGINEERING

TRAFFIC COUNTING SPECIALISTS

C: 787-366-1352 E: TELPEG@GMAIL.COM

DATA SUMMARY

INTERSECTION: PR-2 & VICTOR ROJAS AVENUE, ARECIBO, P.R.

DATE: WEDNESDAY, JANUARY 27, 2010

PEAK HOUR	V. ROJA	AS AVE.		PF	₹-2		TOTAL
(A.M.)	SB-L	SB-R	EB-L	EB-T	WB-T	WB-R	15 MIN
7:15 - 7:30 AM	50	84	26	62	344	290	856
7:30 - 7:45 AM	49	84	28	64	256	166	647
7:45 - 8:00 AM	44	74	29	68	250	173	638
8:00 - 8:15 AM	44	74	35	82	282	228	745
PEAK HOUR VOLUME (A.M.)	187	316	118	276	1132	857	
PEAK HOUR FACTOR (A.M.)	0.94	0.94	0.84	0.84	0.82	0.74	

PEAK HOUR	V. ROJA	AS AVE.		PF	₹-2		TOTAL
(P.M.)	\$B-L	SB-R	EB-L	EB-T	WB-T	WB-R	15 MIN
2:15 - 2:30 PM	89	57	55	127	189	149	666
2:30 - 2:45 PM	109	69	62	144	167	107	658
2:45 - 3:00 PM	87	55	54	126	209	108	639
3:00 - 3:15 PM	83	53	62	146	212	163	719
PEAK HOUR VOLUME (P.M.)	368	234	233	543	777	527	
PEAK HOUR FACTOR (P.M.)	0.84	0.85	0.94	0.93	0.92	0.81	

24 HOUD	V. ROJA	AS AVE.		PF	₹-2	
24 HOUR VOLUME	SB-L	SB-R	EB-L	EB-T	WB-T	WB-R
VOLUME	4640	4135	3073	7161	9040	7898

TELPEG ENGINEERING

TRAFFIC COUNTING SPECIALISTS

DATA SUMMARY

LOCATION: PR-2, EAST OF VICTOR ROJAS AVENUE

DATE: WEDNESDAY, JANUARY 27, 2010

PEAK HOUR	PF	₹-2	TOTAL
(A.M.)	EB	WB	15 MIN
7:15 - 7:30 AM	112	666	778
7:30 - 7:45 AM	113	443	556
7:45 - 8:00 AM	112	444	556
8:00 - 8:15 AM	126	536	662
PEAK HOUR VOLUME (A.M.)	463	2089	
PEAK HOUR FACTOR (A.M.)	0.92	0.78	

PEAK HOUR	PF	TOTAL	
(P.M.)	EB	WB	15 MIN
2:15 - 2:30 PM	216	355	571
2:30 - 2:45 PM	253	288	541
2:45 - 3:00 PM	218	333	551
3:00 - 3:15 PM	229	394	623
PEAK HOUR VOLUME (P.M.)	916	1370	
PEAK HOUR FACTOR (P.M.)	0.91	0.87	

24 HOUR VOLUME	PR-2		
	EB	WB	
	11811	17787	



APPENDIX – D

Arecibo Summary of Trip Generation Calculation For 150 Employees of General Light Industrial March 20, 2010

	Average	Standard	Adjustment	Driveway
	Rate	Deviation	Factor	Volume
Avg. Weekday 2-Way Volume	3.02	1.86	1.00	453
7-9 AM Peak Hour Enter	0.37	0.00	1.00	56
7-9 AM Peak Hour Exit	0.07	0.00	1.00	11
7-9 AM Peak Hour Total	0.44	0.69	1.00	66
4-6 PM Peak Hour Enter	0.09	0.00	1.00	14
4-6 PM Peak Hour Exit	0.33	0.00	1.00	50
4-6 PM Peak Hour Total	0.42	0.67	1.00	63
Saturday 2-Way Volume	0.48	0.72	1.00	72
Saturday Peak Hour Enter	0.02	0.00	1.00	3
Saturday Peak Hour Exit	0.03	0.00	1.00	5
Saturday Peak Hour Total	0.05	0.23	1.00	8

Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Arecibo Summary of Trip Generation Calculation For 150 Employees of General Light Industrial March 20, 2010

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	3.02	1.86	1.00	453 56
7-9 AM Peak Hour Enter	0.37	0.00	1.00 1.00	11
7-9 AM Peak Hour Exit	0.07	0.00	1.00	66
7-9 AM Peak Hour Total	0.44	0.69	1.00	14
4-6 PM Peak Hour Enter	0.09	0.00	1.00	50
4-6 PM Peak Hour Exit	0.33	0.00 0.67	1.00	63
4-6 PM Peak Hour Total	0.42	0.00	1.00	63
AM Pk Hr, Generator, Enter	0.42	0.00	1.00	9
AM Pk Hr, Generator, Exit	0.06 0.48	0.72	1.00	72
AM Pk Hr, Generator, Total	77.2	0.00	1.00	23
PM Pk Hr, Generator, Enter	0.13	0.00	1.00	54
PM Pk Hr, Generator, Exit		0.75	1.00	77
PM Pk Hr., Generator, Total	0.48	0.72	1.00	72
Saturday 2-Way Volume	0.02	0.00	1.00	3
Saturday Peak Hour Enter	0.03	0.00	1.00	5
Saturday Peak Hour Exit Saturday Peak Hour Total	0.05	0.23	1.00	8
Sunday 2-Way Volume	0.26	0.60	1.00	39
Sunday Peak Hour Enter	0.02	0.00	1.00	3
Sunday Peak Hour Exit	0.02	0.00	1.00	3
Sunday Peak Hour Total	0.04	0.20	1.00	6

Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Arecibo Summary of Trip Generation Rates For 150 Employees of General Light Industrial March 20, 2010

	Avg. Trip Rate	Min. Trip Rate	Max. Trip Rate	Std. Dev.	No. of Studies
Avg. Weekday 2-Way Volume 7-9 AM Peak Hour Enter 7-9 AM Peak Hour Exit 7-9 AM Peak Hour Total 4-6 PM Peak Hour Enter 4-6 PM Peak Hour Exit 4-6 PM Peak Hour Total AM Pk Hr, Generator, Enter AM Pk Hr, Generator, Exit AM Pk Hr, Generator, Total PM Pk Hr, Generator, Enter PM Pk Hr, Generator, Exit PM Pk Hr, Generator, Total Saturday 2-Way Volume Saturday Peak Hour Enter Saturday Peak Hour Exit Saturday Peak Hour Exit Sunday Peak Hour Enter Sunday Peak Hour Exit Sunday Peak Hour Exit Sunday Peak Hour Exit	3.02 0.37 0.07 0.44 0.09 0.33 0.42 0.42 0.06 0.48 0.15 0.36 0.51 0.48 0.02 0.03 0.05 0.02 0.02	1.53 0.07 0.01 0.08 0.01 0.03 0.04 0.22 0.03 0.25 0.10 0.26 0.36 0.29 0.02 0.02 0.02 0.04 0.12 0.01	4.48 0.85 0.17 1.02 0.20 0.75 0.95 0.89 0.13 1.02 0.34 0.84 1.18 1.32 0.10 0.11 0.21 2.09 0.14 0.15 0.29	1.86 0.00 0.00 0.69 0.00 0.67 0.00 0.72 0.00 0.75 0.72 0.00 0.23 0.60 0.00 0.20	0 0 21 6 0 0 5 4 0

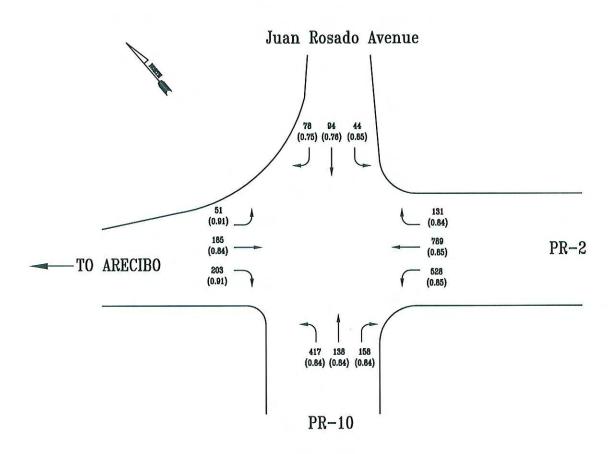
Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

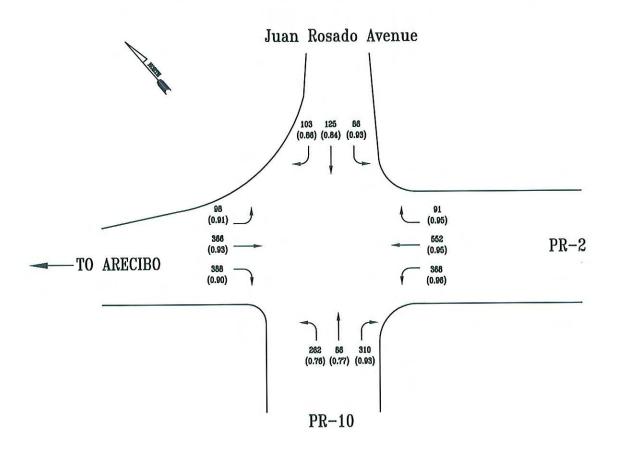


APPENDIX – E

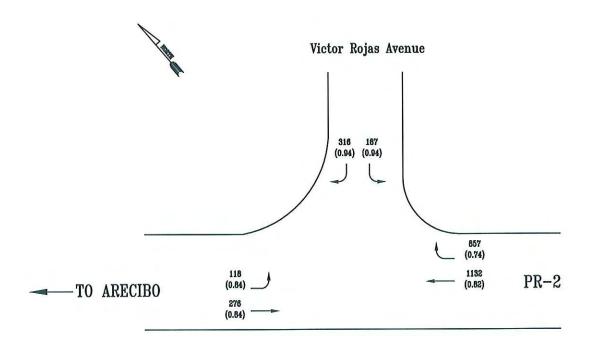
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE Existing AM Peak Hour Volumes and Peak Hour Factors



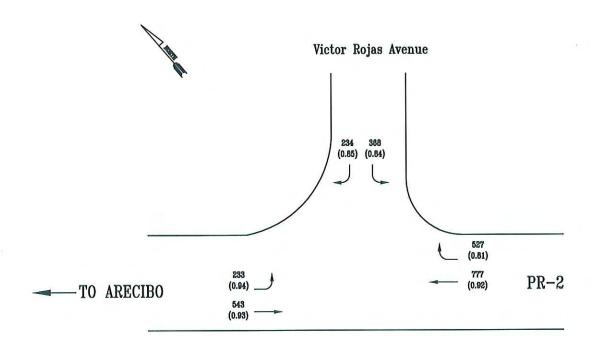
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE Existing PM Peak Hour Volumes and Peak Hour Factors



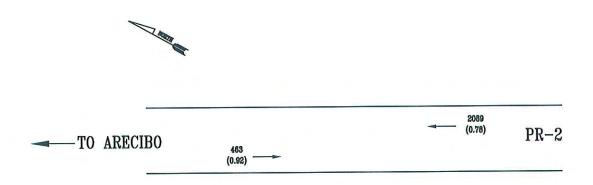
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE Existing AM Peak Hour Volumes and Peak Hour Factors



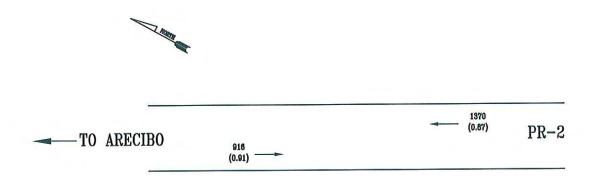
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE Existing PM Peak Hour Volumes and Peak Hour Factors



PR-2 KM. 73.1 Existing AM Peak Hour Volumes and Peak Hour Factors



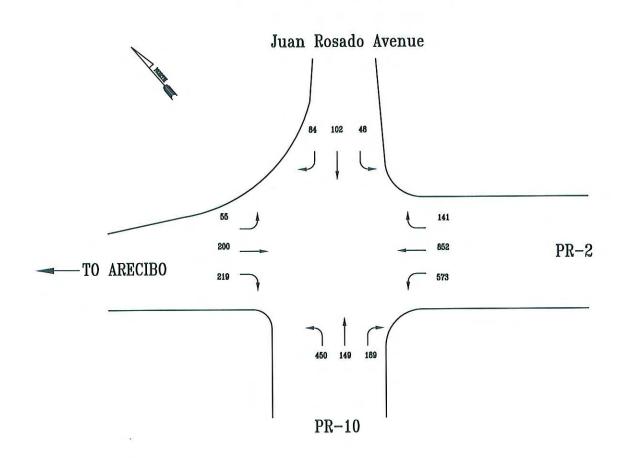
PR-2 KM. 73.1 Existing PM Peak Hour Volumes and Peak Hour Factors



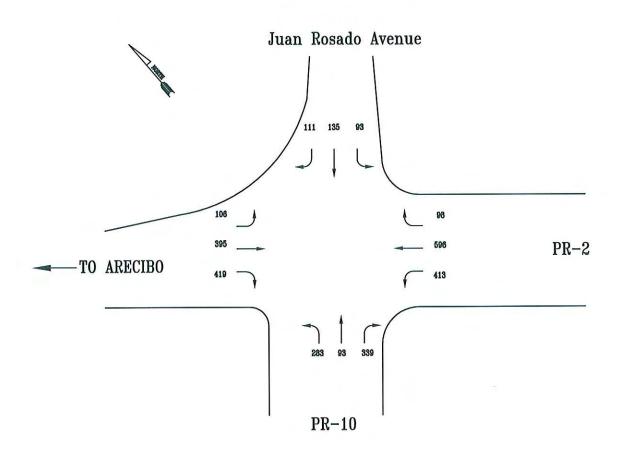


APPENDIX - F

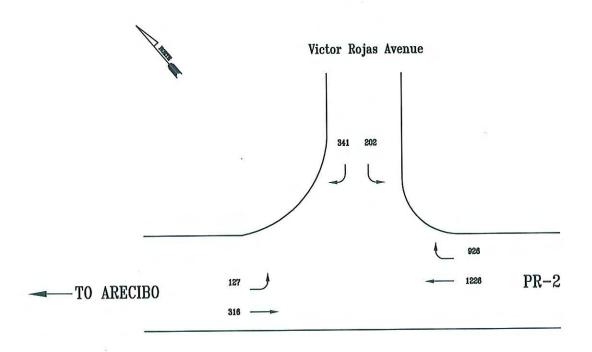
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE 2013 AM Peak Hour Volumes



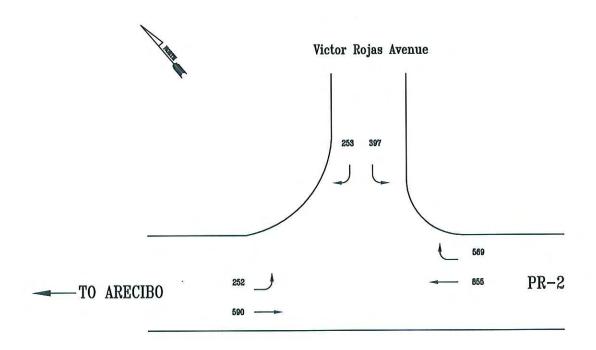
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE 2013 PM Peak Hour Volumes



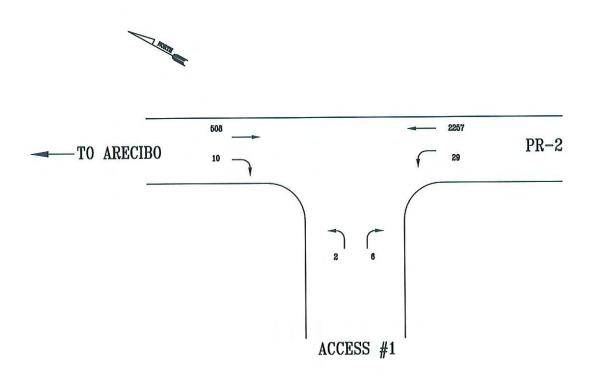
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE 2013 AM Peak Hour Volumes



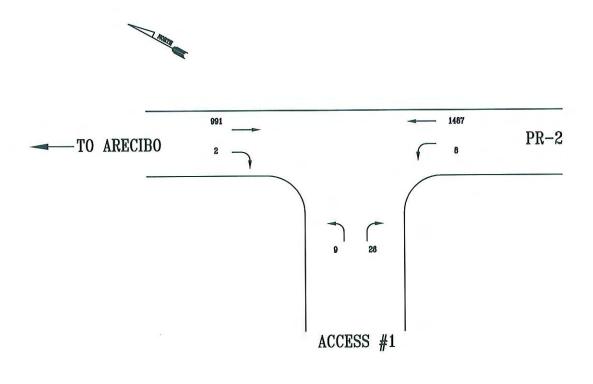
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE 2013 PM Peak Hour Volumes



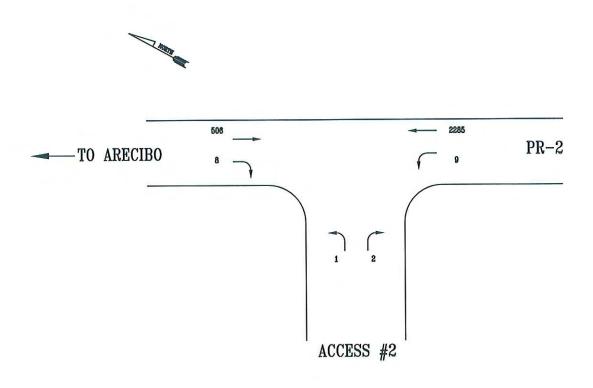
INTERSECTION #3: PR-2 AND ACCESS #1 2013 AM Peak Hour Volumes



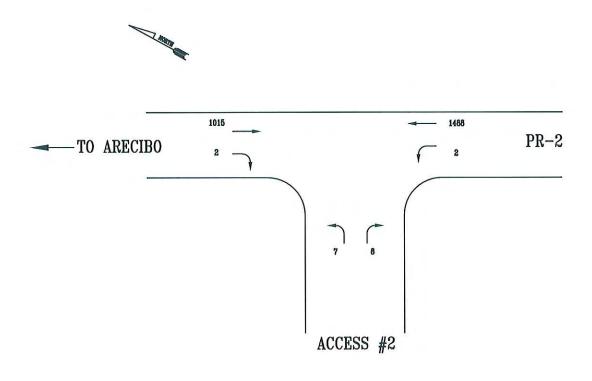
INTERSECTION #3: PR-2 AND ACCESS #1 2013 PM Peak Hour Volumes



INTERSECTION #4: PR-2 AND ACCESS #2 2013 AM Peak Hour Volumes



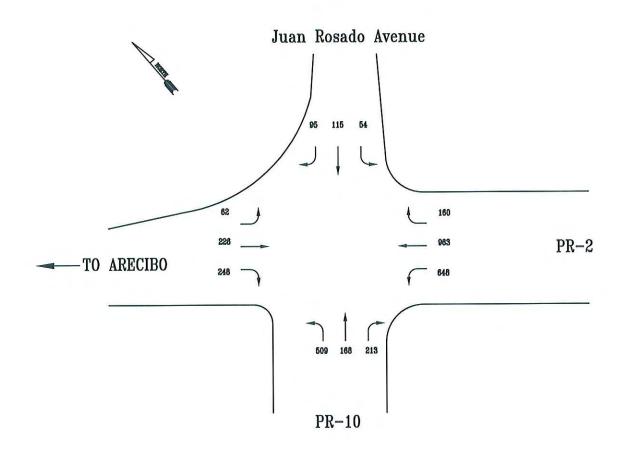
INTERSECTION #4: PR-2 AND ACCESS #2 2013 PM Peak Hour Volumes



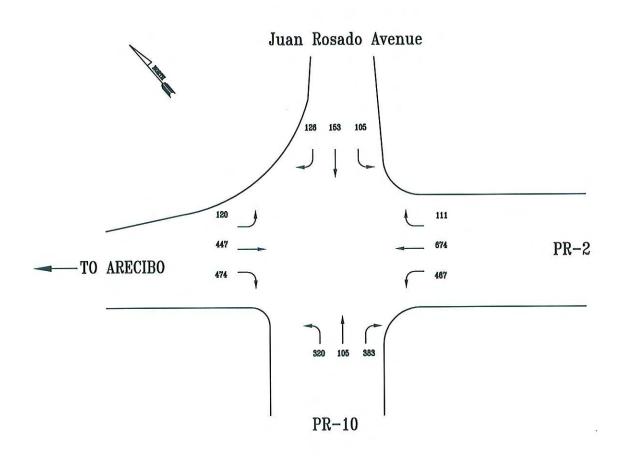


APPENDIX – G

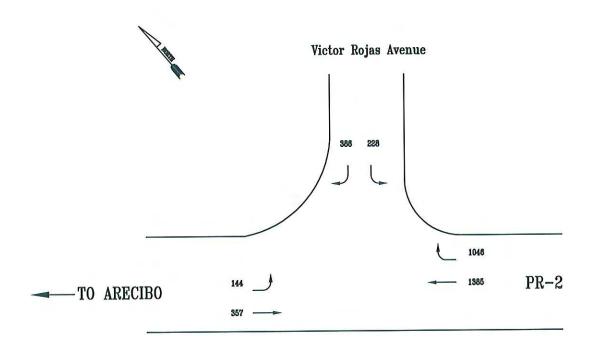
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE 2018 AM Peak Hour Volumes



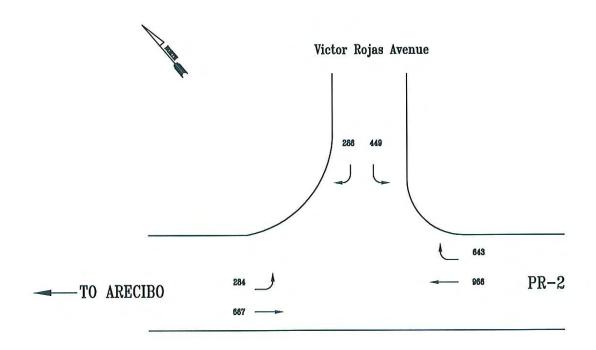
INTERSECTION #1: PR-2 & PR-10 AND JUAN ROSADO AVENUE 2018 PM Peak Hour Volumes



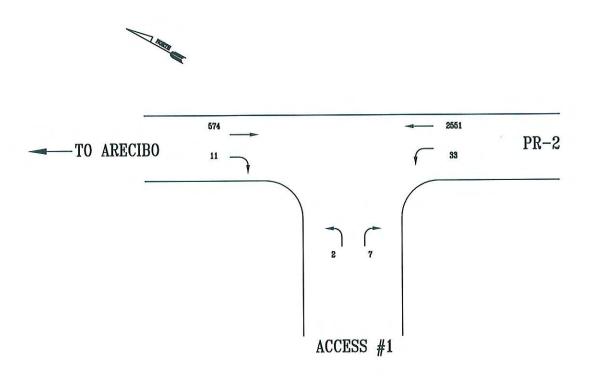
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE 2018 AM Peak Hour Volumes



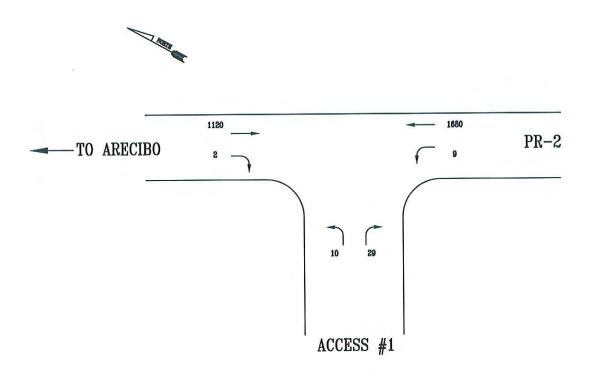
INTERSECTION #2: PR-2 & VICTOR ROJAS AVENUE 2018 PM Peak Hour Volumes



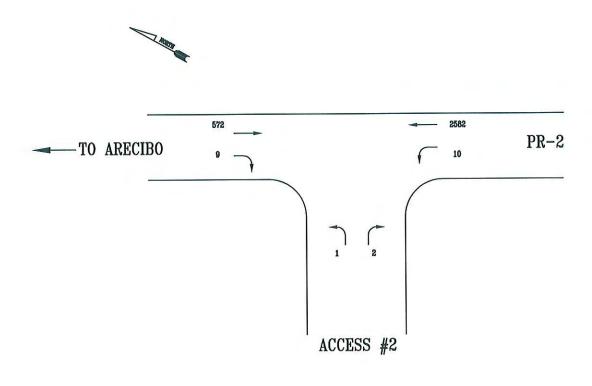
INTERSECTION #3: PR-2 AND ACCESS #1 2018 AM Peak Hour Volumes



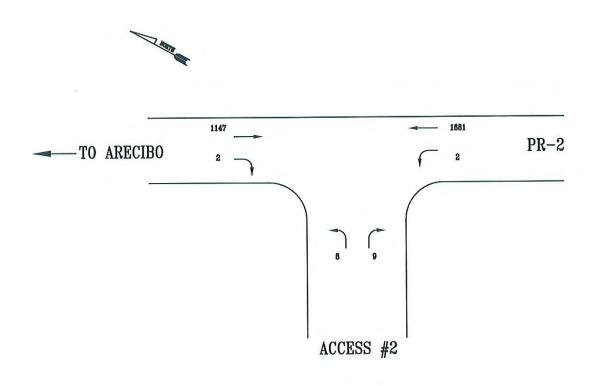
INTERSECTION #3: PR-2 AND ACCESS #1 2018 PM Peak Hour Volumes



INTERSECTION #4: PR-2 AND ACCESS #2 2018 AM Peak Hour Volumes



INTERSECTION #4: PR-2 AND ACCESS #2 2018 PM Peak Hour Volumes





APPENDIX – H

EXISTING AIM FEAK	138	N	i	1	K	7	y	A	1	6	N	K
l O	SEL	SET	SER	NWL.	TWN	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Group	N N	↑ ↑	OLIT	1979	介含			413			of 13	
Lane Configurations		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	10	11	11	9	11	11	12	11	12	12	11	12
Lane Width (ft)	10	0%	11	0	0%	- "		0%			0%	
Grade (%)	40	070	0	85	070	0	0		0	0		0
Storage Length (ft)	48		0	2		0	0		0	0		0
Storage Lanes	1			4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Total Lost Time (s)	4.5	4.5	4.5		50	4.0	50	50		50	50	
Leading Detector (ft)	48	50		50			0	0		0	0	
Trailing Detector (ft)	0	0		0	0	0	15	U	9	15	-	9
Turning Speed (mph)	15		9	15	0.05	9		0.95	0.95	0.95	0.95	0.95
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	0.90	0.55	0.00	0.00
Ped Bike Factor								0.007			0.944	
Frt		0.925			0.978			0.967			0.991	
Fit Protected	0.950			0.950			120	0.972		0		0
Satd. Flow (prot)	1652	3165	0	3090	3346	0	0	3216	0	0	3201	U
Fit Permitted	0.950			0.950				0.972		-	0.991	_
Satd. Flow (perm)	1652	3165	0	3090	3346	0	0	3216	0	0	3201	0
	1002	0.00	Yes			Yes			Yes			Yes
Right Turn on Red		187	, 00		14			23			65	
Satd. Flow (RTOR)	1.09	1.04	1.04	1.14	1.04	1.04	1.00	1.04	1.00	1.00	1.04	1.00
Headway Factor	1.09	35	1.04		45			35			25	
Link Speed (mph)					4064			1070			1297	
Link Distance (ft)		1093			61.6			20.8			35.4	
Travel Time (s)		21.3	202	528	789	131	417	138	158	44	94	78
Volume (vph)	51	185	203	520	109	101	711	100	1.00			
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)		Charles .		0.05	0.05	0.04	0.84	0.84	0.84	0.85	0.76	0.75
Peak Hour Factor	0.91	0.84	0.91	0.85	0.85	0.84	107%	107%	107%	107%	107%	107%
Growth Factor	107%	107%	107%	107%	107%	107%		2%	2%	2%	2%	2%
Heavy Vehicles (%)	2%	2%	2%	2%	2%		2%		0	0	0	0
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	U	U	U	U
Parking (#/hr)								001			0%	
Mid-Block Traffic (%)		0%			0%			0%	004	r.c		111
Adj. Flow (vph)	60	236	239	665	993		531	176	201	55	132	
Lane Group Flow (vph)	212	475	0	665	1160	0	0	908	0			U
	Prot			Prot			Split			Split		
Turn Type Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	1	6		5	2	2	4	4		8		
Detector Phases		4.0		4.0			4.0	4.0		4.0		
Minimum Initial (s)	4.0	20.5		8.5			20.5			20.0	20.0	
Minimum Split (s)	8.5		0.0							24.5	24.5	0.0
Total Split (s)	24.5	59.5	0.0	16.0%				29.1%		16.0%	16.0%	0.0%
Total Split (%)		38.9%					3.0			3.0		
Yellow Time (s)	3.0			3.0			1.5			1.5		
All-Red Time (s)	1.5			1.5			1.0	1.0				
Lead/Lag	Lead			Lead								
Lead-Lag Optimize?	Yes			Yes				Name		None	None	2
Recall Mode	None	Min		None			None			NOTE	14.	
Act Effct Green (s)	10.1			20.5				41.0			0.1	
Actuated g/C Ratio	0.08			0.16	0.3	8		0.3	1		0.1	1

Constitution of the Parket	14	M	À		K	M	7	A	174	4	×	WLI
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.48	0.47		1.38	0.91			0.96dl			0.72	
	64.9	22.7		223.2	45.7			55.9			49.5	
Control Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Queue Delay		22.7		223.2	45.7			55.9			49.5	
Total Delay	64.9			723.Z F	D			E			D	
LOS	E	С		Ĺ				55.9			49.5	
Approach Delay		27.5			110.4			50.5 E			D	
Approach LOS		С			F			E-				

Area Type:

Other

Cycle Length: 153

Actuated Cycle Length: 131.2

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.38
Intersection Signal Delay: 79.0

Intersection LOS: E ICU Level of Service D

Intersection Capacity Utilization 77.7%

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: PR-2 & J Rosado Ave

ol el	* ₀₂	3 04	M 98
24.5 s	59.5 \$	44.5 s	24.5 \$
ø5	№ ø6		
2450	59.5 s	SPECIAL REPORT OF THE PERSON O	

	A		4-	River	1	1	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	19	<u></u>	介		N. W.		
Ideal Flow (vphpl)		1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)		0%	0%		0%		
Storage Length (ft)	220			0	0	0	
Storage Lanes	1			0	2	0	
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0	
	50	50	50		50		
Leading Detector (ft)	0	0	0		0		
Trailing Detector (ft)	15	U	v	9	15	9	
Turning Speed (mph)	1.00	0.95	0.95	0.95	0.97	0.95	
Lane Util. Factor	1.00	0.83	0.00	0.00	0.07	414.7	
Ped Bike Factor			0.932		0.906		
Frt	0.000		0.532		0.982		
Flt Protected	0.950	2520	2200	0	3215	0	
Satd. Flow (prot)	1770	3539	3299	U	0.982	U	
FIt Permitted	0.950	0.000	0000	0	3215	0	
Satd. Flow (perm)	1770	3539	3299	0	3215		
Right Turn on Red				Yes	000	Yes	
Satd. Flow (RTOR)			180		360	4.00	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		45	45		35		
Link Distance (ft)		4064	4074		1144		
Travel Time (s)		61.6	61.7		22.3		
Volume (vph)	118	276	1132	857	187	316	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.84	0.84	0.82	0.74	0.94	0.94	
Growth Factor	107%	107%	107%	107%	107%	107%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)		0%	0%		0%		
	150	352	1477	1239	213	360	
Adj. Flow (vph)		352	2716	0	573	0	
Lane Group Flow (vph)	Prot	002	2, 10				
Turn Type	5	2	6		4		
Protected Phases	3	2	Ü				
Permitted Phases	E	2	6		4		
Detector Phases	5	4.0			4.0		
Minimum Initial (s)	4.0				21.0		
Minimum Split (s)	8.0	21.0					
Total Split (s)	24.0	64.0			46.2%		
Total Split (%)			33.6%		3.0		
Yellow Time (s)	2.0				2.0		
All-Red Time (s)	2.0				2.0		
Lead/Lag	Lead		Lag				
Lead-Lag Optimize?	Yes		Yes				
Recall Mode	None				None		
Act Effct Green (s)	11.1				10.8		
Actuated g/C Ratio	0.16	0.70	0.52	2	0.16)	

H:\09PR078\C00\C-CIVIL\DAT\ARRF_PR-2 Net_Actual AM.sy7 Ruth Miriam Vargas CSA Architects

Control of the Contro	w.A		4—	A.	1	d	
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	
v/c Ratio	0.55	0.14	1.51		0.71		
Control Delay	30.9	4.1	253.7		11.3		
Queue Delay	0.0	0.0	0.0		0.0		
Total Delay	30.9	4.1	253.7		11.3		
LOS	С	Α	F		В		
Approach Delay		12.1	253.7		11.3		
Approach LOS		В	F		В		

Area Type:

Other

Cycle Length: 119

Actuated Cycle Length: 69.6

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.51

Intersection Signal Delay: 185.1

Intersection Capacity Utilization 98.0%

Analysis Period (min) 15

Intersection LOS: F
ICU Level of Service F

Splits and Phases: 2: PR-2 & V Rojas Ave

-le -2		₩ ø4	
		55 %	
ø5	ø6		

	4	×	2	15	K	(7	×	1	Ĺ	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	7	1		44	1			बीक			बीक	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	12	11	12	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		.0	85		0	0		0	0		0
Storage Lanes	1		0	2		0	0		0	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		. 0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.925			0.978			0.964			0.944	
Flt Protected	0.950			0.950				0.972			0.991	
Satd. Flow (prot)	1652	3165	0	3090	3346	0	0	3169	0	0	3201	0
Flt Permitted	0.950			0.950				0.972			0.991	
Satd. Flow (perm)	1652	3165	0	3090	3346	0	0	3169	0	0	3201	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		186			14			26			64	
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.00	1.04	1.00	1.00	1.04	1.00
Link Speed (mph)		35			45			35			25	
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)		21.3			61.6			20.8			35.4	
Volume (vph)	55	200	219	573	852	141	450	149	189	48	102	84
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.84	0.91	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.76	0.75
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			-		-	-						
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	65	255	258	721	1073	180	573	190	238	60	144	120
Lane Group Flow (vph)		513	0	721	1253	0	0	1001	0	0	324	0
Turn Type	Prot	2.12		Prot	1,000		Split			Split		
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases												
Detector Phases	1	6		5	2		4	4		8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	24.5	59.5	0.0	44.5	44.5	0.0	24.5	24.5	0.0
Total Split (%)		38.9%					29.1%			16.0%		0.0%
Yellow Time (s)	3.0	3.0	0.075	3.0	3.0	2.070	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lead/Lag	Lead	Lag		Lead	Lag		1.0			1,5		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	10.7	43.5		20.1	55.3		110110	40.2		, 10110	16.0	
Actuated g/C Ratio	0.08	0.32		0.15	0.40			0.29			0.12	

	4	X	1		K	7	7	×	1	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.51	0.46		1.60	0.93			1.11dl			0.76	
Control Delay	66.4	24.2		317.2	52.6			92.8			53.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	66.4	24.2		317.2	52.6			92.8			53.9	
LOS	Е	С		F	D			F			D	
Approach Delay		28.9			149.3			92.8			53.9	
Approach LOS		С			F			F			D	

Area Type: Other

Cycle Length: 153

Actuated Cycle Length: 138

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.60

Intersection Signal Delay: 108.8
Intersection Capacity Utilization 82.4%

Intersection LOS: F
ICU Level of Service E

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: PR-2 & J Rosado Ave

ø1	× ø2	¾ ∞4	M 08
24.5 s	59.5 s	44.5 s	24.5 s
№ ø5	¥ ø6		
24.5 s	59.5 s		

	A		4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	K	44	1		WW.	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	14	0%	0%	14	0%	12
Storage Length (ft)	220	0 70	0 70	0	0	0
Storage Lanes	1			0	2	0
	4.0	5.0	5.0	5.0	5.0	5.0
Total Lost Time (s)	50	5.0	50	5.0	50	0.0
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)		U	U	0		0
Turning Speed (mph)	15	0.05	0.05	9	15	0.05
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Ped Bike Factor			0.000		0.000	
Frt			0.932		0.906	
Flt Protected	0.950				0.982	
Satd. Flow (prot)	1770	3438	3299	0	3215	0
Flt Permitted	0.950				0.982	
Satd. Flow (perm)	1770	3438	3299	0	3215	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			179		388	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	1.00	45	45	1.50	35	,,,,,
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
	127	316	1226	926	202	341
Volume (vph)	121	310	1220	920	202	041
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)	0.07	0.05	0.00	0.74	0.01	0.04
Peak Hour Factor	0.84	0.85	0.82	0.74	0.94	0.94
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	162	398	1600	1339	230	388
Lane Group Flow (vph)	162	398	2939	0	618	0
Turn Type	Prot					
Protected Phases	5	2	6		4	
Permitted Phases	0	_	0			
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
					21.0	
Minimum Split (s)	8.0	21.0	21.0	0.0		0.0
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		53.8%		0.0%	46.2%	0.0%
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	11.6	49.1	36.2		11.4	
Actuated g/C Ratio	0.16	0.69	0.51		0.16	
o.aa.oa g. o raalo	0.10	0.00	5.51			

	<u></u>		4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.57	0.17	1.66		0.73	
Control Delay	31.7	4.4	318.1		11.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	31.7	4.4	318.1		11.4	
LOS	C	Α	F		В	
Approach Delay		12.3	318.1		11.4	
Approach LOS		В	F		В	
Intersection Summar	У					
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Leng	th: 70.8					
Natural Cycle: 150						
Control Type: Actuate		linated				
Maximum v/c Ratio:						
Intersection Signal D	elay: 230.5			li	ntersect	ion LOS:

ICU Level of Service G

Splits and Phases: 2: PR-2 & V Rojas Ave

Intersection Capacity Utilization 105.0% Analysis Period (min) 15



	1	1	1	1	1	1				
Movement	EBL	EBR	NBL	NBT	SBT	SBR				
Lane Configurations	W		N	ተተ	ተ ተ	7				
Sign Control	Stop		•	Free	Free					
Grade	0%			0%	0%					
Volume (veh/h)	2	6	29	2257	508	10				
Peak Hour Factor	1.00	1.00	1.00	0.78	0.92	1.00				
Hourly flow rate (vph)	2	6	31	3096	591	11				
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type	None									
Median storage veh)										
Upstream signal (ft)										
pX, platoon unblocked										
vC, conflicting volume	2201	295	602							
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	2201	295	602							
tC, single (s)	8.8	8.9	6.1							
tC, 2 stage (s)										
tF(s)	4.5	4.3	3.2							
p0 queue free %	79	99	94							
cM capacity (veh/h)	10	479	524							
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	9	31	1548	1548	295	295	11			
Volume Left	2	31	0	0	0	0	0			
Volume Right	6	0	0	0	0	0	11			
cSH	38	524	1700	1700	1700	1700	1700			
Volume to Capacity	0.22	0.06	0.91	0.91	0.17	0.17	0.01			
Queue Length 95th (ft)	18	5	0	0	0	0	0			
Control Delay (s)	124.2	12.3	0.0	0.0	0.0	0.0	0.0			
Lane LOS	F	В								
Approach Delay (s)	124.2	0.1			0.0					
Approach LOS	F									
Intersection Summary								- Junio		
Average Delay			0.4							
Intersection Capacity U	tilization		76.8%	10	CU Leve	el of Ser	vice		D	
Analysis Period (min)			15							

	1	1	1	1	↓	1			
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		19	个个	44	71			
Sign Control	Stop		·	Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	1	2	9	2285	506	8			
Peak Hour Factor	1.00	1.00	1.00	0.79	0.92	1.00			
Hourly flow rate (vph)	1	2	10	3095	588	9			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	Raised								
Median storage veh)	0								
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2155	294	597						
vC1, stage 1 conf vol	588								
vC2, stage 2 conf vol	1567								
vCu, unblocked vol	2155	294	597						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)	5.8								
tF(s)	3.5	3.3	2.2						
p0 queue free %	99	100	99						
cM capacity (veh/h)	91	702	976						
Direction, Lane#	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	3	10	1547	1547	294	294	9		
Volume Left	1	10	0	0	0	0	0		
Volume Right	2	0	0	0	0	0	9		
cSH	216	976	1700	1700	1700	1700	1700		
Volume to Capacity	0.01	0.01	0.91	0.91	0.17	0.17	0.01		
Queue Length 95th (ft)		1	0	0	0	0	0		
Control Delay (s)	21.9	8.7	0.0	0.0	0.0	0.0	0.0		
Lane LOS	C	A	0.0	5.0	5.0	5.0	7.7		
Approach Delay (s)	21.9	0.0			0.0				
Approach LOS	С	2.50							
Intersection Summary			N						
Average Delay			0.0						
Intersection Capacity U	Jtilization		77.6%	10	CU Leve	el of Ser	vice	D	
Analysis Period (min)			15						
	Jtilization			10	CU Leve	el of Ser	vice	D	

	4	×	1	1	K	C	7	A	174	4	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	7	1		44	1			414	7		413	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	10	10	10	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		60	0		0
Storage Lanes	1		0	2		0	0		1	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	. 0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.925			0.978				0.850		0.944	
Flt Protected	0.950			0.950				0.964			0.991	
Satd. Flow (prot)	1652	3165	0	3090	3346	0	0	3184	1409	0	3201	0
Flt Permitted	0.950			0.950				0.964			0.991	
Satd. Flow (perm)	1652	3165	0	3090	3346	0	0	3184	1409	0	3201	0
Right Turn on Red		120 2000	Yes	130203000		Yes			Yes			Yes
Satd. Flow (RTOR)		162			14				78		57	1,55
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09	1.09	1.00	1.04	1.00
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)		16.6			61.6			20.8			35.4	
Volume (vph)	55	200	219	573	852	141	450	149	189	48	102	84
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.84	0.91	0.85	0.85	0.84	0.84	0.84	0.85	0.85	0.76	0.75
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	65	255	258	721	1073	180	573	190	238	60	144	120
Lane Group Flow (vph)	65	513	0	721	1253	0	0	763	238	0	324	0
Turn Type	Prot			Prot			Split		pt+ov	Split		
Protected Phases	1	6		5	2		4	4	45	8	8	
Permitted Phases												
Detector Phases	1	6		5	2		4	4	45	8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	39.0	74.0	0.0	44.5	44.5	83.5	24.5	24.5	0.0
Total Split (%)		35.5%		23.3%					49.9%			0.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	10.9	34.5		35.3	61.6			39.4	74.6		16.3	
Act Effet Green (s) Actuated g/C Ratio	0.07	0.24		0.25	0.43			0.27	0.52		0.11	

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	4	X	7	1	K	1	7	×	74	h	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.52	0.58		0.95	0.87			1.27dl	0.31		0.78	
Control Delay	72.0	32.5		77.1	43.4			61.9	9.8		59.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	72.0	32.5		77.1	43.4			61.9	9.8		59.8	
LOS	Е	C		E	D			E	Α		E	
Approach Delay		36.9			55.7			49.5			59.8	
Approach LOS		D			E			D			E	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												

Area Type: Other

Cycle Length: 167.5

Actuated Cycle Length: 143.8

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 51.6

Intersection LOS: D

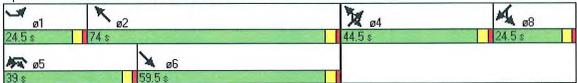
Intersection Capacity Utilization 82.4%

ICU Level of Service E

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

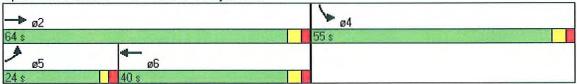
1: PR-2 & J Rosado Ave Splits and Phases:



	1	-	←	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7	44	44	7/	N/W	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	220	3,0	3,0	400	0	0
Storage Lanes	1			1	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	3.0
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	U	Ū	9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
Ped Bike Factor	1.00	0.80	0.80	1.00	0.01	0.50
Frt				0.850	0.906	
	0.050			0.000	0.982	
Flt Protected	0.950	2400	2520	1500		0
Satd. Flow (prot)	1770	3438	3539	1583	3215	0
Flt Permitted	0.950		0.000	4	0.982	
Satd. Flow (perm)	1770	3438	3539	1583	3215	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				818	388	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		45	45		35	
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
Volume (vph)	127	316	1226	926	202	341
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.84	0.85	0.82	0.74	0.94	0.94
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
	U	U	U	U	U	U
Parking (#/hr)		00/	00/		00/	
Mid-Block Traffic (%)	400	0%	0%	1000	0%	200
Adj. Flow (vph)	162	398	1600	1339	230	388
Lane Group Flow (vph)	162	398	1600	1339	618	0
Turn Type	Prot			Free		
Protected Phases	5	2	6		4	
Permitted Phases				Free		
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0		21.0	
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)					46.2%	0.0%
Yellow Time (s)	2.0	3.0	3.0	,	3.0	- 17 (7
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead	2.0	Lag		2.0	
	Yes		Yes			
Lead-Lag Optimize?		Min			None	
Recall Mode	None	Min	Min	70.0	None	
Act Effct Green (s)	11.6	49.1	36.2	70.8	11.4	
Actuated g/C Ratio	0.16	0.69	0.51	1.00	0.16	

	A	-	←	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.57	0.17	0.88	0.85	0.73	
Control Delay	31.7	4.4	27.1	6.3	11.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	31.7	4.4	27.1	6.3	11.4	
LOS	С	Α	C	Α	В	
Approach Delay		12.3	17.6		11.4	
Approach LOS		В	В		В	
Intersection Summar	y					
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Lengt	th: 70.8					
Natural Cycle: 75						
Control Type: Actuate	ed-Uncoord	linated				
Maximum v/c Ratio: 0						
Intersection Signal De	elay: 16.0			Ir	ntersecti	on LOS: E
Intersection Capacity		73.2%		10	CU Leve	of Service
Analysis Period (min)	15					

Splits and Phases: 2: PR-2 & V Rojas Ave



	Care Contract	1	1	Ť	4	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W/		1	44	44	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	14	12	0%	0%	12
Storage Length (ft)	0	0	350	0 70	0 70	400
Storage Lanes	1	0	1			1
	4.0	4.0	4.0	4.0	4.0	4.0
Total Lost Time (s)	50	4.0	50	50	50	50
Leading Detector (ft)			0	0	0	0
Trailing Detector (ft)	0	0		U	U	
Turning Speed (mph)	15	9	15	0.05	0.05	9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Frt	0.899		Tan 12			0.850
FIt Protected	0.988		0.950			
Satd. Flow (prot)	844	0	902	3539	3539	808
Flt Permitted	0.988		0.950			
Satd. Flow (perm)	844	0	902	3539	3539	808
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	6					11
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	15		11.55	45	45	7
Link Distance (ft)	773			848	3282	
Travel Time (s)	35.1			12.8	49.7	
Volume (vph)	2	6	29	2257	508	10
Confl. Peds. (#/hr)		0	20	2201	000	10
Confl. Bikes (#/hr)						
	4.00	4.00	1.00	0.70	0.02	1.00
Peak Hour Factor	1.00	1.00	1.00	0.78	0.92	
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	100%	100%	100%	2%	2%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	2	6	31	3096	591	11
Lane Group Flow (vph) 8	0	31	3096	591	11
Turn Type			Prot			Free
Protected Phases	4		5	2	6	
Permitted Phases			-		19/1	Free
Detector Phases	4		5	2	6	
Minimum Initial (s)	10.0		4.0	4.0	4.0	
Minimum Split (s)	25.0		15.0	40.0	25.0	
	25.0	0.0	20.0	45.0	25.0	0.0
Total Split (s)			28.6%			0.0%
Total Split (%)	35.7%	0.0%				0.0%
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	1.5		1.5	1.5	1.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes	76.5	Yes	
Recall Mode	None		None	Max	Max	
Act Effct Green (s)	11.4		10.0	89.4	79.8	94.8
Actuated g/C Ratio	0.11		0.10	0.94	0.84	1.00

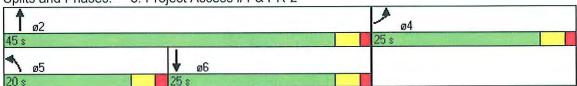
<u></u> ▶	1	4	†	Ţ	1
EBL	EBR	NBL	NBT	SBT	SBR
0.08		0.35	0.93	0.20	0.01
15.1		22.7	11.9	4.0	0.0
0.0		0.0	0.0	0.0	0.0
15.1		22.7	11.9	4.0	0.0
В		C	В	Α	Α
15.1			12.0	3.9	
В			В	Α	
у					
Other					
th: 94.8					
	0.08 15.1 0.0 15.1 B 15.1 B	0.08 15.1 0.0 15.1 B 15.1 B V Other	0.08 0.35 15.1 22.7 0.0 0.0 15.1 22.7 B C 15.1 B Other th: 94.8	0.08 0.35 0.93 15.1 22.7 11.9 0.0 0.0 0.0 15.1 22.7 11.9 B C B 15.1 12.0 B B Other th: 94.8	0.08

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.93 Intersection Signal Delay: 10.7 Intersection Capacity Utilization 81.8%

Intersection LOS: B
ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: Project Access #1 & PR-2



	1	1	1	†	↓	1		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	N/A		14	44	44	17		
Sign Control	Stop		9	Free	Free	- 1		
Grade	0%			0%	0%			
Volume (veh/h)	1	2	9	2285	506	8		
Peak Hour Factor	1.00	1.00	1.00	0.79	0.92	1.00		
Hourly flow rate (vph)	1	2	10	3095	588	9		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)				14				
Percent Blockage								
Right turn flare (veh)								
Median type	Raised							
Median storage veh)	0							
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	2155	294	597					
vC1, stage 1 conf vol	588							
vC2, stage 2 conf vol	1567							
vCu, unblocked vol	2155	294	597					
tC, single (s)	6.8	6.9	4.1					
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3	2.2					
p0 queue free %	99	100	99					
cM capacity (veh/h)	91	702	976					
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	
Volume Total	3	10	1547	1547	294	294	9	_
Volume Left	1	10	0	0	0	0	0	
Volume Right	2	0	0	0	0	0	9	
cSH	216	976	1700	1700	1700	1700	1700	
Volume to Capacity	0.01	0.01	0.91	0.91	0.17	0.17	0.01	
Queue Length 95th (ft)		1	0	0	0	0	0	
Control Delay (s)	21.9	8.7	0.0	0.0	0.0	0.0	0.0	
Lane LOS	C	А	0.0	0.0	0.0	0.0	0.0	
Approach Delay (s)	21.9	0.0			0.0			
Approach LOS	С	15.16						
Intersection Summary								
Average Delay			0.0					
Intersection Capacity L	Jtilization		77.6%	10	CU Leve	el of Ser	vice	
Analysis Period (min)			15					

	4	×	2	1	K	7	7	×	74	4	K	W
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	19	13		44	1			414	7		46	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	10	10	10	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		60	0		0
Storage Lanes	1		0	2		0	0		1	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0-		0	0		0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	1100	0.00	0.00	0.00
Frt		0.924			0.979				0.850		0.945	
FIt Protected	0.950	0.02.1		0.950	0.010			0.964	0.000		0.991	
Satd. Flow (prot)	1652	3161	0	3090	3349	0	0	3184	1409	0	3204	0
FIt Permitted	0.950	0101	U	0.950	0040	U		0.964	1400	U	0.991	·
Satd. Flow (perm)	1652	3161	0	3090	3349	0	0	3184	1409	0	3204	0
Right Turn on Red	1002	3101	Yes	3030	3343	Yes	U	3104	Yes	U	3204	Yes
		167	165		14	165			75		56	163
Satd. Flow (RTOR)	1.00		1.04	111		1.04	1.00	1.00	1.09	1.00		1.00
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09	1.09	1.00	1.04	1.00
Link Speed (mph)		45			45							
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)	00	16.6	040	040	61.6	400	500	20.8	040	EA	35.4	OF
Volume (vph)	62	226	248	648	963	160	509	168	213	54	115	95
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)	0.00	0.05	0.04	0.00	0.05	0.05	0.05	0.05	0.00	0.05	0.70	0.70
Peak Hour Factor	0.92	0.85	0.91	0.86	0.85	0.85	0.85	0.85	0.89	0.85	0.76	0.76
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)					001			001			00/	
Mid-Block Traffic (%)		0%	222		0%	100		0%			0%	
Adj. Flow (vph)	72	284	292	806	1212	201	641	211	256	68	162	134
Lane Group Flow (vph)	72	576	0	806	1413	0	0	852	256	0	364	0
Turn Type	Prot			Prot	-		Split		pt+ov	Split		
Protected Phases	1	6		5	2		4	4	45	8	8	
Permitted Phases												
Detector Phases	1	6		5	2		4	4	45	8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	39.0	74.0	0.0	44.5	44.5	83.5	24.5	24.5	0.0
Total Split (%)		35.5%	0.0%	23.3%	44.2%	0.0%			49.9%			0.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	12.2	47.2		34.5	69.6			40.0	74.6		18.7	
Actuated g/C Ratio	0.08	0.30		0.22	0.44			0.25	0.47		0.12	

	4	X	1		M	7	7	A	174	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.57	0.54		1.20	0.96			1.54dl	0.36		0.85	
Control Delay	76.0	33.9		153.9	57.8			104.0	12.3		72.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	76.0	33.9		153.9	57.8			104.0	12.3		72.4	
LOS	E	C		F	E			F	В		E	
Approach Delay		38.6			92.7			82.8			72.4	
Approach LOS		D			F			F			E	

Area Type:

Other

Cycle Length: 167.5

Actuated Cycle Length: 158.5

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.20

Intersection Signal Delay: 80.4

Intersection LOS: F

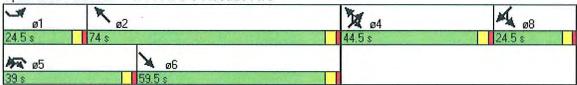
Intersection Capacity Utilization 91.1%

ICU Level of Service F

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

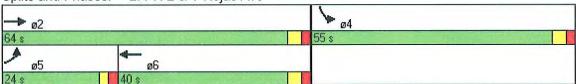
Splits and Phases: 1: PR-2 & J Rosado Ave



	1	-	+	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7	^	个个	7	TY	2011
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	12	0%	0%	12	0%	12
Storage Length (ft)	220	0 / 0	370	400	0	0
Storage Lanes	1			1	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	3.0
Trailing Detector (ft)	0	0	0	0	0	
		U	U			0
Turning Speed (mph)	15	0.05	0.05	9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
Ped Bike Factor						
Frt				0.850	0.906	
Flt Protected	0.950				0.982	
Satd. Flow (prot)	1770	3438	3539	1583	3215	0
FIt Permitted	0.950				0.982	
Satd. Flow (perm)	1770	3438	3539	1583	3215	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				817	397	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		45	45		35	
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
Volume (vph)	144	357	1385	1046	228	386
Confl. Peds. (#/hr)	177	001	1000	1040	220	000
Confl. Bikes (#/hr)						
Peak Hour Factor	0.05	0.00	0.00	0.75	0.04	0.05
	0.85	0.88	0.83	0.75	0.94	0.95
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	181	434	1785	1492	260	435
Lane Group Flow (vph)	181	434	1785	1492	695	0
Turn Type	Prot			Free		
Protected Phases	5	2	6		4	
Permitted Phases				Free		
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0		21.0	
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		53.8%			46.2%	0.0%
				0.076		0.076
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	Min	Min	100	None	
Act Effct Green (s)	12.9	52.6	35.6	76.5	13.7	
Actuated g/C Ratio	0.17	0.69	0.47	1.00	0.18	

	A	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.61	0.18	1.08	0.94	0.77	
Control Delay	33.6	5.1	72.0	14.7	13.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	33.6	5.1	72.0	14.7	13.2	
LOS	С	Α	E	В	В	
Approach Delay		13.5	45.9		13.2	
Approach LOS		В	D		В	
Intersection Summa	ary					
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Len	gth: 76.5					
Natural Cycle: 90						
Control Type: Actua		linated				
Maximum v/c Ratio:						
Intersection Signal I	The state of the s					on LOS:
Intersection Capacit		81.2%		10	CU Leve	of Servi
Analysis Period (min	n) 15					

Splits and Phases: 2: PR-2 & V Rojas Ave



Lane Group		A	1	1	1	1	1
Lane Configurations W 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 19	Lane Group	EBL	EBR	NBI	NBT	SBT	SBR
Deal Flow (vphpl)							The state of the state of
Lane Width (fft)			1900				
Grade (%) 0% 0% 0% 400 Storage Length (ft) 0 0 350 400 400 Storage Lanes 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <t< td=""><td>PROTECTION OF THE PROPERTY OF</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	PROTECTION OF THE PROPERTY OF						
Storage Length (ft)			14	12			12
Storage Lanes			0	350	0 70	0 70	400
Total Lost Time (s)							
Leading Detector (ft)					4.0	4.0	3
Trailing Detector (ft) 0 0 0 0 0 Turning Speed (mph) 15 9 15 9 9 Lane Util. Factor 1.00 1.00 1.00 0.95 0.95 1.00 Ped Bike Factor 1.00 1.00 1.00 0.95 0.850 Fit Protected 0.989 0.950 3539 3539 808 Fit Permitted 0.989 0.950 3539 3539 808 Fit Permitted 0.989 0.950 3539 3539 808 Fit Permitted 0.989 0.950 3539 3539 808 Right Turn on Red Yes Yes Yes Yes 12 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <td></td> <td></td> <td>4.0</td> <td></td> <td></td> <td></td> <td></td>			4.0				
Turning Speed (mph) 15 9 15 9 16 9 1 100							
Lane Util. Factor			0		U	U	
Ped Bike Factor Fit					0.05	0.05	0.5
Frit Protected 0.989 0.950		1.00	1.00	1,00	0.95	0.95	1.00
Fit Protected 0.989 0.950 Satd. Flow (prot) 841 0 902 3539 3539 808 Fit Permitted 0.989 0.950 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Satd. Flow (proth) 100 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <		0.005					0.050
Satd. Flow (prot) 841 0 902 3539 3539 808 Fit Permitted 0.989 0.950 3539 3539 808 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Yes Satd. Flow (RTOR) 7 12 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 15 45 45 45 Link Distance (ft) 773 848 3282 32 Travel Time (s) 35.1 12.8 49.7 49.7 40 40.7 40.7 40 40.7 40.7 40 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.7 40.0 40.7 40.0 40.0 40.0 40.0 40.0 40.0 <td< td=""><td></td><td></td><td></td><td>0.000</td><td></td><td></td><td>0.850</td></td<>				0.000			0.850
Fit Permitted 0.989 0.950 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 15 45 45 45 Link Distance (ft) 773 848 3282 7 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) 2 7 33 2551 574 11 Confl. Peds. (#/hr) 0 1.00 1.00 0.79 0.94 1.00 Confl. Peds. (#/hr) 0 1.00 1.00 0.79 0.94 1.00 Growth Factor 1.00 1.00 1.00 0.79 0.94 1.00 Heavy Vehicles (%) 100% 100% 100% <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Satd. Flow (RTOR) 7 12 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 15 45 45 Link Distance (ft) 773 848 3282 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 848 3282 11 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Bikes (#/hr) 0 1.00 1.00 0.79 0.94 1.00 Growth Factor 1.00 1.00 1.00 0.79 0.94 1.00 Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0			0		3539	3539	808
Right Turn on Red Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00							
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Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <t< td=""><td></td><td></td><td>Yes</td><td></td><td></td><td></td><td>Yes</td></t<>			Yes				Yes
Headway Factor		7					12
Link Speed (mph) 15			1.00	1.00	1.00	1.00	
Link Distance (ft) 773 848 3282 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 848 3282 11 11 Confl. Bikes (#/hr) Confl. Bikes (#/hr) 0 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% <td< td=""><td></td><td></td><td></td><td>4.55</td><td></td><td></td><td></td></td<>				4.55			
Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Free 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107%<							
Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Free 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 Parking (#/hr) 0 0 0 0 0 0 Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 Lead/Lag Lead-Lag Optimize? Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3			7	33			11
Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 100% 20% 20% 100% 00% 00% 00% 00% 00% 00% 00% 00% 00% 00% 00% 00% 100% 00% 00% 00% 100% 100% 100% 00% 100% 100% 00% 100% 100% 00% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% <td></td> <td>2</td> <td>1</td> <td>55</td> <td>2001</td> <td>314</td> <td>1.1</td>		2	1	55	2001	314	1.1
Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 0 Parking (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 2% 2% 100% 100% 2% 2% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <th< td=""><td></td><td>1.00</td><td>1.00</td><td>1.00</td><td>0.70</td><td>0.04</td><td>1.00</td></th<>		1.00	1.00	1.00	0.70	0.04	1.00
Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 Parking (#/hr) 0 0% 0% 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0							
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% 0% 04 Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 Lead/Lag Lead-Lag Optimize? Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None							
Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead-Lag Optimize? Yes Yes Recall Mode None None		0	0	0	0	0	0
Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 Lead-Lag Optimize? Yes Yes Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
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Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 5 2 6 Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3	Adj. Flow (vph)	2	7	35	3455	653	12
Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 5 2 6 Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3		9	0	35	3455	653	12
Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3				Prot			Free
Permitted Phases Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3		4			2	6	
Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							Free
Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3		4		5	2	6	
Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3			0.0				0.0
Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3			0.0%				0.0%
Lead/LagLeadLagLead-Lag Optimize?YesYesRecall ModeNoneNoneMaxAct Effct Green (s)11.510.486.976.992.3							
Lead-Lag Optimize?YesYesRecall ModeNoneNoneMaxAct Effct Green (s)11.510.486.976.992.3		1.5			1.5		
Recall Mode None None Max Max Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3							
				None			
Actuated g/C Ratio 0.11 0.11 0.94 0.83 1.00	Act Effct Green (s)	11.5		10.4	86.9	76.9	92.3
	Actuated g/C Ratio	0.11		0.11	0.94	0.83	1.00

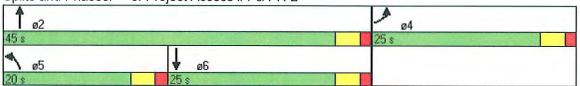
	A	1	1	†	1	1
			,		· ·	
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.09		0.37	1.04	0.22	0.01
Control Delay	14.6		23.0	33.3	4.3	0.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	14.6		23.0	33.3	4.3	0.0
LOS	В		С	С	Α	Α
Approach Delay	14.6			33.2	4.2	
Approach LOS	В			С	Α	
Intersection Summa	ary					-
Area Type:	Other					
Cycle Length: 70						
Actuated Cycle Len	gth: 92.3					
Natural Cycle: 150						
Control Type: Semi	Act Uncoord	1				

Control Type: Semi Act-Uncoord Maximum v/c Ratio: 1.04

Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 90.5% ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Project Access #1 & PR-2



	1	1	1	†	↓	1			
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		7	个个	44	7			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	1	2	10	2582	572	9			
Peak Hour Factor	1.00	1.00	1.00	0.79	0.93	1.00			
Hourly flow rate (vph)	1	2	11	3497	658	10			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	Raised								
Median storage veh)	0								
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2428	329	668						
vC1, stage 1 conf vol	658								
vC2, stage 2 conf vol	1770								
vCu, unblocked vol	2428	329	668						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)	5.8								
tF(s)	3.5	3.3	2.2						
p0 queue free %	98	100	99						
cM capacity (veh/h)	71	667	918						
Direction, Lane#	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	3	11	1749	1749	329	329	10		
Volume Left	1	11	0	0	0	0	0		
Volume Right	2	0	0	0	0	0	10		
cSH	175	918	1700	1700	1700	1700	1700		
Volume to Capacity	0.02	0.01	1.03	1.03	0.19	0.19	0.01		
Queue Length 95th (ft)	1	1	0	0	0	0	0		
Control Delay (s)	25.9	9.0	0.0	0.0	0.0	0.0	0.0		
Lane LOS	D	Α							
Approach Delay (s)	25.9	0.0			0.0				
Approach LOS	D								
Intersection Summary									
Average Delay			0.0	7					
Intersection Capacity L	Itilization		86.4%	10	CU Leve	el of Ser	vice	E	
Analysis Period (min)			15						

	4	×	2	1	K	ť	7	×	74	4	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	15	413		1/4	13			414	71		414	7/
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	10	10	10	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		60	0		0
Storage Lanes	1		0	2		0	0		1	0		1
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	. 0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.91	0.91	0.95	0.97	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00
Ped Bike Factor												
Frt		0.924			0.979				0.850			0.850
Flt Protected	0.950			0.950				0.964			0.985	
Satd. Flow (prot)	1503	3028	0	3090	3349	0	0	3184	1409	0	3370	1583
FIt Permitted	0.950			0.950				0.964			0.985	
Satd. Flow (perm)	1503	3028	0	3090	3349	0	0	3184	1409	0	3370	1583
Right Turn on Red			Yes	2.5.5.57	22000	Yes			Yes			Yes
Satd. Flow (RTOR)		201	1.27		19	1,55			125			134
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09	1.09	1.00	1.04	1.00
Link Speed (mph)	11.7.7	45	,,,,,,,		45	110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	25	1133		25	,,,,,
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)		16.6			61.6			29.2			35.4	
Volume (vph)	62	226	248	648	963	160	509	168	213	54	115	95
Confl. Peds. (#/hr)				18,18	5.5.5		100					
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.85	0.91	0.86	0.85	0.85	0.85	0.85	0.89	0.85	0.76	0.76
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												J
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	72	284	292	806	1212	201	641	211	256	68	162	134
Lane Group Flow (vph)	72	576	0	806	1413	0	0	852	256	0	230	134
Turn Type	Prot	0.0		Prot	1110		Split	002	pt+ov	Split	200	Perm
Protected Phases	1	6		5	2		4	4	4.5	8	8	1 01111
Permitted Phases				J	_				10	U	J	8
Detector Phases	1	6		5	2		4	4	45	8	8	8
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	10	4.0	4.0	4.0
Minimum Split (s)	8.5	8.5		8.5	8.5		8.5	8.5		8.5	8.5	8.5
Total Split (s)	14.0	31.0	0.0	36.0	53.0	0.0	37.0	37.0	73.0	16.0	16.0	16.0
Total Split (%)	11.7%			30.0%			30.8%				13.3%	13.3%
Yellow Time (s)	3.0	3.0	0.070	3.0	3.0	0.070	3.0	3.0	00.070	3.0	3.0	3.0
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Lead/Lag	Lead	Lag		Lead	Lag		1.0	1.0		1.0	1.0	1.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	Min		None	Min		None	None		None	None	None
Act Effct Green (s)	8.8	23.4		31.6	48.7		140116	32.6	64.2	NOTIC	11.0	11.0
Actuated g/C Ratio	0.07	0.20		0.27	0.42			0.28	0.55		0.09	0.09
Totaled g/O Natio	0.07	0.20		0.27	0.42		***	0.20	0.00		0.09	0.09

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Synchro 6 Report Page 1

	1	×	1	1	K	1	7	×	A	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.65	0.75		0.96	1.00			1.39dl	0.31		0.73	0.50
Control Delay	74.8	32.8		66.3	59.3			63.9	5.1		63.8	14.8
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	74.8	32.8		66.3	59.3			63.9	5.1		63.8	14.8
LOS	E	C		E	E			E	Α		E	В
Approach Delay		37.4			61.8			50.3			45.7	
Approach LOS		D			E			D			D	

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 116.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 53.9

Intersection LOS: D

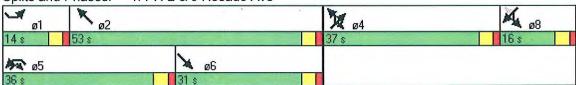
Intersection Capacity Utilization 95.6%

ICU Level of Service F

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

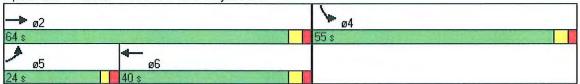
1: PR-2 & J Rosado Ave Splits and Phases:



	1	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	T	^	44	77	N/W	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	14	0%	0%	12	0%	1 64
Storage Length (ft)	220	0 /0	070	400	0	0
Storage Lanes	1			1	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	0.0
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15	U	U	9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
	1.00	0.93	0.95	1.00	0.97	0.90
Ped Bike Factor				0.050	0.000	
Frt	0.050			0.850	0.906	
Flt Protected	0.950	0.455	0500	1505	0.982	_
Satd. Flow (prot)	1770	3438	3539	1583	3215	0
Flt Permitted	0.950				0.982	
Satd. Flow (perm)	1770	3438	3539	1583	3215	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				817	397	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		45	45		35	
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
Volume (vph)	144	357	1385	1046	228	386
Confl. Peds. (#/hr)	1.1.0	001	.000	.0.10		000
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.88	0.83	0.75	0.94	0.95
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)			001		001	
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	181	434	1785	1492	260	435
Lane Group Flow (vph)	181	434	1785	1492	695	0
Turn Type	Prot			Free		
Protected Phases	5	2	6		4	
Permitted Phases				Free		
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0		21.0	
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
		53.8%			46.2%	0.0%
Yellow Time (s)	2.0	3.0	3.0	0.070	3.0	0.070
All-Red Time (s)	2.0	2.0	2.0		2.0	
A SECURE COMPANY OF CONTRACT OF THE PROPERTY O		2.0			2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes		NI	
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	12.9	52.6	35.6	76.5	13.7	
Actuated g/C Ratio	0.17	0.69	0.47	1.00	0.18	

,	1	>-	4-	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.61	0.18	1.08	0.94	0.77	
Control Delay	33.6	5.1	72.0	14.7	13.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	33.6	5.1	72.0	14.7	13.2	
LOS	С	Α	Е	В	В	
Approach Delay		13.5	45.9		13.2	
Approach LOS		В	D		В	
Intersection Summa	ry		La maranta		2 2	
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Leng	th: 76.5					
Natural Cycle: 90						
Control Type: Actuat	ed-Uncoord	inated				
Maximum v/c Ratio:	1.08					
Intersection Signal D	elay: 36.6			In	tersecti	on LOS:
Intersection Capacity		81.2%		IC	CU Leve	of Serv
Analysis Period (min) 15					

Splits and Phases: 2: PR-2 & V Rojas Ave



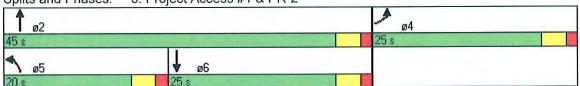
Lane Group EBL EBR NBL NBT SBT SBR Lane Configurations Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900		1	1	1	†	1	1
Lane Configurations W 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 19	Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Ideal Flow (vphpl)							2 0 11 10
Lane Width (ft)			1900				
Storage Length (ft)	The state of the s						
Storage Length (fft)			12	12			12
Storage Lanes			0	350	0.70	0 70	400
Total Lost Time (s)							
Leading Detector (ft) 50 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 0 0 0 0					4.0	4.0	
Trailing Detector (ft)			4.0				
Turning Speed (mph)							
Lane Util. Factor			0	-	U	U	
Ped Bike Factor Frt 0.895 0.950					0.05	0.05	
Frit 0.895 0.950 Satd. Flow (prot) 841 0 902 3539 3539 808 Flt Permitted 0.989 0.950 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes		1.00	1.00	1.00	0.95	0.95	1.00
Fit Protected 0.989 0.950 Satd. Flow (prot) 841 0 902 3539 3539 808 Fit Permitted 0.989 0.950 3539 3539 808 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Yes Yes Satd. Flow (RTOR) 7 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12		0.00-					0.6==
Satd. Flow (prot) 841 0 902 3539 3539 808 Flt Permitted 0.989 0.950 3539 3539 808 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 7 12 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 15 45 45 45 Link Distance (ft) 773 848 3282 32 32 351 12.8 49.7 49.7 Volume (vph) 2 7 33 2551 574 11 256 11 28 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 49.7 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.850</td>							0.850
Fit Permitted 0.989 0.950 Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 Link Distance (ft) 773 848 3282 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) 2 7 33 2551 574 11 Confl. Peds. (#/hr) 2 7 33 2551 574 11 Confl. Bikes (#/hr) 8 4 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107%						-	
Satd. Flow (perm) 841 0 902 3539 3539 808 Right Turn on Red Satd. Flow (RTOR) 7 12 Yes Yes 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			0		3539	3539	808
Right Turn on Red Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.79 0.94 1.00 1.00 1.00 1.00 0.79 0.94 1.00 0.00 0.00 1.00 1.00 0.79 0.94 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00							
Right Turn on Red Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Satd. Flow (perm)	841	0	902	3539	3539	808
Satd. Flow (RTOR) 7 12 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.28 49.7 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40 40			Yes				Yes
Headway Factor		7					
Link Speed (mph) 15 45 45 Link Distance (ft) 773 848 3282 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 848 3282 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 0 0.79 0.94 1.00 Growth Factor 100% 100% 100% 107% 107% 107% 107% 107% 107% 107% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%			1.00	1.00	1.00	1.00	
Link Distance (ft) 773 848 3282 Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 848 3282 11 12.8 49.7 Confl. Peds. (#/hr) Confl. Bikes (#/hr) 0 0 0.79 0.94 1.00 Growth Factor 10.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 10.7% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%							.,,,,
Travel Time (s) 35.1 12.8 49.7 Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 00% 20 20 00% 00% 00% 00% 20% 100% 00% 00% 00% 100% 100% 00% 00% 100% 100% 100% 00% 100%							
Volume (vph) 2 7 33 2551 574 11 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107%							
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max			7	22			11
Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2	1	33	2001	514	101
Peak Hour Factor 1.00 1.00 1.00 0.79 0.94 1.00 Growth Factor 107% 107% 107% 107% 107% 107% Heavy Vehicles (%) 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 Parking (#/hr) 0 0 0 0 0 0 0 Adj. Flow (vph) 2 7 35 3455 653 12 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Free Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (%) 35.7% 0.0% 28.6% 64.3%							
Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 100% 20% 20% 100% 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		4.00	4.00	4.00	0.70	0.04	4.00
Heavy Vehicles (%) 100% 100% 100% 2% 2% 100% Bus Blockages (#/hr) 0 0 0 0 0 0 Parking (#/hr) 0 0% 0% 0% 0% 0% Mid-Block Traffic (%) 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0 0% 0 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 Lead/Lag Lead-Lag Optimize? Yes Recall Mode None None Max Max							
Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes<							
Mid-Block Traffic (%) 0% 0% 0% Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize?		0	0	0	0	0	0
Adj. Flow (vph) 2 7 35 3455 653 12 Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None None Max Max							
Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None None Max Max	Mid-Block Traffic (%)	0%			0%	0%	
Lane Group Flow (vph) 9 0 35 3455 653 12 Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases Free Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead Lead-Lag Optimize? Yes Yes Recall Mode None None Max	Adj. Flow (vph)	2	7	35	3455	653	12
Turn Type Prot Free Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Recall Mode None None Max Max		9	0	35	3455	653	
Protected Phases 4 5 2 6 Permitted Phases 4 5 2 6 Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None None Max Max				Prot			Free
Permitted Phases Free Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None None Max Max		4			2	6	
Detector Phases 4 5 2 6 Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max					_		Free
Minimum Initial (s) 10.0 4.0 4.0 4.0 Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max		1		5	2	6	1100
Minimum Split (s) 25.0 15.0 40.0 25.0 Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max							
Total Split (s) 25.0 0.0 20.0 45.0 25.0 0.0 Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max							
Total Split (%) 35.7% 0.0% 28.6% 64.3% 35.7% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max			0.0				0.0
Yellow Time (s) 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None None Max							
All-Red Time (s) 1.5 1.5 1.5 Lead/Lag Lead Lag Lead-Lag Optimize? Yes Recall Mode None None Max Max			0.0%				0.0%
Lead/LagLeadLagLead-Lag Optimize?YesYesRecall ModeNoneNoneMax							
Lead-Lag Optimize? Yes Yes Recall Mode None None Max Max		1.5			1.5		
Recall Mode None None Max Max							
Act Effct Green (s) 11.5 10.4 86.9 76.9 92.3	Recall Mode			None	Max	Max	
	Act Effct Green (s)	11.5		10.4	86.9	76.9	92.3
Actuated g/C Ratio 0.11 0.11 0.94 0.83 1.00		0.11		0.11	0.94	0.83	1.00

	_	1	4	↑	1	1			
Lane Group	EBL	EBR	NBL	NBT .	SBT	SBR			
v/c Ratio	0.09		0.37	1.04	0.22	0.01			
Control Delay	14.6		23.0	33.3	4.3	0.0			
Queue Delay	0.0		0.0	0.0	0.0	0.0			
Total Delay	14.6		23.0	33.3	4.3	0.0			
LOS	В		С	C	Α	Α			
Approach Delay	14.6			33.2	4.2				
Approach LOS	В			С	Α				
Intersection Summary	/								
Area Type:	Other								
Cycle Length: 70									
Actuated Cycle Lengt	h: 92.3								
Natural Cycle: 150									
Control Type: Semi A	ct-Uncoord	t							
Maximum v/c Ratio: 1									
Intersection Signal De	elay: 28.5		Intersection LOS: C						

Intersection Capacity Utilization 90.5% Analysis Period (min) 15

ICU Level of Service E

3: Project Access #1 & PR-2 Splits and Phases:



,	1	1	1	1	1	1		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W.A.		19	^	44	7		
Sign Control	Stop		- 7	Free	Free			
Grade	0%			0%	0%			
Volume (veh/h)	1	2	10	2582	572	9		
Peak Hour Factor	1.00	1.00	1.00	0.79	0.93	1.00		
Hourly flow rate (vph)	1	2	11	3497	658	10		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	Raised							
Median storage veh)	0							
Upstream signal (ft)								
pX, platoon unblocked								
vC, conflicting volume	2428	329	668					
vC1, stage 1 conf vol	658							
vC2, stage 2 conf vol	1770							
vCu, unblocked vol	2428	329	668					
tC, single (s)	6.8	6.9	4.1					
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3	2.2					
p0 queue free %	98	100	99					
cM capacity (veh/h)	71	667	918					
Direction, Lane#	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	
Volume Total	3	11	1749	1749	329	329	10	
Volume Left	1	11	0	0	0	0	0	
Volume Right	2	0	0	0	0	0	10	
cSH	175	918	1700	1700	1700	1700	1700	
Volume to Capacity	0.02	0.01	1.03	1.03	0.19	0.19	0.01	
Queue Length 95th (ft)	1	1	0	0	0	0	0	
Control Delay (s)	25.9	9.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	D	Α						
Approach Delay (s)	25.9	0.0			0.0			
Approach LOS	D							
Intersection Summary								
Average Delay			0.0					
Intersection Capacity L	Itilization		86.4%	10	CU Leve	el of Ser	vice	
Analysis Period (min)			15					
A second								

	W)	M	1	1	K	C	7	A	174	6	il	W
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	19	介含		44	↑ ↑>			410			413	1000
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	12	11	12	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		0	0		0
Storage Lanes	1		0	2		0	0		0	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor	1.00	0.00	419.5									
Frt		0.922			0.979			0.937			0.950	
Fit Protected	0.950	0.022		0.950				0.979			0.987	
	1652	3154	0	3090	3349	0	0	3138	0	0	3208	0
Satd. Flow (prot)	0.950	0104	U	0.950	0010			0.979			0.987	
Flt Permitted	1652	3154	0	3090	3349	0	0	3138	0	0	3208	0
Satd. Flow (perm)	1002	3134	Yes	5030	0040	Yes		0,00	Yes			Yes
Right Turn on Red		202	165		13	103		117	, 00		46	
Satd. Flow (RTOR)	4.00	202	1.04	111	1.04	1.04	1.00	1.04	1.00	1.00	1.04	1.00
Headway Factor	1.09	1.04	1.04	1.14	45	1.04	1.00	35	1.00	1.00	25	1,00
Link Speed (mph)		35						1070			1297	
Link Distance (ft)		1093			4064			20.8			35.4	
Travel Time (s)		21.3		000	61.6	04	000	86	310	86	125	103
Volume (vph)	98	366	388	368	552	91	262	00	310	00	120	100
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)				20.00			0.70	0.77	0.00	0.02	0.84	0.86
Peak Hour Factor	0.91	0.93	0.90	0.96	0.95	0.95	0.76	0.77	0.93	0.93		107%
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	- 0	0	0	0	0	0
Parking (#/hr)								0.00			001	
Mid-Block Traffic (%)		0%			0%			0%		100	0%	
Adj. Flow (vph)	115	421	461	410	622	102	369	120	357	99	159	128
Lane Group Flow (vph)	115	882	0	410	724	0	0	846	0	0	386	C
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases												
Detector Phases	1	6		5	2		4	4		8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	24.5	59.5			44.5	0.0	24.5	24.5	0.0
Total Split (%)		38.9%		16.0%			29.1%	29.1%	0.0%	16.0%	16.0%	0.0%
	3.0		0.070	3.0	3.0		3.0			3.0	3.0	
Yellow Time (s)	1.5			1.5	1.5		1.5			1.5	1.5	
All-Red Time (s)				Lead			1.0					
Lead/Lag	Lead			Yes								
Lead-Lag Optimize?	Yes			None			None	None		None	None	
Recall Mode	None						NONG	34.7		.,5110	17.4	
Act Effct Green (s)	13.6			20.6				0.27			0.14	
Actuated g/C Ratio	0.11	0.28		0.16	0.33			0.21			J. 17	

	W	M	À		M	C	y	A	174	h	n/	W.
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.65	0.87		0.81	0.65			0.89			0.80	
Control Delay	63.2	35.9		67.1	38.5			45.3			55.8	
	0.0	0.0		0.0	0.0			0.0			0.0	
					38.5			45.3			55.8	
The state of the s	New York Williams	120202			10000			D			E	
	1							45.3			55.8	
Approach LOS		D			D			D			E	
Queue Delay Total Delay LOS Approach Delay Approach LOS	63.2 E	35.9 D 39.1		67.1 E	38.5 D 48.9			45.3 D 45.3			55.8 E 55.8	

Area Type:

Other

Cycle Length: 153

Actuated Cycle Length: 126.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 45.9

Intersection Capacity Utilization 81.7%

Analysis Period (min) 15

Intersection LOS: D
ICU Level of Service D

Analysis Feriod (min) 10

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ø5	₩ ø6		
245s	59.5 s	TANKS BY PERSON	

	1		4	Diena	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ħ	<u></u>	介		有物	
Ideal Flow (vphpl)		1900	1900	1900		1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	-	0%	0%		0%	
Storage Length (ft)	220			0	0	0
	1			0	2	0
Storage Lanes	4.0	5.0	5.0	5.0	5.0	5.0
Total Lost Time (s)	50	50	50	0.0	50	
Leading Detector (ft)		0	0		0	
Trailing Detector (ft)	0	Ü	U	9	15	9
Turning Speed (mph)	15	0.05	0.05	0.95	0.97	0.95
Lane Util. Factor	1.00	0.95	0.95	0.95	0.81	0.00
Ped Bike Factor			0.005		0.040	
Frt			0.935		0.942	
Flt Protected	0.950		444	4	0.970	
Satd. Flow (prot)	1770	3539	3309	0	3302	0
FIt Permitted	0.950				0.970	100
Satd, Flow (perm)	1770	3539	3309	0	3302	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			166		155	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	1.00	45	45		35	
		4064	4074		1144	
Link Distance (ft)		61.6	61.7		22.3	
Travel Time (s)	222	543	777	527	368	234
Volume (vph)	233	043	111	021	000	201
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)		0.00	0.00	0.04	0.94	0.85
Peak Hour Factor	0.94	0.93	0.92	0.81	0.84	
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	265	625	904	696	469	295
Lane Group Flow (vph)		625	1600	0	764	0
	Prot	52.0	,000	151	4 4 4	
Turn Type	5	2	6		4	
Protected Phases	3	2	U			
Permitted Phases	r	0	6		4	
Detector Phases	5	2			4.0	
Minimum Initial (s)	4.0	4.0				
Minimum Split (s)	8.0	21.0			21.0	0.0
Total Split (s)	24.0	64.0				0.0
Total Split (%)	20.2%		33.6%		46.2%	
Yellow Time (s)	2.0	3.0	3.0)	3.0	
All-Red Time (s)	2.0	2.0	2.0)	2.0	
Lead/Lag	Lead		Lag	1		
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None				None	
Kecali Mode	18.0				23.2	
Act Effct Green (s)					0.26	
Actuated g/C Ratio	0.20	0.03	0.08	,	0.20	

			4—	A.	100	1		
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR		
v/c Ratio	0.76	0.28	1.15		0.80			
Control Delay	46.0	8.6	101.9		26.0			
Queue Delay	0.0	0.0	0.0		0.0			
Total Delay	46.0	8.6	101.9		26.0			
LOS	D	Α	F		C			
Approach Delay		19.7	101.9		26.0			
Approach LOS		В	F		C			
Interesting Cumpagn								

Area Type: Other

Cycle Length: 119

Actuated Cycle Length: 90.7

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.15
Intersection Signal Delay: 61.6

Intersection Capacity Utilization 85.7%

Analysis Period (min) 15

Intersection LOS: E ICU Level of Service E



	4	×	1	1	K	7	7	×	174	4	K	100
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	No.	10		44	1			46			बीके	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	12	11	12	12		12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		0	0		0
Storage Lanes	1		0	2		0	0		0	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.922			0.979			0.936			0.950	
Flt Protected	0.950			0.950				0.979			0.987	
Satd. Flow (prot)	1652	3154	0	3030	3349	0	0	3122	0	0	3208	0
Flt Permitted	0.950			0.950				0.979			0.987	
Satd. Flow (perm)	1652	3154	0	3030	3349	0	0	3122	0	0	3208	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		203			13			118			46	
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.00	1.04	1.00	1.00	1.04	1.00
Link Speed (mph)		35			45			35			25	
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)		21.3			61.6			20.8			35.4	
Volume (vph)	106	395	419	413	596	98	283	93	339	93	135	111
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.93	0.90	0.96	0.95	0.95	0.76	0.77	0.93	0.93	0.84	0.86
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%		900	0%		70.00	0%			0%	
Adj. Flow (vph)	125	454	498	460	671	110	398	129	390	107	172	138
Lane Group Flow (vph)	125	952	0	460	781	0	0	917	0	0	417	0
Turn Type	Prot	0		Prot			Split			Split		
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	,	0		-	0							
Detector Phases	1.0	6		5	2		4	4		8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5	0.0	8.5	20.5	0.0	20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	24.5	59.5	0.0	44.5	44.5	0.0	24.5	24.5	0.0
Total Split (%)		38.9%	0.0%	16.0%		0.0%	29.1%		0.0%	16.0%	16.0%	0.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lead/Lag Optimize?	Lead	Lag		Lead	Lag							
Lead-Lag Optimize? Recall Mode	Yes	Yes		Yes	Yes		Nie	NI-			N. I. Service	
	None	Min		None	Min		None	None		None	None	
Actuated a/C Patio	15.0	41.1		20.1	46.2			40.2			19.1	
Actuated g/C Ratio	0.11	0.30		0.14	0.33			0.29			0.14	

 $\label{lem:converse} K:\nonnoverselse K:\nonnoverselse Rev. Oo.\nonnoverselse Rev. Oo.\no$

Synchro 6 Report Page 1

	1	X	7	1	K	1	7	×	1	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.70	0.88		1.05	0.69			0.93			0.87	
Control Delay	69.9	40.1		111.9	42.2			57.8			67.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	69.9	40.1		111.9	42.2			57.8			67.6	
LOS	E	D		F	D			E			E	
Approach Delay		43.5			68.1			57.8			67.6	
Approach LOS		D			E			Е			E	

Area Type: Other

Cycle Length: 153

Actuated Cycle Length: 138.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 58.2
Intersection Capacity Utilization 87.6%

Intersection LOS: E
ICU Level of Service E

Analysis Period (min) 15

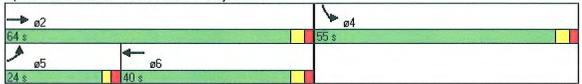
Splits and Phases: 1: PR-2 & J Rosado Ave

9 7	× ø2	≫ ø4	M ø8
24.5 s	59.5 s	44.5 s	24.5 s
▶ ø5	¥ ø6		
24.5 s	59.5 s		

	1	->	-	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	7	44	↑ ↑	, L	N/N/	SDIT
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	12	0%	0%	14	0%	14
Storage Length (ft)	220	0,70	370	0	0	0
Storage Lanes	1			0	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	5.0	50	5.0
Trailing Detector (ft)	0	0	0		0	
Turning Speed (mph)	15	U	U	0	15	0
		0.05	0.05	9		9
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.95
Ped Bike Factor						
Frt			0.935		0.942	
Flt Protected	0.950				0.970	
Satd. Flow (prot)	1770	3539	3291	0	3302	0
FIt Permitted	0.950				0.970	
Satd. Flow (perm)	1770	3539	3291	0	3302	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			163		155	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		45	45	1	35	1000
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
Volume (vph)	252	590	855	569	397	253
Confl. Peds. (#/hr)	202	550	000	503	331	200
Confl. Bikes (#/hr)						
Control of the Contro	0.04	0.00	0.00	0.04	0.04	0.05
Peak Hour Factor	0.94	0.93	0.92	0.81	0.84	0.85
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	287	679	994	752	506	318
Lane Group Flow (vph)	287	679	1746	0	824	0
Turn Type	Prot					
Protected Phases	5	2	6		4	
Permitted Phases						
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0		21.0	
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		53.8%			46.2%	0.0%
				0.0%		0.0%
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes	-	Yes			
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	19.5	58.8	35.2		25.7	
Actuated g/C Ratio	0.21	0.62	0.37		0.27	

	_	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.79	0.31	1.31		0.82	
Control Delay	51.9	9.7	172.6		27.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	51.9	9.7	172.6		27.1	
LOS	D	Α	F		C	
Approach Delay		22.2	172.6		27.1	
Approach LOS		C	F		C	
Intersection Summa	ry					
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Leng	th: 94.5					
Natural Cycle: 90						
Control Type: Actual	ted-Uncoord	inated				
Maximum v/c Ratio:	1.31					
Intersection Signal D	Delay: 97.6			Ir	ntersecti	on LOS:
Intersection Capacity	y Utilization	92.1%		10	CU Leve	l of Serv
Analysis Period (min	1) 15					

Splits and Phases: 2: PR-2 & V Rojas Ave



	1	1	1	1	↓	1				
Movement	EBL	EBR	NBL	NBT	SBT	SBR			-	
Lane Configurations	W.		19	^	ተ	71				
Sign Control	Stop		·	Free	Free					
Grade	0%			0%	0%					
Volume (veh/h)	9	26	8	1487	991	2				
Peak Hour Factor	1.00	1.00	1.00	0.87	0.91	1.00				
Hourly flow rate (vph)	10	28	9	1829	1165	2				
Pedestrians										
Lane Width (ft)										
Walking Speed (ft/s)										
Percent Blockage										
Right turn flare (veh)										
Median type	None									
Median storage veh)										
Upstream signal (ft)										
pX, platoon unblocked										
vC, conflicting volume	2097	583	1167							
vC1, stage 1 conf vol										
vC2, stage 2 conf vol										
vCu, unblocked vol	2097	583	1167							
tC, single (s)	8.8	8.9	6.1							
tC, 2 stage (s)										
tF (s)	4.5	4.3	3.2							
p0 queue free %	26	90	97							
cM capacity (veh/h)	13	275	250							
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	37	9	914	914	583	583	2			- Inited to the same
Volume Left	10	9	0	0	0	0	0			
Volume Right	28	0	0	0	0	0	2			
cSH	44	250	1700	1700	1700	1700	1700			
Volume to Capacity	0.84	0.03	0.54	0.54	0.34	0.34	0.00			
Queue Length 95th (ft)	83	3	0	0	0	0	0			
Control Delay (s)	229.6	19.9	0.0	0.0	0.0	0.0	0.0			
Lane LOS	F	С								
Approach Delay (s)	229.6	0.1			0.0					
Approach LOS	F									
Intersection Summary										
Average Delay			2.9							
Intersection Capacity Ut	tilization		54.0%	10	CU Leve	of Ser	vice	Α	i.	
Analysis Period (min)			15							

	A	1	1	1	↓	1			
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		N	个个	44	77			
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	7	8	2	1488	1015	2			
Peak Hour Factor	1.00	1.00	1.00	0.87	0.91	1.00			
Hourly flow rate (vph)	7	9	2	1830	1193	2			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)	+								
Percent Blockage									
Right turn flare (veh)									
Median type	Raised								
Median storage veh)	0								
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2113	597	1196						
vC1, stage 1 conf vol	1193								
vC2, stage 2 conf vol	919								
vCu, unblocked vol	2113	597	1196						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)	5.8								
tF (s)	3.5	3.3	2.2						
p0 queue free %	93	98	100						
cM capacity (veh/h)	113	446	580						
Direction, Lane#	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	16	2	915	915	597	597	2		
Volume Left	7	2	0	0	0	0	0		
Volume Right	9	0	0	0	0	0	2		
cSH	188	580	1700	1700	1700	1700	1700		
Volume to Capacity	0.09	0.00	0.54	0.54	0.35	0.35	0.00		
Queue Length 95th (ft)	7	0	0	0	0	0	0		
Control Delay (s)	25.9	11.2	0.0	0.0	0.0	0.0	0.0		
Lane LOS	D	В				9			
Approach Delay (s)	25.9	0.0			0.0				
Approach LOS	D								
Intersection Summary			i iliya						
Average Delay			0.1						
Intersection Capacity U	Jtilization		54.0%	10	CU Leve	el of Ser	vice	Α	
Analysis Period (min)			15						

	V	×	1	1	K	*	7	A	1	4	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	15	10		44	10			414	7		413	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	9	11	11	10	10	10	12	11	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	48		0	85		0	0		60	0		0
Storage Lanes	1		0	2		0	0		1	0		0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Leading Detector (ft)	48	50		50	50		50	50	50	50	50	
Trailing Detector (ft)	. 0	0		0	0		0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor												
Frt		0.922			0.979				0.850		0.950	
Flt Protected	0.950			0.950				0.964			0.987	
Satd. Flow (prot)	1652	3154	0	3030	3349	0	0		1463	0	3208	0
FIt Permitted	0.950			0.950				0.964			0.987	
Satd. Flow (perm)	1652	3154	0	3030	3349	0	0	3184	1463	0	3208	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		177	1,55		13	1			185		42	
Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09	1.09	1.00	1.04	1.00
Link Speed (mph)	1.00	45	1.01	4.5.4	45	1,01	1.00	35	1.00	1.00	25	1.00
Link Distance (ft)		1093			4064			1070			1297	
Travel Time (s)		16.6			61.6			20.8			35.4	
Volume (vph)	106	395	419	413	596	98	283	93	339	93	135	111
Confl. Peds. (#/hr)		000			000		200					
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.93	0.90	0.96	0.95	0.95	0.76	0.77	0.93	0.93	0.84	0.86
Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						17			7.0			
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	125	454	498	460	671	110	398	129	390	107	172	138
Lane Group Flow (vph)	125	952	0	460	781	0	0	527	390	0	417	0
Turn Type	Prot			Prot			Split		pt+ov	Split		
Protected Phases	1	6		5	2		4	4	45	8	8	
Permitted Phases					-							
Detector Phases	1	6		5	2		4	4	45	8	8	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5		20.0	20.0	
Total Split (s)	24.5	59.5	0.0	39.0	74.0	0.0	44.5	44.5	83.5	24.5	24.5	0.0
Total Split (%)		35.5%			44.2%				49.9%			0.0%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	10 2 0 1 7 1 TO	3.0	3.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lead/Lag	Lead	Lag		Lead	Lag			305		11.5	2,0,20	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	Min		None	Min		None	None		None	None	
Act Effct Green (s)	14.4	39.1		25.1	53.5			27.5	52.6		20.3	
Actuated g/C Ratio	0.11	0.30		0.19	0.41			0.21	0.40		0.15	

1	×	À	1	K	*	7	×	1	4	K	K
SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
0.70	0.90		0.79	0.57			1.15dl	0.56		0.79	
69.9	40.0		56.5	32.6			53.7	10.5		60.7	
0.0	0.0		0.0	0.0			0.0	0.0		0.0	
69.9	40.0		56.5	32.6			53.7	10.5		60.7	
E	D		Е	C			D	В		E	
	43.5			41.4			35.3			60.7	
	D			D			D			E	
	0.70 69.9 0.0 69.9	0.70 0.90 69.9 40.0 0.0 0.0 69.9 40.0 E D 43.5	0.70 0.90 69.9 40.0 0.0 0.0 69.9 40.0 E D 43.5	0.70 0.90 0.79 69.9 40.0 56.5 0.0 0.0 0.0 69.9 40.0 56.5 E D E 43.5 E E	0.70 0.90 0.79 0.57 69.9 40.0 56.5 32.6 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 E D E C 43.5 41.4	0.70 0.90 0.79 0.57 69.9 40.0 56.5 32.6 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 E D E C 43.5 41.4	0.70 0.90 0.79 0.57 69.9 40.0 56.5 32.6 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 E D E C 43.5 41.4	0.70 0.90 0.79 0.57 1.15dl 69.9 40.0 56.5 32.6 53.7 0.0 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 53.7 E D E C D 43.5 41.4 35.3	0.70 0.90 0.79 0.57 1.15dl 0.56 69.9 40.0 56.5 32.6 53.7 10.5 0.0 0.0 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 53.7 10.5 E D E C D B 43.5 41.4 35.3	0.70 0.90 0.79 0.57 1.15dl 0.56 69.9 40.0 56.5 32.6 53.7 10.5 0.0 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 53.7 10.5 E D E C D B 43.5 41.4 35.3	0.70 0.90 0.79 0.57 1.15dl 0.56 0.79 69.9 40.0 56.5 32.6 53.7 10.5 60.7 0.0 0.0 0.0 0.0 0.0 0.0 69.9 40.0 56.5 32.6 53.7 10.5 60.7 E D E C D B E 43.5 41.4 35.3 60.7

Area Type: Other

Cycle Length: 167.5

Actuated Cycle Length: 131.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 42.7

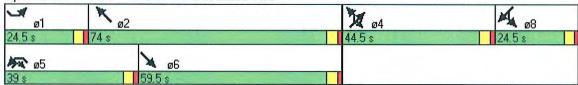
Intersection LOS: D
ICU Level of Service D

Intersection Capacity Utilization 81.2%

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: PR-2 & J Rosado Ave



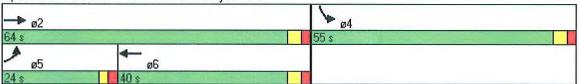
	A	→	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ħ	44	44	7	THY	5511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	12	0%	0%	14	0%	14
Storage Length (ft)	220	0 /0	0 70	400	0%	0
Storage Lanes	1					
		F 0	F 0	1	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
Ped Bike Factor						
Frt				0.850	0.942	
FIt Protected	0.950				0.970	
Satd. Flow (prot)	1770	3539	3505	1583	3302	0
Flt Permitted	0.950				0.970	
Satd. Flow (perm)	1770	3539	3505	1583	3302	0
Right Turn on Red	A. A. 1011-20			Yes		Yes
Satd. Flow (RTOR)				739	155	. 00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	1.00	45	45	1.00	35	1.00
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6				
	050		49.7	500	22.3	252
Volume (vph)	252	590	855	569	397	253
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)	0.04	0.00				
Peak Hour Factor	0.94	0.93	0.92	0.81	0.84	0.85
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	287	679	994	752	506	318
Lane Group Flow (vph)	287	679	994	752	824	0
Turn Type	Prot	0.50000	1000000	Free		
Protected Phases	5	2	6	1100	4	
Permitted Phases		-		Free		
Detector Phases	5	2	6	1100	4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)						
The state of the s	8.0	21.0	21.0	0.0	21.0	0.0
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		53.8%		0.0%	46.2%	0.0%
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	19.3	54.9	31.5	89.8	24.6	
Actuated g/C Ratio	0.21	0.61	0.35	1.00	0.27	

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Synchro 6 Report Page 3

	<u></u> ▲		4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.76	0.31	0.81	0.48	0.81	
Control Delay	47.6	9.7	31.8	1.0	25.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.6	9.7	31.8	1.0	25.9	
LOS	D	Α	C	Α	С	
Approach Delay		21.0	18.5		25.9	
Approach LOS		С	В		C	
Intersection Summary	1		1			
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Lengt	h: 89.8					
Natural Cycle: 65						
Control Type: Actuate	d-Uncoord	linated				
Maximum v/c Ratio: 0	.81					
Intersection Signal De	elay: 20.9			Ir	tersecti	on LOS: 0
Intersection Capacity		72.5%		IC	CU Leve	of Service
Analysis Period (min)	15					

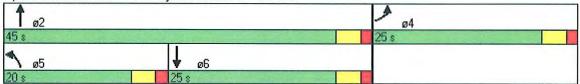
Splits and Phases: 2: PR-2 & V Rojas Ave



	A	1	1	↑	1	1
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		N	ተተ	44	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	1.44		0%	0%	
Storage Length (ft)	0	0	350	-(6.9)	= 1.5	400
Storage Lanes	1	0	1			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	1.0	50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)	15	9	15	U	Ū	9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	1.00	1.00	1.00	ບ.ສວ	0.80	1.00
Frt	0.901					0.850
			0.050			0.650
Fit Protected	0.987	^	0.950	0500	0500	000
Satd. Flow (prot)	845	0	902	3539	3539	808
Flt Permitted	0.987		0.950	-	2222	14/272
Satd. Flow (perm)	845	0	902	3539	3539	808
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	28					2
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	15			45	45	
Link Distance (ft)	773			848	3282	
Travel Time (s)	35.1			12.8	49.7	
Volume (vph)	9	26	8	1487	991	2
Confl. Peds. (#/hr)				7 11000	77	
Confl. Bikes (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	0.87	0.91	1.00
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	100%	100%	100%	2%	2%	100%
		0	0			0
Bus Blockages (#/hr)	0	U	U	0	0	U
Parking (#/hr)	00/			00/	00/	
Mid-Block Traffic (%)	0%	0.0		0%	0%	
Adj. Flow (vph)	10	28	9	1829	1165	2
Lane Group Flow (vph)	38	0	9	1829	1165	2
Turn Type			Prot			Free
Protected Phases	4		5	2	6	
Permitted Phases						Free
Detector Phases	4		5	2	6	
Minimum Initial (s)	10.0		4.0	4.0	4.0	
Minimum Split (s)	25.0		15.0	40.0	25.0	
Total Split (s)	25.0	0.0	20.0	45.0	25.0	0.0
Total Split (%)	35.7%			64.3%		0.0%
Yellow Time (s)	3.0	0.070	3.0	3.0	3.0	0.070
All-Red Time (s)	1.5		1.5	1.5	1.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?	100		Yes		Yes	
Recall Mode	None		None	Max	Max	
Act Effct Green (s)	11.7		7.7	83.8	79.9	94.1
Actuated g/C Ratio	0.11		0.08	0.89	0.85	1.00

	1	1	1	†	Ţ	1
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.31		0.13	0.58	0.39	0.00
Control Delay	13.4		25.4	3.8	4.7	0.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	13.4		25.4	3.8	4.7	0.0
LOS	В		C	Α	Α	Α
Approach Delay	13.4			3.9	4.7	
Approach LOS	В			Α	Α	
Intersection Summa	ıry					
Area Type:	Other					
Cycle Length: 70						
Actuated Cycle Leng	gth: 94.1					
Natural Cycle: 70						
Control Type: Semi	Act-Uncoord					
Maximum v/c Ratio:	0.58					
Intersection Signal D	Delay: 4.3			Ir	tersecti	on LOS:
Intersection Capacit	y Utilization :	59.0%		IC	CU Leve	of Serv
Analysis Period (mir	1) 15					

Splits and Phases: 3: Project Access #1 & PR-2



	1	1	1	1	↓	1			
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		7	个个	^	71			
Sign Control	Stop		•	Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	7	8	2	1488	1015	2			
Peak Hour Factor	1.00	1.00	1.00	0.87	0.91	1.00			
Hourly flow rate (vph)	7	9	2	1830	1193	2			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)							-		
Percent Blockage									
Right turn flare (veh)									
Median type	Raised								
Median storage veh)	0								
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2113	597	1196						
vC1, stage 1 conf vol	1193	001	1100						
vC2, stage 2 conf vol	919								
vCu, unblocked vol	2113	597	1196						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)	5.8	0.0	7.1						
tF (s)	3.5	3.3	2.2						
p0 queue free %	93	98	100						
cM capacity (veh/h)	113	446	580						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	16	2	915	915	597	597	2		
Volume Left	7	2	0	0	0	0	0		
Volume Right	9	0	0	0	0	0	2		
cSH	188	580	1700	1700	1700	1700	1700		
Volume to Capacity	0.09	0.00	0.54	0.54	0.35	0.35	0.00		
Queue Length 95th (ft)		0	0	0	0	0	0		
Control Delay (s)	25.9	11.2	0.0	0.0	0.0	0.0	0.0		
Lane LOS	D	В							
Approach Delay (s)	25.9	0.0			0.0				
Approach LOS	D								
Intersection Summary							Us		
Average Delay			0.1						
Intersection Capacity U	Itilization		54.0%	10	CU Leve	el of Ser	vice	Α	
			15						
Analysis Period (min)	runzation				JO Leve	51 01 061	VICE	A	

Lane Contigurations		4	×	1	1	K	7	7	×	74	4	K	M
Lane Configurations	Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Ideal Flow (vphpl)	Lane Configurations	10	介含		青青	介含			413	71			
Lane Width (ft)	Ideal Flow (vphpl)			1900			1900	1900			1900		1900
Crade (%)	Lane Width (ft)	10	11	11	9			10					
Storage Langth (ft)	Grade (%)		0%			0%							
Storage Lanes	Storage Length (ft)	48		0	85		0	0		60	0		0
Total Lost Time (s)	Storage Lanes	1		0	2		0	0			0		
Leading Detector (ft)	Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Training Detector (ft)	Leading Detector (ft)	48	50		50	50							
Lane Util. Factor	Trailing Detector (ft)	0	0		0	0	4	0					
Lane Util. Factor	Turning Speed (mph)	15		9	15		9	15		9	15		9
Ped Bike Factor Fit	Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	0.95	0.95	0.95	1.00		0.95	0.95
Fit Protected	Ped Bike Factor												
Fit Protected	Frt		0.922			0.979				0.850		0.950	
Satic Flow (prof) 1652 3154 0 3030 3349 0 0 3184 1463 0 3208 0 0 0 0 0 0 0 0 0	Flt Protected	0.950			0.950				0.964				
Fit Permitted	Satd. Flow (prot)	1652	3154	0	3030	3349	0	0	3184	1463	0		0
Right Turn on Red Yes	Flt Permitted	0.950			0.950				0.964				
Right Turn on Red Yes	Satd. Flow (perm)	1652	3154	0	3030	3349	0	0	3184	1463	0	3208	0
Satd. Flow (RTOR) 176 14 14 1.04 1.09 1.09 1.04 1.04 1.04 1.09 1.09 1.00 1.04 1.00 Link Speed (mph) 45 45 35 25 25 Link Distance (ft) 1093 4064 1070 1297 Travel Time (s) 16.6 61.6 20.8 35.4 Volume (wph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Volume (wph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Volume (wph) 107 1079 1078 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 1079 <	Right Turn on Red			Yes			Yes						
Headway Factor 1.09 1.04 1.04 1.14 1.04 1.09 1.09 1.09 1.00 1.04 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Satd. Flow (RTOR)		176			14						42	
Link Speed (mph) 45 45 4664 35 25 Link Distance (ft) 1093 4064 1070 1297 Travel Time (s) 16.6 61.6 20.8 35.4 Volume (vph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Confl. Peds. (#/hr) Volume (vph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Confl. Peds. (#/hr) Volume (vph) 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078 1078	Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09		1.00		1.00
Link Distance (ff)	Link Speed (mph)		45			45							20.500
Travel Time (s) 16.6 61.6 20.8 35.4 Volume (vph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.92 0.94 0.91 0.98 0.96 0.96 0.77 0.77 0.95 0.94 0.85 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107%	Link Distance (ft)		1093			4064							
Volume (vph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Second Bikes (#/hr) Second Bikes (#/hr) Second Bikes (#/hr) Second Bikes (#/hr) 0.92 0.94 0.91 0.98 0.96 0.96 0.77 0.77 0.95 0.94 0.85 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% <t< td=""><td>Travel Time (s)</td><td></td><td>16.6</td><td></td><td></td><td>61.6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Travel Time (s)		16.6			61.6							
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.92 0.94 0.91 0.98 0.96 0.96 0.77 0.77 0.95 0.94 0.85 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107%	Volume (vph)	120	447	474	467	674	111	320		383	105		126
Peak Hour Factor 0.92 0.94 0.91 0.98 0.96 0.97 0.77 0.95 0.94 0.85 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107	Confl. Peds. (#/hr)												(100)-9
Growth Factor 107% 107% 107% 107% 107% 107% 107% 107%	Confl. Bikes (#/hr)												
Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 20% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%<	Peak Hour Factor	0.92	0.94	0.91	0.98	0.96	0.96	0.77	0.77	0.95	0.94	0.85	0.87
Heavy Vehicles (%) 2% 2% 2% 4% 2% 2% 2% 2% 3% 2% 2% 2% 2% 3% 2% 2% 2% Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Growth Factor	107%	107%	107%	107%	107%	107%	107%					
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%				
Mid-Block Traffic (%) 0% 0% 0% 0% Adj. Flow (vph) 140 509 557 510 751 124 445 146 431 120 193 155 Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 468 0 Turn Type Prot Prot Split pt+ov Split pt+ov Split Protected Phases 1 6 5 2 4 4 45 8 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 9 9 9	Bus Blockages (#/hr)	0	0	0	0	0	0	0	0				
Adj. Flow (vph) 140 509 557 510 751 124 445 146 431 120 193 155 Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 468 0 Turn Type Prot Prot Split pt+ov Split Ptov Ptov <td>Parking (#/hr)</td> <td></td>	Parking (#/hr)												
Adj. Flow (vph) 140 509 557 510 751 124 445 146 431 120 193 155 Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 468 0 Turn Type Prot Prot Split pt+ov Split pt+ov Split Protected Phases 1 6 5 2 4 4 45 8 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9 9 9 <t< td=""><td>Mid-Block Traffic (%)</td><td></td><td>0%</td><td></td><td></td><td>0%</td><td></td><td></td><td>0%</td><td></td><td></td><td>0%</td><td></td></t<>	Mid-Block Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 468 0 Turn Type Prot Prot Split pt+ov Split Ptov Split pt+ov Split Ptov Split Ptov Split pt+ov Split Ptov Split pt+ov Split Ptov	Adj. Flow (vph)	140	509	557	510	751	124	445	146	431	120		155
Turn Type Prot Split pt+ov Split Protected Phases 1 6 5 2 4 4 45 8 8 Permitted Phases Detector Phases 1 6 5 2 4 4 45 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4	Lane Group Flow (vph)	140	1066	0	510	875	0	0	591	431	0	468	0
Protected Phases Permitted Phases Detector Phases 1 6 5 2 4 4 4 5 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Minimum Split (s) 8.5 20.5 8.5 20.5 20.5 20.0 20.0 Total Split (s) 24.5 59.5 0.0 39.0 74.0 0.0 44.5 44.5 83.5 24.5 24.5 0.0 Total Split (%) 14.6% 35.5% 0.0% 23.3% 44.2% 0.0% 26.6% 26.6% 49.9% 14.6% 14.6% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 Lead/Lag Lead Lag	Turn Type	Prot			Prot			Split		pt+ov	Split		
Detector Phases 1 6 5 2 4 4 4 5 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0<	Protected Phases	1	6		5	2			4	45	-	8	
Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Minimum Initial (s) 8.5 20.5 20.5 20.5 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0	Permitted Phases												
Minimum Split (s) 8.5 20.5 8.5 20.5 20.5 20.5 20.0 20.0 Total Split (s) 24.5 59.5 0.0 39.0 74.0 0.0 44.5 44.5 83.5 24.5 24.5 0.0 Total Split (%) 14.6% 35.5% 0.0% 23.3% 44.2% 0.0% 26.6% 26.6% 49.9% 14.6% 14.6% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Detector Phases	1	6		5	2		4	4	45	8	8	
Minimum Split (s) 8.5 20.5 8.5 20.5 20.5 20.5 20.0 20.0 Total Split (s) 24.5 59.5 0.0 39.0 74.0 0.0 44.5 44.5 83.5 24.5 24.5 0.0 Total Split (%) 14.6% 35.5% 0.0% 23.3% 44.2% 0.0% 26.6% 26.6% 49.9% 14.6% 14.6% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Total Split (s) 24.5 59.5 0.0 39.0 74.0 0.0 44.5 44.5 83.5 24.5 24.5 0.0 Total Split (%) 14.6% 35.5% 0.0% 23.3% 44.2% 0.0% 26.6% 26.6% 49.9% 14.6% 14.6% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Minimum Split (s)	8.5	20.5		8.5	20.5		20.5	20.5				
Total Split (%) 14.6% 35.5% 0.0% 23.3% 44.2% 0.0% 26.6% 26.6% 49.9% 14.6% 14.6% 0.0% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Total Split (s)	24.5	59.5	0.0	39.0	74.0	0.0			83.5			0.0
Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Total Split (%)	14.6%	35.5%	0.0%	23.3%	44.2%	0.0%	26.6%					
All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 <td>Yellow Time (s)</td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td></td> <td></td>	Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lead/Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes	All-Red Time (s)	1.5			1.5								
Lead-Lag Optimize? Yes Yes Yes Yes		Lead									-	7.500	
The state of the s	Lead-Lag Optimize?												
		None						None	None		None	None	
Act Effct Green (s) 16.4 48.1 29.6 61.3 33.0 62.6 20.6	Act Effct Green (s)									62.6			
Actuated g/C Ratio 0.11 0.32 0.20 0.41 0.22 0.42 0.14													

 $\label{lem:converse} K:\non-converse K:\non-converse Value PR-2 Net_2018 PM_REV-09-09-2010.sy7 Ruth Miriam Vargas$

Synchro 6 Report Page 1

	W	X	2	1	M	7	7	×	174	6	K	W
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.77	0.94		0.85	0.63			1.22dl	0.60		0.98	
Control Delay	81.5	49.9		66.7	37.2			62.4	13.4		95.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	81.5	49.9		66.7	37.2			62.4	13.4		95.3	
LOS	F	D		E	D			E	В		F	
Approach Delay		53.6			48.0			41.8			95.3	
Approach LOS		D			D			D			F	

Area Type: Other

Cycle Length: 167.5

Actuated Cycle Length: 149.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.98

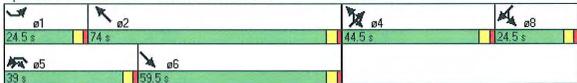
Intersection Signal Delay: 53.5
Intersection Capacity Utilization 89.9%

Intersection LOS: D
ICU Level of Service E

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: PR-2 & J Rosado Ave



	1	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	T	44	44	7	MAN	ODIN
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	12	0%	0%	12	0%	12
Storage Length (ft)	220	0 70	0 70	400	0	0
Storage Lanes	1			1	2	0
Total Lost Time (s)	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	0.0
Trailing Detector (ft)	0	0	0	. 0	0	
Turning Speed (mph)	15	J	J	9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
Ped Bike Factor	1.00	0.55	0.00	1.00	0.01	0.55
Frt				0.850	0.942	
Flt Protected	0.950			0.000	0.942	
		2520	2505	1583		0
Satd. Flow (prot)	1770	3539	3505	1583	3302	0
Fit Permitted	0.950	0500	2505	4500	0.970	_
Satd. Flow (perm)	1770	3539	3505	1583	3302	0
Right Turn on Red				Yes	150	Yes
Satd. Flow (RTOR)	2 2 2			738	156	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		45	45		35	
Link Distance (ft)		4064	3282		1144	
Travel Time (s)		61.6	49.7		22.3	
Volume (vph)	284	667	966	643	449	286
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.94	0.93	0.82	0.85	0.86
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)				7.1	1/2	-
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	320	759	1111	839	565	356
Lane Group Flow (vph)	320	759	1111	839	921	0
Turn Type	Prot	100	1111	Free	041	U
Protected Phases	5	2	6	1166	4	
Permitted Phases	3	2	Ü	Free	4	
	E	2	C	riee	A	
Detector Phases	5	2	6		4	
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0	0.0	21.0	0.0
Total Split (s)	24.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		53.8%		0.0%	46.2%	0.0%
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	20.1	59.3	35.2	99.4	30.1	
Actuated g/C Ratio	0.20	0.60	0.35	1.00	0.30	
		-	NE SECTION			

	<u></u> ▲	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.89	0.36	0.90	0.53	0.83	
Control Delay	68.3	11.9	42.3	1.3	28.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	68.3	11.9	42.3	1.3	28.3	
LOS	E	В	D	Α	С	
Approach Delay		28.6	24.7		28.3	
Approach LOS		C	С		С	
Intersection Summary						
Area Type:	Other					
Cycle Length: 119						
Actuated Cycle Length	n: 99.4					
Natural Cycle: 75						
Control Type: Actuated		linated				
Maximum v/c Ratio: 0.						
Intersection Signal De						ion LOS: (
Intersection Capacity I		80.4%		IC	CU Leve	el of Servi
Analysis Period (min)	15					

Splits and Phases: 2: PR-2 & V Rojas Ave



	A	1	1	T	₩	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	44	44	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	12	12	0%	0%	12
	0 70	0	250	0 70	0 70	400
Storage Length (ft)		0	350			
Storage Lanes	1	0	1	4.0	4.0	1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Turning Speed (mph)	15	9	15			9
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Frt	0.900					0.850
Flt Protected	0.987		0.950			
Satd. Flow (prot)	844	0	902	3539	3539	808
Flt Permitted	0.987	·	0.950	5000	2000	
Satd. Flow (perm)	844	0	902	3539	3539	808
Right Turn on Red	044	Yes	302	5558	3338	Yes
And the state of t	24	168				
Satd. Flow (RTOR)	31	4.00	4.00	4.00	4.00	1.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	15			45	45	
Link Distance (ft)	773			848	3282	
Travel Time (s)	35.1			12.8	49.7	
Volume (vph)	10	29	9	1680	1120	2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	0.88	0.91	1.00
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	100%	100%	100%	2%	2%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0
	U	U	U	U	U	U
Parking (#/hr)	00/			00/	00/	
Mid-Block Traffic (%)	0%		4.0	0%	0%	
Adj. Flow (vph)	11	31	10	2043	1317	2
Lane Group Flow (vph)	42	0	10	2043	1317	2
Turn Type			Prot			Free
Protected Phases	4		5	2	6	
Permitted Phases						Free
Detector Phases	4		5	2	6	
Minimum Initial (s)	10.0		4.0	4.0	4.0	
Minimum Split (s)	25.0		15.0	40.0	25.0	
Total Split (s)	25.0	0.0	20.0	45.0	25.0	0.0
Total Split (%)	35.7%		28.6%			0.0%
		0.076				0.076
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	1.5		1.5	1.5	1.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	Max	Max	
Act Effct Green (s)	11.8		7.8	82.4	78.5	92.7
Actuated g/C Ratio	0.12		0.08	0.89	0.85	1.00

	1	1	4	↑	Ţ	1
	mp.		N.E.	NET	ODT	ODD
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.34		0.14	0.65	0.44	0.00
Control Delay	13.4		25.7	5.0	5.2	0.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	13.4		25.7	5.0	5.2	0.0
LOS	В		C	Α	Α	Α
Approach Delay	13.4			5.1	5.2	
Approach LOS	В			Α	Α	

Area Type:

Other

Cycle Length: 70

Actuated Cycle Length: 92.7

Natural Cycle: 75

Control Type: Semi Act-Uncoord

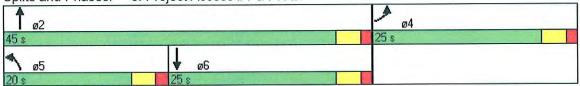
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 5.2

Intersection LOS: A
ICU Level of Service C

Intersection Capacity Utilization 64.7%

Analysis Period (min) 15

Splits and Phases: 3: Project Access #1 & PR-2



	1	1	1	↑	↓	1			
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		19	ተ	44	71			
Sign Control	Stop		-	Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	8	9	2	1681	1147	2			
Peak Hour Factor	1.00	1.00	1.00	0.88	0.91	1.00			
Hourly flow rate (vph)	9	10	2	2044	1349	2			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	Raised								
Median storage veh)	0								
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	2375	674	1351						
vC1, stage 1 conf vol	1349	011	1001						
vC2, stage 2 conf vol	1026								
vCu, unblocked vol	2375	674	1351						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)	5.8	0.0							
tF (s)	3.5	3.3	2.2						
p0 queue free %	91	98	100						
cM capacity (veh/h)	93	397	505						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	18	2	1022	1022	674	674	2		
Volume Left	9	2	0	0	0	0	0		
Volume Right	10	0	0	0	0	0	2		
cSH	157	505	1700	1700	1700	1700	1700		
Volume to Capacity	0.12	0.00	0.60	0.60	0.40	0.40	0.00		
Queue Length 95th (ft)		0	0	0	0	0	0		
Control Delay (s)	31.0	12.2	0.0	0.0	0.0	0.0	0.0		
Lane LOS	D	В							
Approach Delay (s)	31.0	0.0			0.0				
Approach LOS	D								
Intersection Summary									and the same of
Average Delay			0.2						
Intersection Capacity U	Itilization		59.7%	10	CU Leve	el of Ser	vice	В	
Analysis Period (min)			15						
A second									

Lane Configurations Math Math Math Math Meth		4	×	1	100	K	7	7	A	A	6	K	K
Ideal Flow (wphp) 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1	Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Ideal Flow (typhp)	Lane Configurations	1/2	A D		11/11	16			414	11		413	7
Lane Width (ft)	Ideal Flow (vphpl)			1900			1900	1900			1900		
Storage Length (fth) 48	Lane Width (ft)	10	11	11	9	11	11	10			12		
Storage Lanes	Grade (%)		0%			0%			0%			0%	
Total Lost Time (s)	Storage Length (ft)	48		0	85		0	0		60	0		0
Paralling Detector (ft)	Storage Lanes	1		0	2		0	0		1	0		1
Training Detector (ft)	Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Turning Speed (mph)	Leading Detector (ft)	48	50		50	50		50	50	50	50	50	50
Lane Util. Factor	Trailing Detector (ft)	- 0	0		0	0		0	0	0	0	- 0	0
Ped Bike Factor	Turning Speed (mph)	15		9	15		9	15		9	15		9
Fit Protected	Lane Util. Factor	0.91	0.91	0.95	0.97	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00
Filt Protected	Ped Bike Factor												
Satd. Flow (prot) 1503 3022 0 3030 3349 0 0 3184 1463 0 3356 1583 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518 1518	Frt		0.922			0.979				0.850			0.850
Fit Permitted	FIt Protected	0.950			0.950				0.964			0.981	
Satd. Flow (perm) 1503 3022 0 3030 3349 0 0 3184 1463 0 3356 1583 Right Turn on Red Yes Yes 155 Headway Factor 1.09 1.04 1.04 1.04 1.09 1.09 1.09 1.00 1.04 1.00 Link Distance (ft) 1093 4064 1070 1297 1297 172 1297 172 1297 1204 166 61.6 29.2 35.4 100 100 120 1297 1729 35.4 100 100 100 100 100 100 100 120 35.4 120 1297 1297 1297 1297 1297 1297 1297 1297 1297 1297 1297	Satd. Flow (prot)	1503	3022	0	3030	3349	0	0	3184	1463	0	3356	1583
Sight Turn on Red	FIt Permitted	0.950			0.950				0.964			0.981	
Satd. Flow (RTOR)	Satd. Flow (perm)	1503	3022	0	3030	3349	0	0	3184	1463	0	3356	1583
Headway Factor	Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)	Satd. Flow (RTOR)		168			12				172			155
Link Distance (ft)	Headway Factor	1.09	1.04	1.04	1.14	1.04	1.04	1.09	1.09	1.09	1.00	1.04	1.00
Travel Time (s)	Link Speed (mph)		45			45			25			25	
Volume (vph) 120 447 474 467 674 111 320 105 383 105 153 126 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Feak Hour Factor 0.92 0.94 0.91 0.98 0.96 0.77 0.77 0.95 0.94 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 10	Link Distance (ft)		1093			4064			1070			1297	
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.92 0.94 0.91 0.98 0.96 0.96 0.77 0.77 0.95 0.94 0.85 0.87 Growth Factor 107% 107% 107% 107% 107% 107% 107% 107%	Travel Time (s)		16.6			61.6			29.2			35.4	
Confl. Bikes (#/hr)	Volume (vph)	120	447	474	467	674	111	320	105	383	105	153	126
Peak Hour Factor	Confl. Peds. (#/hr)												
Growth Factor 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 107% 20% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% <th< td=""><td>Confl. Bikes (#/hr)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Confl. Bikes (#/hr)												
Heavy Vehicles (%) 2% 2% 2% 4% 2% 2% 2% 3% 2% 2% 2% 2% 2% 3% 2% 2% 2% 3% 2% 2% 2% 3% 2% 2% 3% 3% 2% 2% 2% 3% 3% 2% 2% 3% 3% 2% 2% 3% 3% 3% 2% 2% 3% 3% 3% 3% 3% 3% 3% 3% 3% 3% 3% 3% 3%	Peak Hour Factor	0.92	0.94	0.91	0.98	0.96	0.96	0.77	0.77	0.95	0.94	0.85	0.87
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Growth Factor	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%	107%
Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 155 155 155 143 120 193 155 155 155 143 120 193 155 155 155 140 431 120 193 155 155 155 141 6 5 150 150 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 155 <t< td=""><td>Heavy Vehicles (%)</td><td>2%</td><td>2%</td><td>2%</td><td>4%</td><td>2%</td><td>2%</td><td>2%</td><td>2%</td><td>3%</td><td>2%</td><td>2%</td><td>2%</td></t<>	Heavy Vehicles (%)	2%	2%	2%	4%	2%	2%	2%	2%	3%	2%	2%	2%
Mid-Block Traffic (%) 0% 0% 0% 0% 0% 0% Adj. Flow (vph) 140 509 557 510 751 124 445 146 431 120 193 155 Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 313 155 Turn Type Prot Prot Split pt+ov Split Perm Permitted Phases 1 6 5 2 4 4 45 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 Detector Phases 1 6 5 2 4 4 4.5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8<	Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Adj. Flow (vph) 140 509 557 510 751 124 445 146 431 120 193 155 Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 313 155 Turn Type Prot Prot Split pt+ov Split Perm Protected Phases 1 6 5 2 4 4 45 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 Detector Phases 1 6 5 2 4 4 45 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Parking (#/hr)												
Lane Group Flow (vph) 140 1066 0 510 875 0 0 591 431 0 313 155 Turn Type Prot Prot Split pt+ov Split Perm Protected Phases 1 6 5 2 4 4 45 8 8 Permitted Phases 1 6 5 2 4 4 45 8 8 8 Detector Phases 1 6 5 2 4 4 45 8 8 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Mid-Block Traffic (%)		0%			0%			0%			0%	
Turn Type Prot Split pt+ov Split Perm Protected Phases 1 6 5 2 4 4 45 8 8 Permitted Phases 5 2 4 4 45 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 5 8 5 8 5 8 5 8 5 8 5 8 5	Adj. Flow (vph)	140	509	557	510	751	124	445	146	431	120	193	155
Protected Phases 1 6 5 2 4 4 4 5 8 8 Permitted Phases 1 6 5 2 4 4 4 5 8 8 Detector Phases 1 6 5 2 4 4 4 5 8 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 5.0 5.0 5.0 5.0	Lane Group Flow (vph)	140	1066	0	510	875	0	0	591	431	0	313	155
Permitted Phases 1 6 5 2 4 4 4 5 8 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 <t< td=""><td>Turn Type</td><td>Prot</td><td></td><td></td><td>Prot</td><td></td><td></td><td>Split</td><td></td><td>pt+ov</td><td>Split</td><td></td><td>Perm</td></t<>	Turn Type	Prot			Prot			Split		pt+ov	Split		Perm
Detector Phases 1 6 5 2 4 4 4 5 8 8 8 Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 <td< td=""><td>Protected Phases</td><td>1</td><td>6</td><td></td><td>5</td><td>2</td><td></td><td>4</td><td>4</td><td>45</td><td>8</td><td>8</td><td></td></td<>	Protected Phases	1	6		5	2		4	4	45	8	8	
Minimum Initial (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0<	Permitted Phases												8
Minimum Split (s) 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	Detector Phases	1	6		5	2		4	4	45	8	8	8
Total Split (s) 29.0 63.5 0.0 39.0 73.5 0.0 51.0 90.0 23.5 23.5 23.5 Total Split (%) 16.4% 35.9% 0.0% 22.0% 41.5% 0.0% 28.8% 28.8% 50.8% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3% 13.3%	Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Total Split (%) 16.4% 35.9% 0.0% 22.0% 41.5% 0.0% 28.8% 28.8% 50.8% 13.3% 13.3% 13.3% Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	Minimum Split (s)	8.5	8.5		8.5	8.5		8.5	8.5		8.5	8.5	8.5
Yellow Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Total Split (s)	29.0	63.5	0.0	39.0	73.5	0.0	51.0	51.0	90.0	23.5	23.5	23.5
All-Red Time (s) 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 <td>Total Split (%)</td> <td>16.4%</td> <td>35.9%</td> <td>0.0%</td> <td>22.0%</td> <td>41.5%</td> <td>0.0%</td> <td>28.8%</td> <td>28.8%</td> <td>50.8%</td> <td>13.3%</td> <td>13.3%</td> <td>13.3%</td>	Total Split (%)	16.4%	35.9%	0.0%	22.0%	41.5%	0.0%	28.8%	28.8%	50.8%	13.3%	13.3%	13.3%
Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Recall Mode None Min None None <td>Yellow Time (s)</td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td></td> <td>3.0</td> <td>3.0</td> <td>3.0</td>	Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lead/Lag Lead Lag Lead-Lag Optimize? Yes Yes Recall Mode None Min None None </td <td>All-Red Time (s)</td> <td>1.5</td> <td>1.5</td> <td></td> <td>1.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	All-Red Time (s)	1.5	1.5		1.5								
Lead-Lag Optimize?YesYesYesYesRecall ModeNoneMinNoneNoneNoneNoneNoneAct Effct Green (s)18.552.130.163.835.365.417.517.5	Lead/Lag	Lead	Lag		Lead								
Recall Mode None Min None Min None	Lead-Lag Optimize?	Yes											
Act Effct Green (s) 18.5 52.1 30.1 63.8 35.3 65.4 17.5 17.5								None	None		None	None	None
	Act Effct Green (s)									65.4			
			0.34										

K:\09PR078\C00\C-CIVIL\DAT\ARRF_PR-2 Net_2018 PM_IMPROV_REV-09-09-2010.sy7 Ruth Miriam Vargas

Synchro 6 Report Page 1

	4	×	1	K	K	*	7	×	174	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
v/c Ratio	0.78	0.94		0.86	0.63			1.17dl	0.60		0.82	0.49
Control Delay	80.3	50.5		69.4	38.8			60.9	14.2		80.4	14.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	80.3	50.5		69.4	38.8			60.9	14.2		80.4	14.5
LOS	F	D		E	D			E	В		F	В
Approach Delay		54.0			50.1			41.2			58.6	
Approach LOS		D			D			D			E	

Area Type: Other

Cycle Length: 177

Actuated Cycle Length: 153.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94

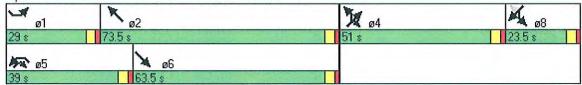
Intersection Signal Delay: 50.0
Intersection Capacity Utilization 87.6%

Intersection LOS: D
ICU Level of Service E

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: PR-2 & J Rosado Ave



	1	-	-	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	F	44	44	7 Park	WW.	ODIN
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	12	0%	0%	12	0%	12
Storage Length (ft)	220	0 70	0 70	400	0 %	0
Storage Lanes	1			1	2	0
Total Lost Time (s)		5 O	5.0			
	4.0	5.0	5.0	5.0	5.0	5.0
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Turning Speed (mph)	15			9	15	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.95
Ped Bike Factor						
Frt				0.850	0.942	
Flt Protected	0.950				0.970	
Satd. Flow (prot)	1770	3539	3505	1583	3302	0
Flt Permitted	0.950				0.970	
Satd. Flow (perm)	1770	3539	3505	1583	3302	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				725	152	100
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	1.00	45	45	1.00	35	1.00
Link Distance (ft)		4064	3282		1144	
Travel Time (s)	004	61.6	49.7	040	22.3	000
Volume (vph)	284	667	966	643	449	286
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)	115		4.2.2			
Peak Hour Factor	0.95	0.94	0.93	0.82	0.85	0.86
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	320	759	1111	839	565	356
Lane Group Flow (vph)	320	759	1111	839	921	0
Turn Type	Prot	, 00		Free	721	0
Protected Phases	5	2	6	1 100	4	
Permitted Phases	J		U	Free	4	
Detector Phases	E	2	G	1-166	4	
	5		6			
Minimum Initial (s)	4.0	4.0	4.0		4.0	
Minimum Split (s)	8.0	21.0	21.0		21.0	0.0
Total Split (s)	26.0	64.0	40.0	0.0	55.0	0.0
Total Split (%)		52.9%		0.0%	45.5%	0.0%
Yellow Time (s)	2.0	3.0	3.0		3.0	
All-Red Time (s)	2.0	2.0	2.0		2.0	
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Recall Mode	None	Min	Min		None	
Act Effct Green (s)	22.1	61.3	35.2	102.2	30.9	
Actuated g/C Ratio	0.22	0.60	0.34	1.00	0.30	
3.0.1000	V 1 Am Am	0.00			0.00	125

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	1	-	4	1	1	1
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
v/c Ratio	0.84	0.36	0.92	0.53	0.83	CDIC
Control Delay	59.7	12.0	46.6	1.3	29.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.7	12.0	46.6	1.3	29.4	
LOS	E	В	D	Α	C	
Approach Delay		26.1	27.1		29.4	
Approach LOS		C	C		С	
Intersection Summa	ıry			400		
Area Type:	Other					
Cycle Length: 121						
Actuated Cycle Leng	gth: 102.2					
Natural Cycle: 75						
Control Type: Actua		linated				
Maximum v/c Ratio:						
Intersection Signal [ion LOS: C
Intersection Capacit		80.4%		10	SU Leve	el of Service
Analysis Period (mir	1) 15					

Splits and Phases: 2: PR-2 & V Rojas Ave



	1	1	1	↑	1	1
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		K	ት ት	44	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		1 64	0%	0%	
Storage Length (ft)	0	0	350	5,5	0.70	400
Storage Lanes	1	0	1			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	4.0	50	50	50	50
Trailing Detector (ft)			0	0	0	0
	0	0	1 1	U	U	9
Turning Speed (mph)	15	9	15	0.05	0.05	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Frt	0.900					0.850
Flt Protected	0.987		0.950			
Satd. Flow (prot)	844	0	902	3539	3539	808
Flt Permitted	0.987		0.950			
Satd. Flow (perm)	844	0	902	3539	3539	808
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	31	515				2
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	15			45	45	
Link Distance (ft)	773			848	3282	
Travel Time (s)	35.1			12.8	49.7	
	10	29	9	1680	1120	2
Volume (vph)	10	29	9	1000	1120	2
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)	4.00	4.00	4.00	0.00	0.04	4.00
Peak Hour Factor	1.00	1.00	1.00	0.88	0.91	1.00
Growth Factor	107%	107%	107%	107%	107%	107%
Heavy Vehicles (%)	100%	100%	100%	2%	2%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	11	31	10	2043	1317	2
Lane Group Flow (vph)	42	0	10	2043	1317	2
Turn Type	,	J	Prot			Free
Protected Phases	4		5	2	6	. 100
Permitted Phases	4		J	2	U	Free
			F	0	6	riee
Detector Phases	4		5	2	6	
Minimum Initial (s)	10.0		4.0	4.0	4.0	
Minimum Split (s)	25.0		15.0	40.0	25.0	
Total Split (s)	25.0	0.0	20.0	45.0	25.0	0.0
Total Split (%)	35.7%	0.0%	28.6%			0.0%
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	1.5		1.5	1.5	1.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	Max	Max	
Act Effct Green (s)	11.8		7.8	82.4	78.5	92.7
Actuated g/C Ratio	0.12		0.08	0.89	0.85	1.00
Actuated gro Natio	0.12		0.00	0.09	0.00	1.00

	1	1	1	†	1	1
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.34		0.14	0.65	0.44	0.00
Control Delay	13.4		25.7	5.0	5.2	0.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	13.4		25.7	5.0	5.2	0.0
LOS	В		С	Α	Α	Α
Approach Delay	13.4			5.1	5.2	
Approach LOS	В			Α	Α	
Intersection Summa	iry					
Area Type:	Other					

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 92.7

Natural Cycle: 75

Control Type: Semi Act-Uncoord

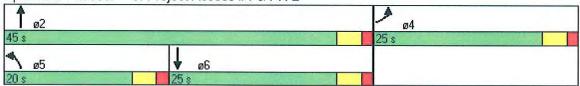
Maximum v/c Ratio: 0.65 Intersection Signal Delay: 5.2

Intersection Capacity Utilization 64.7%

Intersection LOS: A ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 3: Project Access #1 & PR-2



	1	1	4	†	1	1		
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W		N	ተ ተ	ተተ	7		
Sign Control	Stop			Free	Free			
Grade	0%			0%	0%			
Volume (veh/h)	8	9	2	1681	1147	2		
Peak Hour Factor	1.00	1.00	1.00	0.88	0.91	1.00		
Hourly flow rate (vph)	9	10	2	2044	1349	2		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	Raised							
Median storage veh)	0							
Upstream signal (ft)								
X, platoon unblocked								
vC, conflicting volume	2375	674	1351					
C1, stage 1 conf vol	1349							
C2, stage 2 conf vol	1026							
Cu, unblocked vol	2375	674	1351					
C, single (s)	6.8	6.9	4.1					
C, 2 stage (s)	5.8							
F (s)	3.5	3.3	2.2					
00 queue free %	91	98	100					
cM capacity (veh/h)	93	397	505					
					CD 1	000	000	
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	
Volume Total	18	2	1022	1022	674	674	2	
Volume Left	9	2	0	0	0	0	0	
Volume Right	10	0	0	0	0	0	2	
cSH	157	505	1700	1700	1700	1700	1700	
Volume to Capacity	0.12	0.00	0.60	0.60	0.40	0.40	0.00	
Queue Length 95th (ft)		0	0	0	0	0	0	
Control Delay (s)	31.0	12.2	0.0	0.0	0.0	0.0	0.0	
Lane LOS	D	В						
Approach Delay (s)	31.0	0.0			0.0			
Approach LOS	D							
ntersection Summary					Time!			
Average Delay			0.2					
Intersection Capacity U	Jtilization		59.7%	10	CU Leve	el of Ser	vice	
Analysis Period (min)			15					



APPENDIX – I

Maximum Daily Heavy Vehicle Volume Distribution

Type of Heavy Vehicle	Maximum Daily Volume	Comments
Fuel Receiving: Transfer Trailers	65	Trailer capacity is approximately $100 \mathrm{yd}^3$. Trailer length is approximately $50 \mathrm{ft.}$
Fuel Receiving: Roll-Off and Collection Trucks	189	Collection trucks: front end loaders and rear loaders .
Bottom Ash Metals Recovery	9	Roll-off truck.
Boiler Aggregate	14	Trailer capacity is between 40-60 yd ³ .
Conditioned Fly Ash	16	Trailer capacity is between 40-60 yd ³ .
Lime Delivery Truck	1	Pneumatic tankers (800-100 ft³).
Alternative Fuels	20	Fuel tanker.
Maximum Total Daily Heavy Vehicle		
Volume	311	

Energy Answers International Arecibo Puerto Rico 70MW Resource Recovery Facility RRF

Note: 5 shift crews needed to cover Power Block. 3 shift crews needed to cover Processing. Two (main) shifts needed to cover ash processing.

70MW - Puerto Rico Facility

			Harmbre	4 -6	CI	. :££ \A	/ al.e.	اد ۔
Position	Status	EX/NE	Hourly Rate	# of Positions		nift W 2nd		
Administration								
Facility Manager / General Manager O&M Manager Maintenance Manager Plant Engineer Environmental Health/Safety Manager HR Specialist Office Manager Plant Accountant Receptionist A/R Clerk	FT FT FT FT FT FT FT FT	EX EX EX EX EX EX EX NE NE		1 1 1 1 1 1 1 1	1 1 1 1 1 1 1			
A/P Clerk	FT	NE		1	1			
Waste Processing Operations								
Shift Supervisor - Fuels/Ash Heavy Equip. Opr MSW to PRF Utility Operator - Picker (front end) CRO - Fuel Handling Plant Operator - Fuels Weighmaster Utility Operator	FT FT FT FT FT FT	EX NE NE NE NE NE		3 6 6 3 12 2 4	1 2 2 1 4 1 2	1 2 2 1 4 1 2	1 2 2 1 4	
Power Block Operations								
Shift Supervisor - Power CRO - Power Assistant CRO - Power Plant Operator - Power Utility Operator-Power Block Water Treatment Technician	FT FT FT FT FT	EX NE NE NE NE NE		5 5 5 10 5 1	2 2 2 4 2 1	1 1 1 2 1	1 1 1 2 1	1 1 1 2 1
Ash Processing								
Plant Operator - Ash Utility Operator - Picker (ash) Heavy Equipment Operator-Ash	FT FT FT	NE NE NE		4 2 6	2 1 2	2 1 2	1	1
Maintenance								
Sr. Maintenance Mechanic Jr. Maintenance Mechanic Sr. Electrician Electrician I & C Technician Utility Worker Warehouse Attendant	FT FT FT FT FT FT	NE NE NE NE NE NE		9 8 2 2 2 14 1	4 3 2 2 2 2 1	1 1 2	3 3	1 1 2
Total Plant Employees				128				
Tractor Trailer Drivers Corproate Management				13 9	_			
Total Employment				150				



APPENDIX – J

AM Peak Hour Analysis

Existing (2010) vs. Opening Day (2013) Conditions

ve.
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Rosado
Juan
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PR-10.
PR-2

Cut of the color of the cut of	Act	All color All color	Color Delay (sec) Color Delay (sec) Color Delay (sec) LOS Queue (veh) Queuery delay (sec) Color Delay (sec) Co	ment Delay (sec) 10S Queue (veh) traffic signal 2013 traffic signal 2013 traffic signal 2013 traffic signal 2013 traffic signal 4 Allowed 64.9 E 5 66.4 < 80 22.7 C 6 24.2 37.7 < 80 323.2 F 22 317.2 < 80 45.7 D 25 52.6 60.7 < 80 55.9 E 22 92.8 < 80				2010		melan stoc			2013 w	2013 with Improvements
64.9 E 5 66.4 < 80	64.9 E 5 66.4 \$80 22.7 C 6 24.2 37.7 22.3 C 6 317.2 \$80 45.7 D 25 52.6 60.7	64.9 E 5 66.4 ≤80 22.7 C 6 24.2 37.7 223.2 F 22 317.2 ≤80 45.7 D 25 52.6 60.7	22.7 C 6 24.2 37.7 22.3.2 F 22 317.2 < 80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 < 80	64.9 E 5 66.4 <80 22.7 C 6 24.2 37.7 223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	N	ment		SO	Queue (veh)	2013 Delays with existing traffic signal times and geometry	2013 Allowed delay (sec)	Delay (sec)	(sec)	(sec) LOS
22.7 C 6 24.2 37.7 223.2 F 22 317.2 < 80	22.7 C 6 24.2 37.7 223.2 F 22 317.2 < 80 45.7 D 25 52.6 60.7	22.7 C 6 24.2 37.7 223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7	22.7 C 6 24.2 37.7 223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	22.7 C 6 24.2 37.7 223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	EB-L		-	ш	S	66.4	< 80	72		ш
223.2 F 22 317.2	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	253.2 F 22 317.2 < 80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 < 80	1-83		22.7	U	9	24.2	37.7	32.5	+	O
223.2 F 22 317.2 ≤80	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	223.2 F 22 317.2 <80 45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	EB-R	~							-	
	45.7 D 25 52.6 60.7	45.7 D 25 52.6 60.7	45.7 D 25 52.6 60.7 55.9 E 22 92.8 <80	45.7 D 25 52.6 60.7 55.9 E 22 92.8 < 80	WB-L	ب	223.2	ш	22	317.2	< 80	77.1		ш
WB-R	NB-F				NB-T	-	55.9	ш	22	92.8	< 80	61.9		ш
55.9 E 22 92.8 < 80	55.9 E 22 92.8 < 80	55.9 E 22 92.8 ≤80		T-BS.	NB-R	2						9.8		A
55.9 E 22 92.8 < 80 49.5 D 6 53.9 64.5	NB-T 55.9 E 22 92.8 \$80 NB-R NB-R SB-L 64.5 B-1	NB-T 55.9 E 22 92.8 <80 NB-R NB-R SB-L 49.5 D 6 53.9 64.5	49.5 D 6 53.9 64.5		Avenue SB-R	0								

			2010				2013 w	2013 with Improvements	ements
	Movement	Delay (sec)	SO	Queue (veh)	2013 Delays with existing traffic signal times and geometry	2013 Allowed delay (sec)	Delay (sec)	ros	Queue (veh)
	E8-L	30.9	U	5	31.7	45.9	31.7	U	9
	EB-T	4.1	A	2	4.4	24.1	4.4	A	m
PR-2	WB-T	253,7	u	46	318.1	< 80	27.1	O	23
	WB-R						6.3	A	0
Victor	SB-L	11.3	æ	4	11.4	31.3	11.4	00	Ŋ
Avenue SB-R	SB-R								

PR-2 & Access #1

			2010				2013	2013 with Improvements	ements
	Movement	Movement Delay (sec)	SOT	Queue (veh)	2013 Delays with existing geometry	2013 Allowed delay (sec)	Delay (sec)	ros	Queue (veh)
	NB-L	N/A		N/A	12.3	N/A	22.7	U	н
	NB-T	N/A	N/A	N/A	N/A	N/A	11.9	8	30
PR-2/	SB-T	N/A	N/A	N/A	N/A	N/A	4	4	S
Access #1	SB-R								
	EB-L	N/A	N/A	N/A	124.2	N/A	15.1	60	
	EB-R								

PR-2 & Access #2

			2010				2013	2013 with improvements	ements
	Movement	Movement Delay (sec)	LUL EL	2013 Delays with existing LOS Queue (veh) geometry		2013 Allowed delay (sec) Delay (sec)	Delay (sec)	SOI	Queue (veh)
	NB-L	N/A		N/A	8.7	N/A	8.7	A	1
	NB-T								
PR-2/	SB-T								
Access #2 SB-R	SB-R								
	EB-L	N/A	N/A	N/A	21.9	N/A	21.9	U	н
	EB-R								

Existing (2010) vs. 5 Years after Opening Day (2018) Conditions

٠
Ave.
Rosado
& Juan
PR-10,
PR-2,

			2010				2018 wi	2018 with Improvements	nents
	Movement	Delay (sec)	son	Queue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	ros	Queue (veh)
	E8-L	64.9	ш	5	76	> 80	74.8	ш	9
	EB-T	22.7	U	9	33.9	37.7	32.8	U	00
	EB-R								
PK-Z	WB-L	223.2	u.	22	153.9	< 80	66.3	ш	17
	WB-T	45.7	٥	25	57.8	60.7	59.3	ш	28
	WB-R								
	NB-L								
PR-10	NB-T	55.9	w	22	104	< 80	63.9	ш	18
	NB-R				12.3	29.8	5.1	A	m
Juan	SB-L								
Rosado		49.5	٥	9	72.4	64.5	63.8	В	S
enne							14.8	8	2

PR-2 & Victor Rojas Ave.

			2010				2018 wi	2018 with Improvements	nents
	Movement	Delay (sec)	ros	Queue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	SOI	Queue (veh)
	EB-L	30.9	O	5	33.6	45.9	33.6	U	9
	EB-T	4.1	A	2	5.1	24.1	5.1	A	m
PR-Z	WB-T	253.7	u.	46	72	<80	72	ш	31
	WB-R				14.7	26.3	14.7	89	0
Victor	SB-L	11.3	ω	4	13.2	31.3	13.2	æ	9
venue venue	Avenue SB-R								

PR-2 & Access #1

			2010				2018 wr	2018 with Improvements	nents
			3		2018 Delays with 2013	2018 Allowed	Colm (coc)	Š	Queue (web)
5	Movement	Delay (sec)	COS	Queue (ven)	Conditions	deldy (sec)	Delay (sec)	200	1
	NB-L	N/A	N/A	N/A	23	N/A	23	U	н
	NB-T	N/A	N/A	N/A	33.3	N/A	33.3	U	36
PR-2/	SB-T	N/A	N/A	N/A	4.3	N/A	4.3	A	S
Access #1 SB-R	SB-R								
	EB-L	N/A	N/A	N/A	14.6	N/A	14.6	œ	-1
	FR.R								

PR-2 & Access #2

			2010				2018 wi	2018 with Improvements	nents
	Movement	Delay (sec)	S	Queue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	SOI	Queue (veh)
	NB-L	N/A	N/A	N/A	6	N/A	O	A	н
	NB-T								
PR-2/	SB-T								
Access #2 SB-R	SB-R								
	EB-L	N/A	N/A	N/A	25.9	N/A	25.9	۵	н
	EB-R								

PM Peak Hour Analysis

Existing (2010) vs. Opening Day (2013) Conditions PR.2, PR-10, & Juan Rosado Ave.

			2010				2013 v	2013 with Improvements	ements
	Movement	Delav (sec)	SOI	Queue (veh)	2013 Delays with existing traffic signal times and geometry	2013 Allowed Delay (sec)	Delay (sec)	SOI	Queue (veh)
	FB.1	63.2	ш	7	6.69	> 80	6.69	ш	6
	E8-T	35.9	۵	16	40.1	50.9	40	۵	21
1	E8-R				,			1	,
PR-2	W/B-1	67.1	ш	13	111.9	× 80	56.5	ш	13
	T-G/V	38.5	0	15	42.2	53.5	32.6	U	17
	1.0V	200							
	1000								
	NB-L					4 17	1 41		2,2
PR-10	T-RN	45.3	۵	15	57.8	60.3	53./	0	77
1	a-av						10.5	œ	7
Service Control									
Juan	28-L	7				1		u	13
Rosado	SB-T	55.8	Э	6	67.6	08 >	90.7		2
	d.as	-							

			2010				X013 W	ZOTS with improvements	ments
		(as) vila	ŞĊ	Onene (veh)	2013 Delays with existing traffic signal times and geometry	2013 Allowed Delay (sec)	Delay (sec)	FOS	Queue (veh)
	Movement	75 (3CV)	6	12		61	47.6	٥	14
	7-02	0	>	· ·	9.7	28.6	5.6	A	7
PR-2	-93	0.0			3 577	08 /	31.8	U	17
	WB-T	101.9	_	200	172.0	200		٧	c
	WB-R						1		,
Victor	SB-1	26	U	6	27.1	41	25.9	U	10
Rojas	d as								

PR-2 & Access #1

			2010				2013	2013 with Improvements	ments
		100		(Hay) anailo	2013 Delays with existing	2013 Allowed Delay (sec)	2013 Allowed Delay (sec)	SOI	Queue (veh)
	Movement	Movement Delay (sec)		27.0	1	N/A	25.4	U	1
	NB-L	N/A	N/A	N/A	13.3	2/11			
	FON	A/N	N/A	N/A	N/A	N/A	3.8	A	OT
	I-ON	2/11						*	o
DR-2 /	T.R.	N/A	N/A	N/A	N/A	N/A	4.1	1	0
A and 41									
CCESS #T				1	0 000	NI IA	121	α	
	EB-L	N/A	N/A	N/A	279.0	W/W	10.4	,	
	FB-R								

PR-2 & Access #2

Movement Delay (sec) LOS Queue (veh) geometry Delay (sec) N/A N/A 11.2 N/A SB-T SB-R N/A N/A N/A N/A N/A 25.9 N/A N/		-		2010	Part Make			2013 w	2013 with Improvements	ements
Movement Delay (sec) LOS Queue (veh) geometry Delay (sec) N/A N/A 11.2 N/A N/A 12.2 N/A N/A						2013 Delays	2013			
NB-L N/A N/A 11.2 N/A N/A N/B N/			lans) veloc	SOI	Oueue (veh)	with existing	Allowed Delay (sec)	Delay (sec)	SOI	Queue (veh)
NB-1 N/A N/A 11.2 N/A N/A 18-7 N/A N/B-1 SB-1 N/A N/A N/A 25.9 N/A	INIONE	1	Delay (see)				NI /A	413	ď	0
NB-T SB-T SB-R FB-I N/A N/A 25.9 N/A	NB	3-1	N/A	N/A	N/A	777	W/N	44.44		
SB-T SB-R FB-I N/A N/A 25.9 N/A	an an	1.7								
SB-R SB-R FB-I N/A N/A Z5.9 N/A	ON	1.0								
SB-R N/A N/A 25.9 N/A		J-1								
EB-1 N/A N/A 25.9 N/A		-B								
			NIA	N/A	N/A	25.9	N/A	25.9	٥	1
	00	7-6	2/21							

Conditions
(2018) (
Existing (2010) vs. 5 Years after Opening Day (2018) Conditions
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	PR-10
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1			2010				ZUIS WIT	ZULS WITH IMPROVEILIERIES	CHE
	Movement	Delay (sec.)	SO	Queue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	sol	Queue (veh)
	FR-I	63.2	ш	7	81.5	< 80	80.3	u.	11
	E8-T	35.9	٥	16	49.9	50.9	50.5	٥	30
	EB-R								
PR-2	WB-I	67.1	ш	13	66.7	< 80	69.4	ш	16
	WB-T	38.5	۵	15	37.2	53.5	38.8	٥	21
ij	WB-R								
	NB-L							-	
PR-10	L-RN	45.3	Q	15	62.4	60.3	6.09	ш	14
	NB-R				13.4	30.5	14.2	ω	19
luan	SB-L								
Rosado	SB-T	55.8	ы	6	95.3	<80	80.4	ıL	10
Aronio	S.B.S						14.5	ω	3

			2010				2018 wit	2018 with Improvements	nents
			Š	(Hev) etterio	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	r og	Queue (veh)
١	Niovement		3	70	2 65	61	59.7	ш	17
	1-83	46	0	77	2.00	-			
	F.B.T	98	A	9	11.9	28.6	12	2	7
PR-2	1	0101	u	33	42.3	<80	46.6	۵	24
	-0M	101.3	-	3	1.3	21	1.3	A	0
	N-GW								
Victor	180	96	U	თ	28.3	41	29.4	U	: 12
Rojas	100							• • •	
Avenue	SB-R								

PR-2 & Access #1

			2010				2018 wi	2018 with Improvements	nents
		o de la companya de l	Š	Oueue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	SOT .	Queue (veh)
	Novement	Delay (360)	207	N/A	757	A/N	25.7	U	ч
	NB-L	N/A	W/W	2/1		VIV	r.	A	13
	NB-1	N/A	N/A	N/A	0	2/41		-	1
PR-2 /	T-82	N/A	N/A	N/A	5.2	N/A	5.2	A.	1
Access #1									
		N/A	N/A	N/A	13.4	N/A	13.4	ю.	1
	2.85								

			2010				2018 wi	2018 with Improvements	nents
		land of the state	Š	Oueue (veh)	2018 Delays with 2013 Conditions	2018 Allowed delay (sec)	Delay (sec)	ros	Queue (veh)
	Movement	Delay (sec)		27.70	42.2	N/A	122	8	0
	NB-L	N/A	N/A	N/A	77.7	W/A:	2000		
	Tan								
	1000								
1 6-80	CR.T								
1-	-								
Access #2	SB-R								,
	EB-L	N/A	N/A	N/A	31	N/A	31	0	-
	0 00								

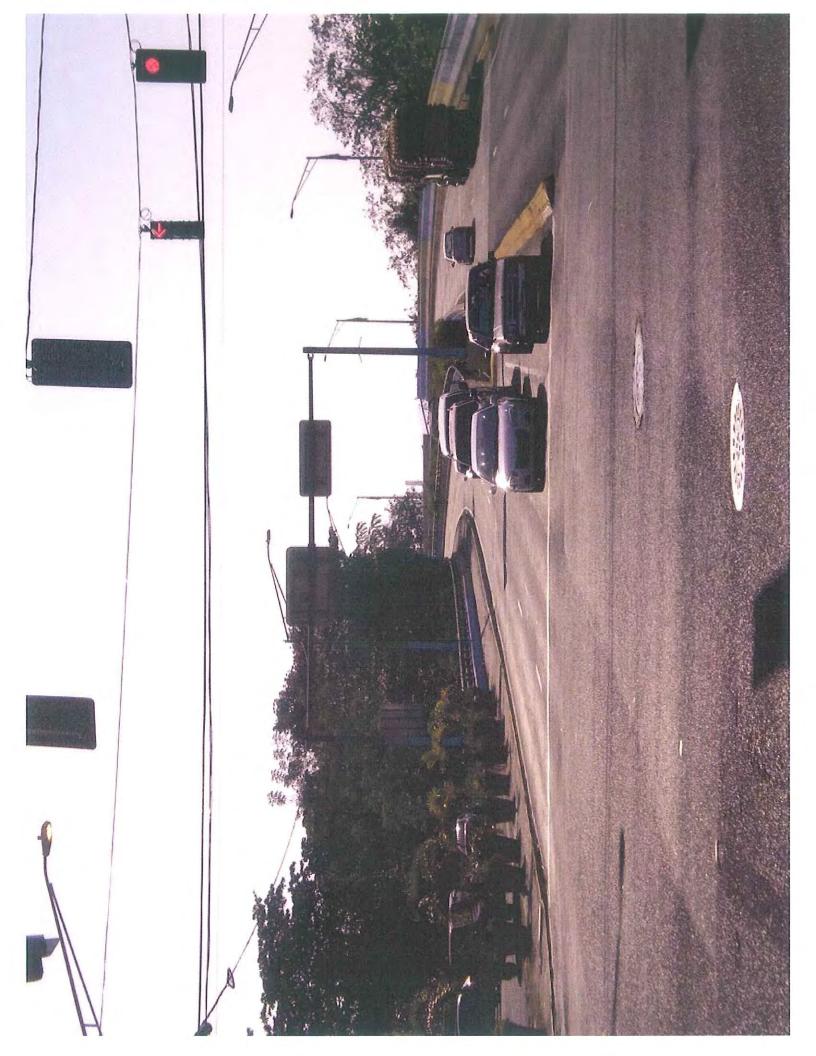


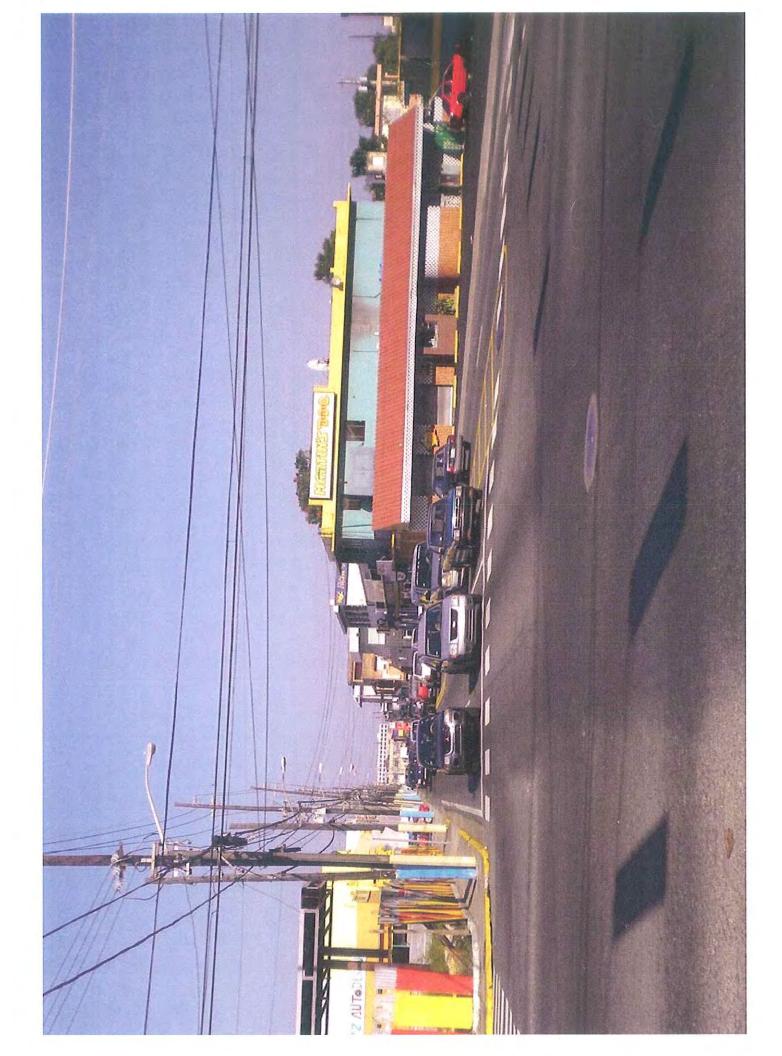
APPENDIX – K

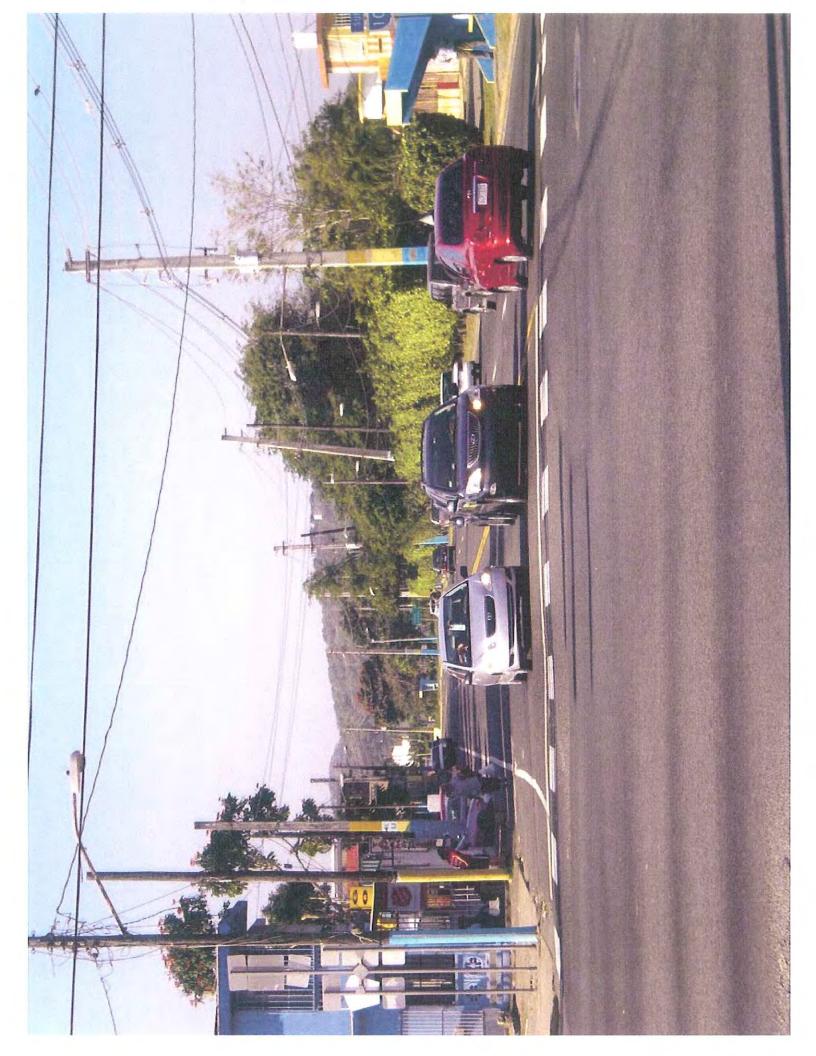


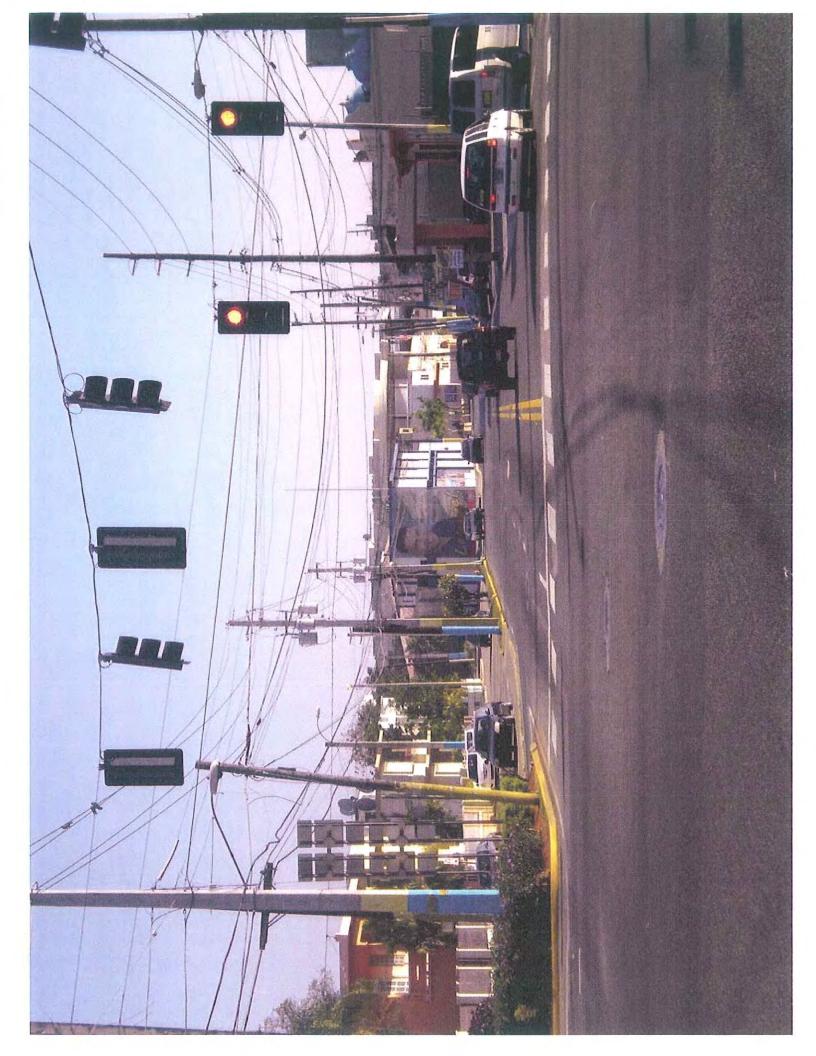
Intersection #1

PR-2, PR-10 & Juan Rosado Avenue





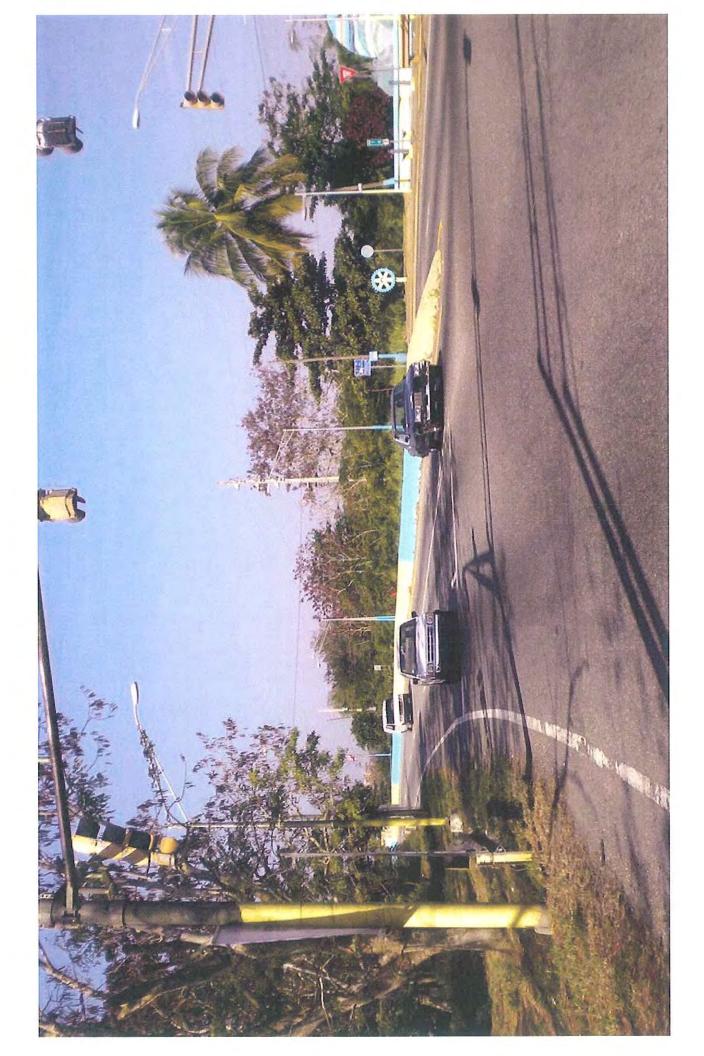


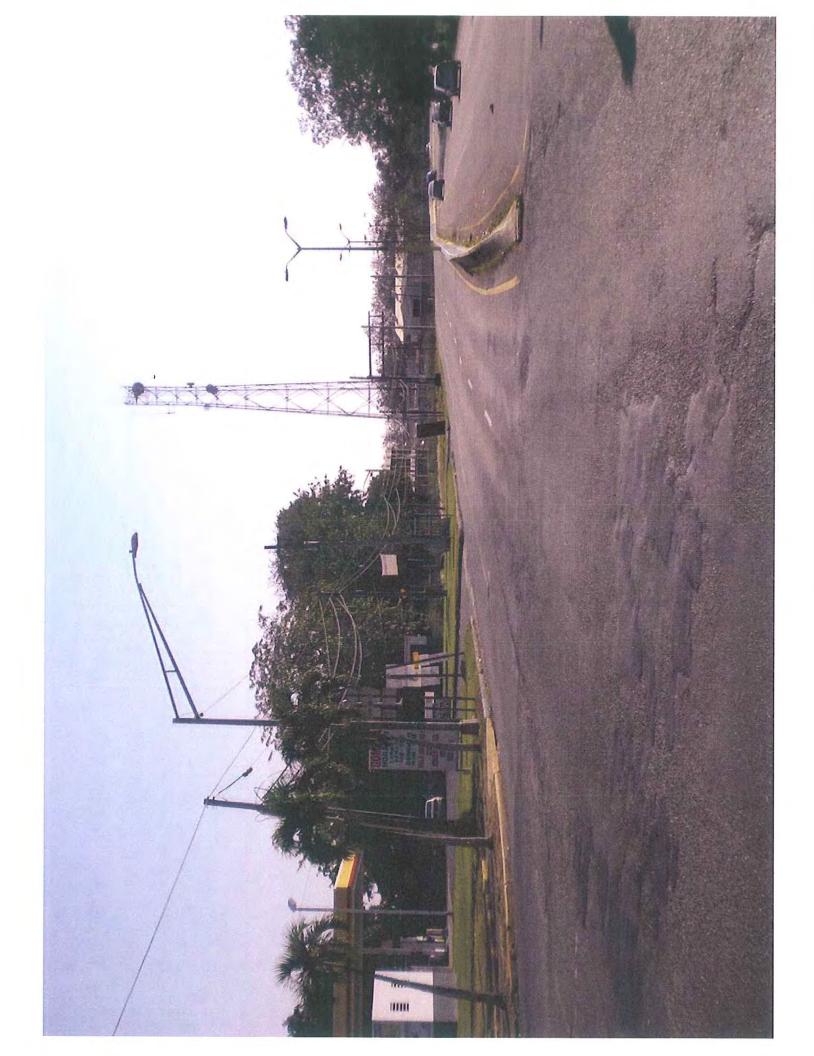


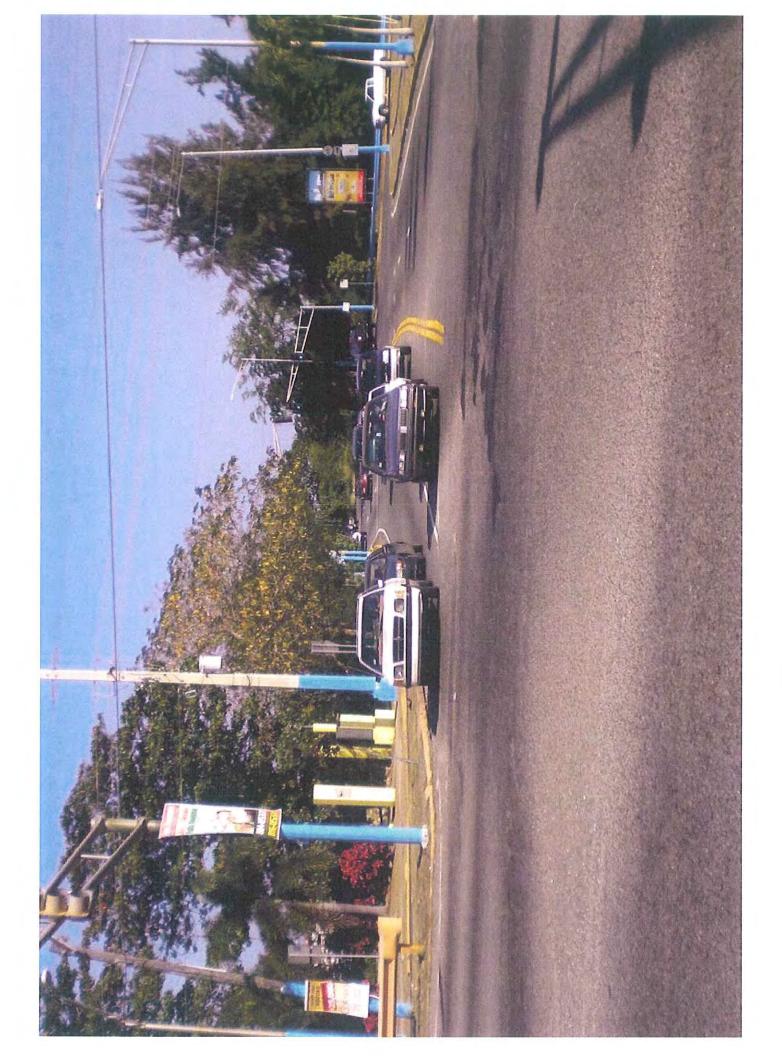


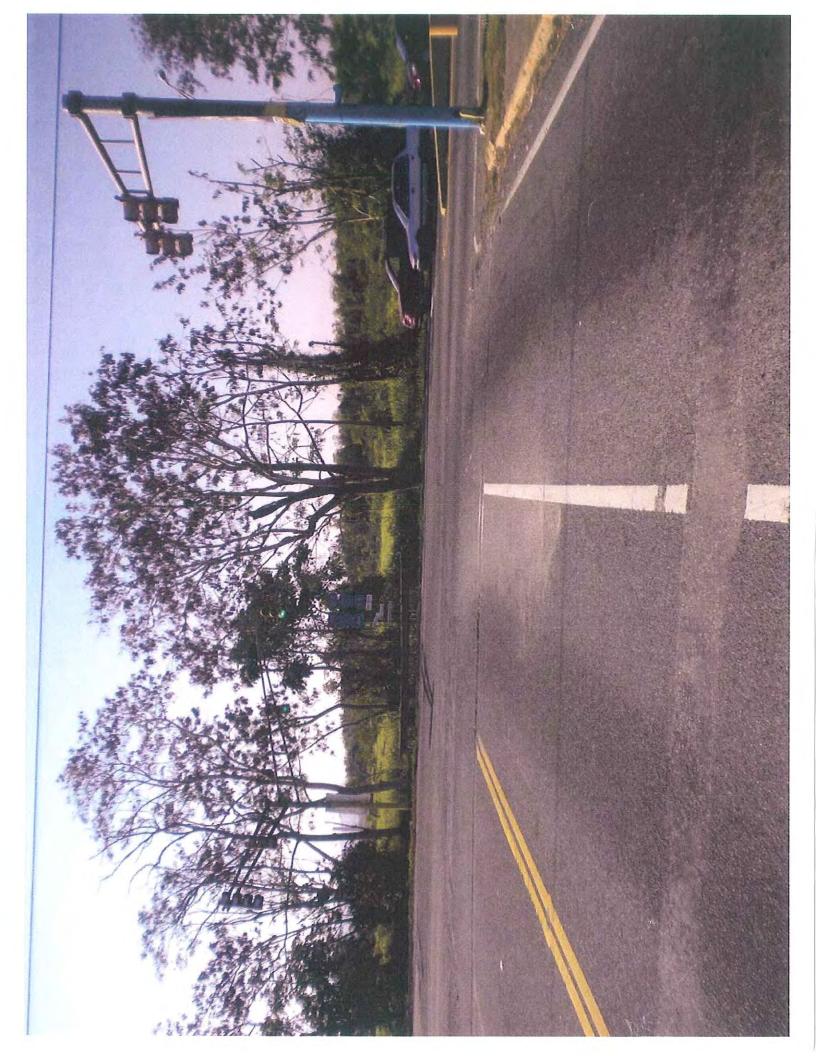
Intersection #2

PR-2 & Victor Rojas Avenue











PR-2 Km. 73.1

Proposed Project Area

