NOTICE OF SPECIAL COUNCIL MEETING

In accordance with § 38-431.02 of the Arizona Revised Statutes of the State of Arizona, notice is hereby given to the Members of City Council and to the general public that the Mayor and Council of the City of San Luis, Arizona will hold a Special City Council meeting at 6:00 p.m., Wednesday, January 25, 2023. The meeting will take place at the City Council Chambers, located at 1090 E. Union Street, San Luis, Arizona, 85349. The public is invited to attend the open meeting.

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the City of San Luis does not discriminate on the basis of disability in the admission of or access to, or treatment or employment in its programs, activities, or services. For information regarding rights and provisions of the ADA or Section 504, or to request reasonable accommodations for participation in City programs, activities, or services contact: ADA/Section 504 Coordinator, City of San Luis Human Resources Department, 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Notice is hereby given that pursuant to A.R.S. § 1-602.A.9, subject to certain specified statutory exceptions, parents have a right to consent before the State or any of its political subdivisions make a video or audio recording of a minor child. Meetings of the City Council are audio and/or video recorded, and, as a result, proceedings in which children are present may be subject to such recordings. Parents in order to exercise their rights may either file written consent with the City Clerk to such recordings or take personal action to ensure that their child or children are not present when a recording may be made. If a child is present at the time a recording is made, the City will assume that the rights afforded parents pursuant to A.R.S. § 1-602.A.9 have been waived.

THIS NOTICE IS GIVEN BY:

/s/ Sonia Cornelio, City Clerk

AVISO DE JUNTA ESPECIAL

De acuerdo con los Estatutos del Estado de Arizona A.R.S. § 38-431.02, se le informa a los miembros del Cabildo y al público en general que el Alcalde y el Cabildo, tendrán una Junta Especial a las 6:00 p.m., el día Miercoles 25 de Enero del 2023. La junta se llevará a cabo en la Sala del Cabildo, ubicada en el 1090 E. Union Street, San Luis, Arizona, 85349. El público está invitado a la junta.

De acuerdo con el Acta de Americanos con Discapacidades y la Sección 504 del Acta de Rehabilitación del 1973, la Ciudad de San Luis, Arizona no discrimina por causa de discapacidad la admisión y acceso a sus programas, actividades, servicios o en el trato en cuanto a empleo. Para más información referente a derechos y provisiones del Acta de Americanos con Discapacidades o Sección 504, o para solicitar adaptaciones que sean razonables para la participación en programas, actividades o servicios de la Ciudad, contactar al: Coordinador del Acta de Americanos con Discapacidades/Sección 504, Departamento de Recursos Humanos de la Ciudad de San Luis, Arizona, ubicado en el 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Por medio de este aviso y de acuerdo con los Estatutos del Estado de Arizona A.R.S § 1-602.A.9, sujeto a ciertas excepciones reglamentarias, los padres de familia tienen el derecho de dar el consentimiento ante el Estado o cualquiera de sus subdivisiones políticas para hacer una grabación de audio o video de su hijo menor de edad. Las juntas del Cabildo se graban en audio y/o video y como resultado, el hecho de que haya menores presentes puede ser sujeto a que sean grabados. Para que los padres de familia puedan ejercer sus derechos pueden dar el consentimiento por escrito con la Secretaria de la Ciudad a tal grabación, o tomar acción personal para asegurarse que su hijo menor no esté presente cuando la grabación se lleve a cabo. Si un menor de edad está presente en el momento de la grabación, la Ciudad asumirá que los padres de familia están cediendo los derechos sobre una posible grabación de acuerdo con los Estatutos del Estado de Arizona A.R.S. § 1-602.A.9.

ESTE AVISO ES DADO POR:

/f/ Sonia Cornelio, Actuaria de la Ciudad

AGENDA
Special Meeting
San Luis City Council
San Luis Council Chambers
1090 E. Union Street
San Luis, AZ 85349
January 25, 2023
6:00 p.m.

1. **CALL TO ORDER/ROLL CALL**

2. **PLEDGE OF ALLEGIANCE**

3. **INVOCATION**

4. **CALL TO THE PUBLIC**
This is the time for the public to comment. Members of the City Council may not discuss items that are not specifically identified on the agenda. Therefore, pursuant to A.R.S. § 38-431.01 (H), action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism or scheduling the matter for further consideration and decision at a later date.

5. **CONSENT AGENDA**
All matters are considered to be routine by the City Council and will be enacted by one motion. If discussion is desired, that item will be removed from the Consent Agenda and will be considered separately.

5. A. **MINUTES OF**
- Regular Council Meeting held January 11, 2023

5. B. **Disbursements from January 3, 2023 to January 17, 2023**
Total disbursements $2,007,133.85
(Two Million, Seven Thousand, One Hundred Thirty-Three Dollar and Eighty-Five Cents)

6. **DISCUSSION AND POSSIBLE ACTION ITEMS:**

6. A. Presentation, discussion, and possible directions to staff on any and all matters regarding fire, building, and zoning regulations pertaining to the construction of cloth shade structures within the required building setback. **(Jose A. Guzman, Director of Planning & Zoning)**

6. B. Discussion and possible action on any and all matters regarding consulting services to conduct a Total Compensation Study and a Classification & Analysis/Total Compensation Study. **(Adela Cortez, Human Resources Director)**

6. C. Discussion and possible action on any and all matters regarding the purchase of a 7.5-ton bridge crane for the Fleet Maintenance Building Expansion. **(Manuel Hernandez, Public Works Project Manager)**

6. D. Discussion and possible action on any and all matters regarding the authorization to reallocate the budgeted funds from the Fleet Shop Project to the Fernando Padilla Community Center Repair Project. **(Yolanda Dueñas, Facilities Supervisor)**

6. E. Continued public hearing followed by discussion and possible action on any and all matters regarding Conditional Use Permit Case No. 2022-0592. A request by Dahl, Robins & Associates on behalf of HMS Development, LLC for a Conditional Use Permit from Section 18.35.30(C) (1) of the City of San Luis Zoning Ordinance to allow a commercial building with a gross floor area greater than 50,000 square feet, Assessor's parcel number 776-34-260, located south of Cesar Chavez Boulevard between 7th Avenue and 8th Avenue in San Luis, Arizona. **(Fernando Villegas, Principal Planner)**

A. Continuance of Open Public Hearing
   1. Staff presentation
   2. Call to the Public on this item
B. Close Public Hearing
C. Action on Conditional Use Permit Case No. 2022-0592

6. F. Discussion and possible action on any and all matters regarding Order No. 2023-01.An order of the Mayor and City Council of the City of San Luis, Arizona, authorizing and directing the acquisition of all property necessary for the completion of the construction of a portion of 21st Avenue between County 23½ Street and County 24th Street, a portion of County 24th Street between 21st Avenue and Avenue E, and land necessary for a wastewater lift station on the Corner of County 24th Street and 21st Avenue within the City of San Luis by dedication, donation, purchase, exchange, or under the power of eminent domain as a matter of public necessity. **(Kay Marion Macuil, City Attorney)**

6. G. Discussion and possible action on any and all matters regarding Resolution No. 2242. A resolution of the Mayor and City Council of the City of San Luis, Arizona amending section HR-4-03(A) of the City of San Luis Personnel Policies relating to holidays; repealing conflicting provisions and providing for severability. **(Ralph Velez, Interim City Manager)**

7. SUMMARY OF CURRENT EVENTS
Events by Mayor, Council Members and/or City Manager pursuant to A.R.S. §38-431.02 (K).

8. ADJOURNMENT

AGENDA ITEM REVIEW FORM

Special City Council Meeting **5. A.**

Meeting Date: 01/25/2023

Summary

MINUTES OF

- Regular Council Meeting held January 11, 2023

Attachments

RCM 1/11/2023

M I N U T E S
Regular Council Meeting
San Luis City Council
San Luis Council Chambers
1090 E. Union Street
January 11, 2023
7:00 p.m.

Vice Mayor Luis E. Cabrera indicated that he would direct the council meeting due to Mayor Nieves Riedel's intermittent inability to speak.

1. CALL TO ORDER/ROLL CALL

Vice Mayor Luis E. Cabrera called the Regular City Council meeting to order at approximately 7:01 p.m.

PRESENT: Mayor Nieves Riedel
Vice Mayor Luis E. Cabrera
Council Member Maria Cecilia Cruz
Council Member Tadeo De La Hoya
Council Member Matias Rosales
Council Member Gloria Torres
Council Member Javier Vargas

OTHERS PRESENT: Ralph Velez, Interim City Manager
Kay Macuil, City Attorney
Sonia Cornelio, City Clerk
Alan Guevara, San Luis Police Department
Angel Ramirez, Fire Chief
Aracely De La Hoya, Senior Services Manager
Edgar Esparza, Billing & Collections Manager
Elizabeth Bayne, San Luis Police Department
Eulogio Vera, Director of Public Works
Fernando Villegas, Principal Planner
Francia Alonso, Records Management Specialist
Jenny Torres, Economic Development Manager
Jorge Perez, Assistant Director of Public Works
Jose A. Guzman, Planning & Zoning Director
Jose Luis Cisneros, Assistant Parks & Recreation Director
Lizeth Laguna, San Luis Police Department
Marco Santana, San Luis Police Department
Miguel Alvarez, San Luis Police Department
Michelle Boucher, San Luis Police Department
Monica Castro, Director of Finance
Nancy Juarez, San Luis Police Department
Nigel Reynoso, San Luis Police Department

Olivia Jenkins, Government and Foreign Affairs Coordinator
Richard Jessup, Chief of Police
Ruben Lopez, I.T. Technician
Yadira Bobadilla, San Luis Police Department
Ana Lomeli, Resident
Antonio Carrillo, Yuma County Arts and Cultural Group
Cesar Neyoy, Reporter
Christian Cuevas, Translator
Doug Nicholls, Core Engineering
Javier Nuño, Resident
Lucy Lopez, Reporter
Mark Concha, Resident
Nydia Mendenhall, Resident
Raul Lomeli, Resident

2. PLEDGE OF ALLEGIANCE

Council Member Maria Cecilia Cruz led the Pledge of Allegiance.

3. INVOCATION

Mr. Manuel Castro, Pastor, led the invocation.

Vice Mayor Luis E. Cabrera moved Item No. 7, Summary of Current Events, to be next on the agenda. There was no opposition from the City Council.

7. SUMMARY OF CURRENT EVENTS

Lt. Marco A. Santana presented Chief of Police Richard Jessup with a retirement plaque.

Chief of Police Richard Jessup thanked his staff, City Council, staff, and community members for their support and for allowing him to serve the City of San Luis.

Vice Mayor Luis E. Cabrera thanked and congratulated Chief of Police Jessup. He also reported that he attended a Congressional Delegation meeting led by Senator Kyrsten Sinema with other members of Congress, including Arizona Senator Mark Kelly, Texas Senator John Cornyn, Oklahoma Senator James Lynford, Connecticut Senator Chris Murphy, North Carolina Senator Thom Tillis and local leaders from Yuma County. The issue discussed was the immigration system being outdated and broken, affecting all the border communities, and how this has caused a humanitarian crisis and security issues for the communities. They are committed to a bipartisan approach and trying to get something done in Washington. They are also aware there is a Declaration of Emergency in the City of San Luis due to the possible lift of Title 42. On a separate note, Vice Mayor Luis E. Cabrera reported that he and the other members of the City Council attended the ribbon-cutting ceremony for Subway located on Main Street.

4. CALL TO THE PUBLIC

Mr. Antonio Carrillo, ComicCon President, extended an invitation to the Mayor, Council Members, and community to the Blazing Desert ComicCon; this year, they will be celebrating their 10th Anniversary. The event will occur on February 18, 2023, at Southwest Junior High School. He thanked the Mayor and City Council for their continued support.

5. CONSENT AGENDA

5. A. MINUTES OF
- Special Council Meeting held December 28, 2022

5. B. Disbursements from December 20, 2022, to January 3, 2023
Total disbursements $1,072,860.66
(One Million, Seventy-Two Thousand, Eight Hundred Sixty Dollars and Sixty-Six Cents)

5. C. Discussion and possible action on any and all matters regarding a Memorandum of Understanding with Yuma Community Food Bank for a cold food storage unit to be placed on city property to expand service to the food-insecure residents of San Luis. (Kay Marion Macuil, City Attorney)

5. D. Discussion and possible action on any and all matters regarding the city's acceptance of funds awarded from the Arizona Internet Crimes Against Children (ICAC) Task Force for the purpose such as training, investigations, computer forensics, and public awareness in connection with Internet Crimes Against Children (ICAC). (Miguel Alvarez, Police Lieutenant)

5. E. Discussion and possible action on any and all matters regarding authorization to purchase updated software for Body Worn Cameras. (Miguel Alvarez, Police Lieutenant)

MOTION: Council Member Gloria Torres/Vice Mayor Luis E. Cabrera to approve the Consent Agenda as presented. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. DISCUSSION AND POSSIBLE ACTION ITEMS:

6. A. Discussion and possible action on any and all matters regarding the replastering of the Municipal Pool. (Jose Luis Cisneros, Assistant Director of Parks and Recreation).

Mr. Jose Luis Cisneros, Assistant Director of Parks & Recreation, explained that the municipal pool had developed black algae due to an imbalance of chemicals caused by various factors, including weather, improper use of clothing, and other characteristics. The black algae have caused significant damage to the pool plaster, which is crumbling and needs to be replaced as soon as possible to be usable for next season. He added that staff requested quotes for the replastering and received a few. However, it was later realized that the problem was more severe. Therefore, the situation was reassessed, and staff concluded that the pools need to be refurbished, which includes replastering, fixing & replacing the tiles, redecking the perimeter around the pool, replacing the deck drains, replacing the lights and inspecting pipes for possible leaks.

Mr. Cisneros mentioned that this fiscal year, $255,000.00 were budgeted to begin the San Luis Veterans Park construction. However, these funds have not been used as of this moment. Since refurbishing the pool is urgent, staff recommends using these funds for this project.

Vice Mayor Luis E. Cabrera asked staff, who had been doing maintenance for the past two (2) years, how the pool got to this condition.

Mr. Cisneros responded that the pool water had not been drained in five (5) years. The use of chemicals and the improper use of clothing caused the soaking of the dwelling, and the balances of the PH change caused certain things to grow, causing the black algae and caused the plastering to begin crumbling. He added that the pool was plastered five (5) or 17 years ago.

Vice Mayor Luis E. Cabrera mentioned he noticed the amount of money; if it is not budgeted for, the pool would not be operating in the summer, which is something the city does not want.

Council Member Tadeo Azael De La Hoya asked why this was not done if funds were budgeted for and approved in the past.

Mr. Cisneros replied that he has been in the Parks & Recreation Department for one and a half (1½) months, but his information is that funds were held due to the pandemic. Staff was trying to be conservative with funds and not spend the money on items that were not necessary.

Council Member Tadeo Azael De La Hoya asked if the city knows if there have been any complaints against the contractor with the Registrar of Contractors that the city should be concerned about.

Mr. Milan, Milan Pools and Spas, LLC, responded that there had not been any complaints with the Registrar of Contractors, adding that he is a very responsible person and knows the work well, rest assuring the City Council that he will do a good job.

Vice Mayor Luis E. Cabrera asked how long the project would take to be completed.

Mr. Milan said that it would be completed by the end of April.

Council Member Javier Vargas asked Mr. Milan if he recommended repairing or refurbishing the pool.

Mr. Milan indicated the best option is refurbishing the pool.

Vice Mayor Luis E. Cabrera mentioned that the quote includes a two (2) year warranty and asked Ms. Kay Macuil, City Attorney, to add this to the contract if approved by the Mayor and City Council.

MOTION: Council Member Matias Rosales/Council Member Maria Cecilia Cruz to approve the redecking and refurbishing of the Municipal Pool by Milan Pools and Spas, LLC, not to exceed $255,370.00, waive formal bidding procedures for the reasons presented and approve the budget transfer as presented. Motion passed with six (aye votes and one (1) abstention by Mayor Nieves Riedel.

The vote was as follows:

Mayor Nieves Riedel	Abstained
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. B. Discussion and possible action on any and all matters regarding adopting a Notice of Intention to increase water, wastewater, and solid waste collection service rates with an amended report. (Edgar Esparza, Billing and Collections Manager and Monica Castro, Director of Finance)

Mr. Edgar Esparza, Billing & Collections Manager, indicated that on December 20, 2022, the City Council adopted a Notice of Intent to increase the utility rates, and was made public on December 29, 2022. But per Mr. Dan Jackson's recommendation, the reports were amended to include a 2% annual rate increase after 2027 as the cost of services is forecasted to increase 2% to 3% every year. The recommended yearly accumulation must be implemented every year for up to five (5) years or until the new rate study is prepared and adopted. With this, when the City Council adopts the new

rate, the increase will not be that substantial as the city will be implementing a slight yearly increase instead of having a rate increase every three (3) or five (5) years.

Vice Mayor Luis E. Cabrera clarified that adopting a Notice of Intent to increase the utility rate does not increase the rates. A public hearing will be held on March 22, 2023, at 6:00 p.m. He suggested preparing a summary to be posted on social media so the community knows why this is happening.

Mr. Esparza mentioned that the Notice of Intent with all the information would be posted tomorrow, January 12, 2023, with a link to the report performed by Mr. Dan Jackson from Willdan Financial Services.

MOTION: Council Member Javier Vargas/Mayor Nieves Riedel to approve and adopt the Notice of Intent as presented and direct staff to make the amended schedule and report available to the public. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. C. Discussion and possible action on any and all matters regarding the appointment of two (2) City of San Luis residents to serve on the City of San Luis Planning and Zoning Commission. (Jose A. Guzman, Director of Planning and Zoning)

Mr. Jose Guzman, Director of Planning & Zoning, stated that currently, there are two (2) terms for the Planning & Zoning Commission that will expire by the end of this month. Staff has received a letter of interest from Commission Member George Amaya and three (3) applications from Ms. Luisa Arreola, Mr. Jesus M. Carrilo, and Mr. Saul Estrada.

MOTION: Council Member Tadeo Azael De La Hoya/Mayor Nieves Riedel to appoint George Amaya and Luisa Arreola to the City of San Luis Planning and Zoning Commission with a term expiration of January 31, 2027. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye

Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6.D. Public hearing followed by discussion and possible action on any and all matters regarding Conditional Use Permit Case No. 2022-0592. A request by Dahl, Robins & Associates on behalf of HMS Development LLC for a Conditional Use Permit from Section 18.35.30(C)(1) of the City of San Luis Zoning Ordinance to allow commercial building with a gross floor area greater than 50,000 square feet. Assessor's Parcel Number 776-34-260, located south of Cesar Chavez Boulevard between 7th Avenue and 8th Avenue in San Luis, Arizona. (Fernando Villegas, Principal Planner)

Mayor Nieves Riedel declared a possible conflict of interest and indicated she would abstain from this item.

A. Open Public Hearing

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Gloria Torres to open the Public Hearing. Motion passed with six (6) aye votes and one (1) abstention from Mayor Nieves Riedel.

The vote was as follows:

Mayor Nieves Riedel	Abstained
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

1. Staff presentation

Mr. Fernando Villegas, Principal Planner, stated that the applicant has requested that this item be continued to the next Council meeting. He added that staff sent notifications and hand-delivered some of the letters because that was one (1) of the conditions of approval from the Planning and Zoning Commission. He added that staff did not receive any comments or phone calls from the community.

Council Member Tadeo Azael De La Hoya asked if a traffic study would affect the new construction of Cesar Chavez Boulevard.

Mr. Villegas replied that he has a presentation tonight, and the traffic study will be a condition of approval. The applicant favors the traffic study, which will have to be coordinated with both projects.

2. Call to the Public on this item

Ms. Kay Macuil, City Attorney, explained that since staff noticed the public hearing, the Public should be invited to comment on this item and to give the Public yet another chance, to keep the public hearing open until the next date.

Ms. Jessica Lopez, resident, stated that she received a letter and lives within 300 feet of the proposed project and did not understand what was going on, adding that she had questions. Many residents in that area have lived there for many years and want an explanation of what this really means for their property.

Vice Mayor Luis E. Cabrera indicated that no action will be taken today as the item will be continued to the next City Council meeting, where the presentation will be made. He invited Ms. Lopez to meet with the Planning & Zoning Department staff for further details.

B. Close Public Hearing

MOTION: Vice Mayor Luis E. Cabrera/Council Member Javier Vargas to continue the item to Wednesday, January 25, 2023. Principal Planner Fernando Villegas relayed to City Council his department received the applicant's request for a continuance to their next Council Meeting. City Council passed the motion to continue with six (6) aye votes and one (1) abstention from Mayor Nieves Riedel.
The vote was as follows:

Mayor Nieves Riedel	Abstained
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

Vice Mayor Luis E. Cabrera publicly announced: The public hearing is continued to Wednesday, January 25, 2023, at 6:00 p.m. in the San Luis City Hall Council Chambers.

6. E. Public hearing followed by discussion and possible action on any and all matters regarding Conditional Use Permit Case No. 2022-0596. A request by Core Engineering Group PLLC on behalf of RL Jones Properties LLC for a Conditional Use Permit from Section 18.40.20 (C)(1) and (10) of the City of San Luis Zoning Ordinance to allow a truck stop with a gas station and convenience store.

Assessor's parcel 227-23-023, located on the southwest corner of Vaughan Street and Port Authority Avenue in San Luis, Arizona. (Fernando Villegas, Principal Planner)

A. Open Public Hearing

MOTION: Council Member Javier Vargas/Council Member Tadeo Azael De La Hoya to open the Public Hearing. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

1. Staff Presentation

Mr. Fernando Villegas, Principal Planner, stated that the applicant is requesting a conditional use permit to allow a truck stop with a gas station and convenience store in the Light Industrial Zoning District. The Zoning Ordinance allows truck stops and commercial compatible with the purpose of the Light Industrial Zoning District with conditional use permits only. He showed an aerial view of the location and existing development around the property. According to the site plan submitted by the applicant, the project will be developed in two (2) phases. The first phase will be the construction of the truck stop area, and the second phase will be a gas station and convenience store.
He added that the Planning & Zoning Commission recommended approval with the following conditions:

1. Development shall comply with the City of San Luis Zoning Regulations, Building Code Requirements, Public Works Standards, and any applicable regulations for industrial development.

2. The applicant/owner shall submit a Trip Generation Memo for the proposed development to determine if the proposed use generates 100 or more trips during the peak hour. Suppose 100 or more trips are generated during peak hours. The applicant/owner shall submit a traffic study during the building permit review. The developer shall construct all improvements recommended by the traffic study caused by the proposed development to the satisfaction of the Public Works Director.

Mr. Villegas indicated that the applicant agrees with both conditions.

2. Call to the Public on this item

There were no comments from the Public on this item.

B. Close Public Hearing

MOTION: Council Member Gloria Torres/Council Member Javier Vargas to close the Public Hearing. Motion passed with six (6) aye votes and one (1) abstention from Mayor Nieves Riedel due to a possible conflict of interest.

The vote was as follows:

Mayor Nieves Riedel	Abstained
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

C. Action on Conditional Use Permit Case No. 2022-0596

MOTION: Council Member Gloria Torres/Council Member Javier Vargas to approve Conditional Use Permit Case No. 2022-0596 subject to the conditions of approval as presented by staff. Motion passed with six (6) aye votes and one (1) abstention by Mayor Nieves Riedel.

The vote was as follows:

Mayor Nieves Riedel	Abstained
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. F. Public hearing followed by discussion and possible action on any and all matters regarding Conditional Use Permit Case No. 2022-0618. A request by FLITE Banking Center LLC on behalf of Walmart Stores Inc. for a Conditional Use Permit from Section 18.35.30 (C)(11) of the City of San Luis Zoning Ordinance to allow an outdoor vending machine (ATM) with a drive-through facility. Assessor's parcel 775-05-001, located at 1613 N. Main Street in San Luis, Arizona. (Fernando Villegas, Principal Planner)

A. Open Public Hearing

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Gloria Torres to open the Public Hearing. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

1. Staff Presentation

Mr. Fernando Villegas, Principal Planner, explained the application is to allow an outdoor vending machine or ATM with a drive-through facility at the Walmart parking lot. The applicant requests the approval of ten (10) parking spaces removal for the ATM installation. The location of the project is behind the Chevron gas station. The Planning & Zoning Commission recommended approval of the project with the following conditions:

1. The proposed use shall not interfere with landscape areas or traffic visibility at driveway entries and street intersections.

2. The proposed use shall not create additional traffic congestion to the existing parking lot and adjacent streets.
3. If the proposed use is not in compliance with the conditions of approval above, the Conditional Use Permit shall become null and void, the proposed improvements shall be removed from the project area, and the site shall be restored to its original condition.

Mr. Villegas stated that the applicant agrees with the conditions.

Vice Mayor Luis E. Cabrera said he knows it will be a Chase ATM, and its customers will be happy to have this facility.

2. Call the Public on this item

There were no comments from the public on this item.

B. Close Public Hearing

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Gloria Torres to close the Public Hearing. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

C. Action on Conditional Use Permit Case No. 2022-0618

MOTION: Mayor Nieves Riedel/Council Member Javier Vargas to approve Conditional Use Permit Case No. 2022-0618 subject to the conditions of approval as presented. Vice Mayor Luis E. Cabrera abstained from voting due to his employment with Walmart. Motion passed with six (6) aye votes and one (1) abstention by Vice Mayor Luis E. Cabrera.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Abstained
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6.G. Discussion and possible action on any and all matters regarding Resolution No. 2251. A resolution of the Mayor and City Council of the City of San Luis, Arizona, establishing and adopting fees for video service providers; repealing any conflicting provisions; and providing for severability. (Kay Marion Macuil, City Attorney)

Ms. Kay Macuil, City Attorney, stated that this resolution imposes a fee on a cable company and has been noticed longer than required. It is a mixture of Federal and State law that allows cities to charge cable companies for using their rights-of-way to provide their service. The Federal government allows up to a 5% be on their revenues; cities throughout the state have imposed that fee.

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Javier Vargas to approve and adopt Resolution No. 2251, establishing a video service fee as presented. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. H. Discussion and possible action on any and all matters regarding Resolution No. 2252. A resolution of the Mayor and City Council of the City of San Luis, Arizona designating signers on city bank accounts; and declaring an emergency. (Monica Castro, Director of Finance)

(Six (6) votes in favor are required to pass immediately as an emergency measure per ARS 19-142)

Ms. Monica Castro, Director of Finance, stated that the bank requires a resolution to appoint authorized signers to the city's bank account. To be efficient and avoid this, every time there is a change in Administration, staff requests to give the signatory authority to the holders of the Mayor, Vice Mayor, and City Clerk. This resolution also states that the Mayor or the Vice Mayor can certify those names to the bank of the holders of such positions. The resolution contains the clause of emergency so that it takes effect immediately for the payroll and accounts payable checks.

MOTION: Council Member Gloria Torres/Council Member Javier Vargas to approve and adopt Resolution No. 2252 and declare an emergency. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

6. I. Discussion and possible action regarding Ordinance No. 434. An Ordinance of the Mayor and City Council of the City of San Luis, Arizona, amending sections of Chapter 2.20 of the City Code to include the Chief of Police in the classified service; repealing any conflicting provisions; and providing for severability. (Kay Marion Macuil, City Attorney)

Ms. Kay Macuil, City Attorney, stated that this ordinance is to include the Chief of Police in the classified service and removes the consent by the City Council for the appointment of the Chief of Police and will be just like the rest of the Department Heads. It also cleans some of the older languages; for example, Marshall is deleted as that was used for the town.

Council Member Matias Rosales mentioned that it is normal for the Fire Chief to be in the classified service and the Chief of Police under the City Council's direction. He asked how other cities are treating the position of Chief of Police.

Ms. Macuil responded that it is a mixture; it is up to the City Council how they want to handle the position.

Lieutenant Miguel Alvarez said the trend locally, such as in the City of Yuma, falls under the City Manager. Still, other cities throughout the state have it under the direction of the City Council.

Council Member Matias Rosales mentioned that the City of Yuma is a charter city and probably has something to do with it.

Ms. Macuil added that a city does not necessarily need to be a charter city to have it.

Council Member Tadeo Azael De La Hoya commented that given the City of San Luis' trend, the city just had the longest-serving Chief of Police of five (5) years and has gone through a Chief of Police yearly in past years. He thinks this is the best approach to take politics and the City Council out of appointing a Chief of Police.

A. Action on Ordinance No. 434 by title only

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Maria Cecilia Cruz to approve the reading of Ordinance No. 434 by title only. Motion passed with six (6) aye votes and one (1) nay vote by Council Member Gloria Torres.
The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Nay
Council Member Javier Vargas	Aye

Mrs. Sonia Cornelio, City Clerk, read Ordinance No. 434 by title only.

B. Action on Ordinance No. 434

MOTION: Council Member Javier Vargas/Council Member Tadeo Azael De La Hoya to approve Ordinance No. 434. Motion passed with six (6) aye votes and one (1) nay vote by Council Member Gloria Torres.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Nay
Council Member Javier Vargas	Aye

6. J. Discussion and possible action on any and all matters regarding Ordinance No. 435. An Ordinance of the Mayor and City Council of the City of San Luis, Arizona, amending subsection 2.25.040(A) of the City Code to include the Fire Chief in the classified service; repealing any conflicting provisions; providing for severability. (Kay Marion Macuil, City Attorney)

Ms. Kay Macuil, City Attorney, explained this ordinance is for the Fire Chief to be in the classified service and removes the consent by the City Council for the appointment of the Fire Chief and will be just like the rest of the Department Heads.

A. Action on reading of Ordinance No. 435 by title only.

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Maria Cecilia Cruz to approve the reading of Ordinance No. 435 by title only. Motion passed with six (6) aye votes and one (1) nay vote by Council Member Gloria Torres.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Nay
Council Member Javier Vargas	Aye

Mrs. Sonia Cornelio, City Clerk, read Ordinance No. 435 by title only.

B. Action on Ordinance No. 435

MOTION: Council Member Tadeo Azael De La Hoya/Council Member Maria Cecilia Cruz to approve Ordinance No. 435. Motion passed with six (6) aye votes and one (1) nay vote by Council Member Gloria Torres.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Nay
Council Member Javier Vargas	Aye

8. ADJOURNMENT

MOTION: Mayor Nieves Riedel/Council Member Tadeo Azael De La Hoya to adjourn the Regular Council meeting at approximately 8:10 p.m. Motion passed unanimously.

The vote was as follows:

Mayor Nieves Riedel	Aye
Vice Mayor Luis E. Cabrera	Aye
Council Member Maria Cecilia Cruz	Aye
Council Member Tadeo Azael De La Hoya	Aye
Council Member Matias Rosales	Aye
Council Member Gloria Torres	Aye
Council Member Javier Vargas	Aye

APPROVED:

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Regular City Council meeting of the City Council of the City of San Luis, Arizona, held on January 11, 2023. I further certify that the meeting was duly called and held and that a quorum was present.

_____
Sonia Cornelio, City Clerk

AGENDA ITEM REVIEW FORM

Special City Council Meeting **5. B.**

Meeting Date: 01/25/2023

Summary

Disbursements from January 3, 2023 to January 17, 2023
Total disbursements $2,007,133.85
(Two Million, Seven Thousand, One Hundred Thirty-Three Dollar and Eighty-Five Cents)

Attachments

Disbursements

City of San Luis
Finance Department

COUNCIL MEETING JANUARY 25, 2023
Disbursement Report from 01/03/2023 TO 01/17/2023

Bank Accounts	Check Date	Amount	Schedule
Payroll Check Account	01/05/2023	$ 405,510.79	Schedule A
Accounts Payable Check Account	01/06/2023	$ 1,104,311.98	Schedule B
Payroll Check Account	01/11/2023	$ 4,831.16	Schedule C
Accounts Payable Check Account	01/13/2023	$ 492,479.92	Schedule D
	Total Disbursements:	**$ 2,007,133.85**	

Please contact Ms. Monica Castro prior to the meeting if additional information is needed.

Prepared by Karla Plascencia: _____

Verified by Director of Finance: _____

For Council approval on: _____

Mayor: _____

Council: _____

_____

_____

_____

_____

_____

RECEIVED
2023 JAN 17 P 1:09
CITY OF SAN LUIS
OFFICE OF THE CITY CLERK

Pay Day Register

Pay Date Range 12/17/22 - 12/30/22
Pay Batch 202301

Monica Castro

Digitally signed by: Monica Castro
DN: CN = Monica Castro email = mcastro@sanluisaz.gov C = AD
Date: 2023.01.05 12:28:36 -07'00'

PSPRS FIRE DB RATE - TIER 3	2,987.20	30,052.30
PSPRS FIRE DC RATE - TIER 3	194.33	2,159.22
PSPRS FIRE DISABILITY RATE	35.84	2,159.22
PSPRS POLICE DB RATE - TIER	4,096.25	53,545.77
PSPRS POLICE DB RATE - TIER	1,793.49	23,444.25
PSPRS POLICE DB RATE - TIER 2	785.58	10,268.98
PSPRS POLICE DB RATE - TIER 3	4,099.40	41,241.51
STANDARD LIFE ADDTNL	1,054.48	.00
TRANSWESTERN MEXICAN	97.00	.00
U.S. MEX DENTAL - EE &	574.84	.00
U.S. MEX DENTAL - EE &	143.71	.00
UNITED WAY	14.00	.00
US & MEX DENTAL= FAMILY	512.40	.00
US & MEX HEALTH = C	6,357.85	.00
US & MEX HEALTH = FAMILY	5,661.24	.00
US & MEX HEALTH = SP	1,423.40	.00
VSP - VISION CHILDREN	266.09	.00
VSP - VISION FAMILY	305.03	.00
VSP - VISION SPOUSE	103.84	.00
Net	$405,510.79	

CLERICAL OFFICE/ LIBRARY/	314.73	131,134.95
Electrician	66.57	2,120.00
FIREFIGHTERS & DRIVERS	4,838.84	101,870.45
GARBAGE/ ASH/ REFUSE	405.25	6,484.00
Homemaker Service	19.40	847.09
MUNICIPAL/ TOWN/	346.84	19,818.71
PARKS- NOC ALL EMPLOYEES	666.64	21,504.25
POLICE OFFICERS	6,328.15	133,224.19
RECREATION- ALL EMPLOYEES/	227.58	16,610.04
SEWAGE DISPOSAL/ PLANT	746.89	21,711.98
Street or Road Construction	2,313.47	26,200.12
WATERWORKS OPERATIONS	653.51	18,832.47
Total	$18,417.32	

Direct Deposits	Amount
1st Bank Yuma	35,336.12
ACADEMY BANK	2,427.08
Bank of America	1,792.67
Bank of America CA	906.36
Bankcorp	200.00
BANKCORP BANK	1,235.24
Charles Sch	250.00
Chase Bank	193,886.17
CHASE BANK MORGAN	953.72
CHASE BANK TX	2,568.46
chase centro	1,237.53
discover	900.00
Federal Credit Union	40,985.83
FF CREDIT UNION	2,050.15
FIREFIGHTER FIRST CREDIT UNION	5,816.78
HUGHES FCU	1,781.22
National Bank	1,446.48
Navy Federal	25,307.46
NetSpend Corporation DD	120.00
NORTH ISLAND CREDIT UNION	798.58
SOFI BANK	100.00
Sunbank	1,376.74
THE FOOTHILLS BANK	652.55
VANTAGE WEST	1,747.09
WASHINGTON FEDERAL	2,419.92
Wells Fargo	78,030.72
WELLS FARGO CALE	1,140.30
Total	$405,467.17

Schedule A

City of San Luis

Payment Register

From Payment Date: 1/3/2023 - To Payment Date: 1/6/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1BYPAYABLE - 1st BY Accounts Payable									
Check									
104709	01/04/2023	Open			Utility Management Refund	GAMBOA, SYLVIA	$30.00		
104710	01/05/2023	Open			Accounts Payable	ARIZONA STATE RETIREMENT SYSTEM	$132.88		
104711	01/05/2023	Open			Accounts Payable	FOP/ALC	$435.00		
104712	01/05/2023	Open			Accounts Payable	ONEMAIN FINANCIAL GROUP LLC	$350.64		
104713	01/05/2023	Open			Accounts Payable	SAN LUIS POLICE OFFICERS ASSOC	$330.00		
104714	01/05/2023	Open			Accounts Payable	SUPPORT PAYMENT CLEARINGHOUSE	$3,116.68		
104715	01/05/2023	Open			Accounts Payable	UNITED WAY OF YUMA COUNTY INC.	$14.00		
104716	01/05/2023	Open			Accounts Payable	UNITED YUMA FIRE FIGHTERS ASSOC	$91.50		
104717	01/05/2023	Open			Accounts Payable	UNITED YUMA FIRE FIGHTERS-IAFF	$1,110.00		
104718	01/05/2023	Open			Accounts Payable	CASTRO, EDGARD	$683.67		
104719	01/06/2023	Open			Accounts Payable	AUTOZONE STORES, INC	$155.63		
104720	01/06/2023	Open			Accounts Payable	CORDOVA, ROSALICIA	$50.00		
104721	01/06/2023	Open			Accounts Payable	EMPIRE MACHINERY	$242.86		
104722	01/06/2023	Open			Accounts Payable	G&T ALARM CO LLC	$468.00		
104723	01/06/2023	Open			Accounts Payable	GUEVARA, GABRIELA	$268.00		
104724	01/06/2023	Open			Accounts Payable	MALDONADO, JUAN, J	$150.00		
104725	01/06/2023	Open			Accounts Payable	PACHECO, CARLOS	$268.00		
104726	01/06/2023	Open			Accounts Payable	PACHECO, CARLOS	$8.53		
104727	01/06/2023	Open			Accounts Payable	STANDARD INSURANCE CO.	$2,162.85		
104728	01/06/2023	Open			Accounts Payable	CONSULTANT ENGINEERING INC	$200.00		
104729	01/06/2023	Voided		01/06/2023	Accounts Payable	DPE CONSTRUCTION, INC	$500,036.59		
104730	01/06/2023	Open			Accounts Payable	KONICA MINOLTA BUSINESS SOLUTIONS USA INC	$87.00		
104731	01/06/2023	Open			Accounts Payable	LAWSON PRODUCTS INC.	$2.94		
104732	01/06/2023	Open			Accounts Payable	MERRILL WALKER BUILDERS, INC.	$40,531.95		
104733	01/06/2023	Open			Accounts Payable	PETTY CASH/POLICE	$154.06		
104734	01/06/2023	Open			Accounts Payable	PITNEY BOWES INC.	$142.41		
104735	01/06/2023	Open			Accounts Payable	WAL-MART	$20.92		
104736	01/06/2023	Open			Accounts Payable	YUMA COUNTY ELECTIONS	$5,603.03		
104737	01/06/2023	Open			Accounts Payable	DPE CONSTRUCTION, INC	$33,742.08		
104738	01/06/2023	Open			Accounts Payable	DPE CONSTRUCTION, INC	$466,294.51		
Type Check Totals:					30 Transactions		$1,056,883.73		
EFT									
2650	01/04/2023	Open			Accounts Payable	VERIZON COMMUNICATIONS INC	$4,972.89		
2651	01/06/2023	Open			Accounts Payable	BLUE STREAK SIGNS, LLC	$1,011.48		
2652	01/06/2023	Open			Accounts Payable	CUEVAS, CHRISTIAN	$75.00		
2653	01/06/2023	Open			Accounts Payable	FRUTH GROUP INC	$1,338.71		
2654	01/06/2023	Open			Accounts Payable	DIGITAL ROOM LLC	$440.46		
2655	01/06/2023	Open			Accounts Payable	HILL BROTHERS CHEMICAL CO.	$7,097.56		
2656	01/06/2023	Open			Accounts Payable	HUGHES FIRE EQUIPMENT, INC.	$203.22		
2657	01/06/2023	Open			Accounts Payable	ODP BUSINESS SOLUTIONS LLC	$1,897.85		

City of San Luis

Payment Register

From Payment Date: 1/3/2023 - To Payment Date: 1/6/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
2658	01/06/2023	Open			Accounts Payable	PRECISION PROTECTIVE SERVICES LLC	$569.14		
2659	01/06/2023	Open			Accounts Payable	PRO SALES GROUP INC	$1,311.84		
2660	01/06/2023	Open			Accounts Payable	RALPH VELEZ CONSULTING SERVICES	$6,754.00		
2661	01/06/2023	Open			Accounts Payable	RAMIREZ ADVISORS INTER-NATIONAL,LLC	$5,000.00		
2662	01/06/2023	Open			Accounts Payable	SAN DIEGO POLICE EQUIPMENT CO.	$8,749.81		
2663	01/06/2023	Open			Accounts Payable	SUN GRAPHICS	$282.51		
2664	01/06/2023	Open			Accounts Payable	TORRES, ALEJANDRA , S	$222.04		
2665	01/06/2023	Open			Accounts Payable	USA BLUE BOOK	$706.64		
2666	01/06/2023	Open			Accounts Payable	WAXIE SANITARY SUPPLY	$2,736.02		
2667	01/06/2023	Open			Accounts Payable	YUMA TRUCK PARTS	$4,059.08		
Type EFT Totals:					18 Transactions		$47,428.25		

1BYPAYABLE - 1st BY Accounts Payable Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	29	$556,847.14	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	1	$500,036.59	$0.00
	Stopped	0	$0.00	$0.00
	Total	30	$1,056,883.73	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	18	$47,428.25	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	18	$47,428.25	$0.00

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	47	$604,275.39	$0.00

City of San Luis

Payment Register

From Payment Date: 1/3/2023 - To Payment Date: 1/6/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source		Payee Name	Transaction Amount	Reconciled Amount	Difference
					Reconciled	0	$0.00		$0.00	
					Voided	1	$500,036.59		$0.00	
					Stopped	0	$0.00		$0.00	
					Total	48	$1,104,311.98		$0.00	

Grand Totals:

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	29	$556,847.14	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	1	$500,036.59	$0.00
	Stopped	0	$0.00	$0.00
	Total	30	$1,056,883.73	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	18	$47,428.25	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	18	$47,428.25	$0.00

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	47	$604,275.39	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	1	$500,036.59	$0.00
	Stopped	0	$0.00	$0.00
	Total	48	$1,104,311.98	$0.00

Guadalupe Canez

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Guadalupe Canez
DN: CN = Guadalupe Canez
email = gcanez@sanluisaz.gov C = AD
Date: 2023.01.06 17:13:16 -07'00'

Pay Day Register

Pay Date Range 01/01/23 - 01/31/23
Pay Batch 202301M

Pay Batch 202301M Total
Employees in Pay Batch 7
Female Employees In Pay Batch 3

Hours Description	Hours	Gross
102 - SALARY	.0000	7,550.00
806 - TELEPHONE STIPEND	.0000	100.00
Total	0.0000	$7,650.00

Withholdings and Deductions		Gross Base
Gross	7,650.00	
Imputed Income		
FEDERAL TAX WITHHOLDING	211.14	5,979.60
SOCIAL SECURITY TAX	474.30	7,650.00
MEDICARE	110.94	7,650.00
STATE WITHHOLDING	127.87	5,979.60
ASRS Council	264.66	2,200.00
ASRS LTD Council	3.08	2,200.00
Council Retirement EORP	351.00	2,700.00
Dental Council	92.28	.00
EODCRS - COUNCIL	212.00	2,650.00
EODCRS - DISABILITY	4.38	2,650.00
GARNISHMENT	221.11	.00
Medical Council	720.14	.00
Vision Council	25.94	.00
Net	$4,831.16	

Benefits		Gross Base
ASRS Council	264.66	2,200.00
ASRS LTD Council	3.08	2,200.00
ASRS/EORP - LEGACY RATE	1,284.58	2,200.00
Dental Council	254.03	.00
EODCRS - COUNCIL	159.00	2,650.00
EODCRS - DISABILITY	4.38	2,650.00
EODCRS/EORP LEGACY RATE	1,707.13	2,650.00
Health Council	5,479.26	.00
Retirement Council EORP	1,901.34	2,700.00
Vision Council	79.03	.00
Total	$11,136.49	

Workers' Comp		Gross Base
MUNICIPAL/ TOWN/	133.89	7,650.00
Total	$133.89	

Direct Deposits	Amount
1st Bank Yuma	692.27
Chase Bank	1,395.72
Navy Federal	643.31
REALTORS FED CRED UNION	32.87
Wells Fargo	696.61
Total	$3,460.78
Check	$1,370.38

Monica Castro

Digitally signed by: Monica Castro
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Date: 2023.01.11 14:41:27 -07'00'

Schedule C

City of San Luis

Payment Register

From Payment Date: 1/9/2023 - To Payment Date: 1/13/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1BYPAYABLE - 1st BY Accounts Payable									
Check									
104739	01/10/2023	Open			Accounts Payable	PETTY CASH/ ANGELICA CIFUENTES	$983.66		
104740	01/10/2023	Open			Accounts Payable	TORRES, GILBERTO	$150.00		
104741	01/10/2023	Open			Accounts Payable	INTERNAL REVENUE SERVICE	$221.11		
104742	01/11/2023	Open			Accounts Payable	YUMA COUNTY DEVELOPMENT SERVICES	$1,000.00		
104743	01/13/2023	Voided		01/13/2023	Accounts Payable	RODRIGUEZ, ISRAEL	$1.00		
104744	01/13/2023	Voided		01/13/2023	Accounts Payable	RODRIGUEZ, ISRAEL	$1.00		
104745	01/13/2023	Voided		01/13/2023	Accounts Payable	RODRIGUEZ, ISRAEL	$1.00		
104746	01/13/2023	Open			Accounts Payable	AMERICAN FIDELITY ASSURANCE CO	$2,367.24		
104747	01/13/2023	Open			Accounts Payable	ARIZONA MUNICIPAL RISK RETENTION POOL - WC	$782.03		
104748	01/13/2023	Open			Accounts Payable	CENTURYLINK	$171.45		
104749	01/13/2023	Open			Accounts Payable	CENTURYLINK	$5,609.42		
104750	01/13/2023	Open			Accounts Payable	ENTERPRISE FM TRUST	$755.68		
104751	01/13/2023	Open			Accounts Payable	GAXIOLA, JESUS	$337.00		
104752	01/13/2023	Open			Accounts Payable	LOPEZ, MIGUEL	$337.00		
104753	01/13/2023	Open			Accounts Payable	MANHATTANLIFE ASSURANCE CO	$291.54		
104754	01/13/2023	Open			Accounts Payable	MASSMUTUAL FINANCIAL GROUP	$20.00		
104755	01/13/2023	Open			Accounts Payable	NEW YORK LIFE INSURANCE CO.	$72.97		
104756	01/13/2023	Open			Accounts Payable	PREPAID LEGAL SERVICES	$112.60		
104757	01/13/2023	Open			Accounts Payable	TRANSWESTERN INSURANCE ADMIN	$194.00		
104758	01/13/2023	Open			Accounts Payable	URQUIJO, SALVADOR	$150.00		
104759	01/13/2023	Open			Accounts Payable	VALENZUELA, MIGUEL	$337.00		
104760	01/13/2023	Open			Accounts Payable	VISION SERVICE PLAN OF ARIZONA	$4,511.76		
104761	01/13/2023	Open			Accounts Payable	AED EVERYWHERE, INC.	$768.78		
104762	01/13/2023	Open			Accounts Payable	AIRGAS USA LLC	$1,308.21		
104763	01/13/2023	Open			Accounts Payable	ANGEL'S TOWING SERVICE/AUTO SALES	$270.00		
104764	01/13/2023	Open			Accounts Payable	ARREOLA, LUISA	$75.00		
104765	01/13/2023	Open			Accounts Payable	AUTOZONE STORES, INC	$1,961.90		
104766	01/13/2023	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$89.00		
104767	01/13/2023	Voided		01/13/2023	Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$238.00		
104768	01/13/2023	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$71.20		
104769	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104770	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104771	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104772	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104773	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104774	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$38,322.22		
104775	01/13/2023	Open			Accounts Payable	BLX GROUP LLC, DEPT 34461	$2,000.00		
104776	01/13/2023	Open			Accounts Payable	BOUND TREE MEDICAL, LLC.	$139.49		
104777	01/13/2023	Open			Accounts Payable	CISNEROS, JAVIER	$76.00		

Schedule D

City of San Luis

Payment Register

From Payment Date: 1/9/2023 - To Payment Date: 1/13/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
104778	01/13/2023	Open			Accounts Payable	EMPIRE MACHINERY	$211.04		
104779	01/13/2023	Open			Accounts Payable	EMS TECHNOLOGY SOLUTIONS, LLC	$900.00		
104780	01/13/2023	Open			Accounts Payable	ESTRADA, LETICIA	$50.00		
104781	01/13/2023	Open			Accounts Payable	FREIGHTLINER OF ARIZONA, LLC	$348.84		
104782	01/13/2023	Open			Accounts Payable	G&T ALARM CO LLC	$138.00		
104783	01/13/2023	Open			Accounts Payable	GALLS, AN ARAMARK CO., LLC	$243.83		
104784	01/13/2023	Open			Accounts Payable	LOPEZ, ENRIQUE	$76.00		
104785	01/13/2023	Open			Accounts Payable	ADOT MVD	$1.65		
104786	01/13/2023	Open			Accounts Payable	ARIZONA DEPARTMENT OF PUBLIC SAFETY	$0.33		
104787	01/13/2023	Open			Accounts Payable	ARIZONA STATE TREASURER	$22,876.37		
104788	01/13/2023	Open			Accounts Payable	ENESCO PROPERTIES LLC	$962.79		
104789	01/13/2023	Open			Accounts Payable	HARVEY, JENNIFER	$375.00		
104790	01/13/2023	Open			Accounts Payable	HIREQUEST LLC	$1,955.70		
104791	01/13/2023	Open			Accounts Payable	INTERNATIONAL ASSOC. FOR PROP/EVIDENCE	$260.00		
104792	01/13/2023	Open			Accounts Payable	IPS GROUP INC	$451.17		
104793	01/13/2023	Open			Accounts Payable	IRON MOUNTAIN INC	$509.87		
104794	01/13/2023	Open			Accounts Payable	J2 ENGINEERING & ENVIR DESIGN LLC	$2,343.32		
104795	01/13/2023	Open			Accounts Payable	JCG TECHNOLOGIES INC.	$525.00		
104796	01/13/2023	Open			Accounts Payable	KS STATE BANK	$236.59		
104797	01/13/2023	Open			Accounts Payable	LAWSON PRODUCTS INC.	$468.45		
104798	01/13/2023	Open			Accounts Payable	LOWE'S HIW, INC.	$886.25		
104799	01/13/2023	Open			Accounts Payable	MEMBERSHIP LOCKBOX 4047	$2,064.00		
104800	01/13/2023	Open			Accounts Payable	MGM INTERNET SOLUTIONS, INC	$110.00		
104801	01/13/2023	Open			Accounts Payable	NAVARRO BELTRAN, ALEJANDRO	$100.00		
104802	01/13/2023	Open			Accounts Payable	NEW BORDER TACTICAL, INC.	$204.00		
104803	01/13/2023	Open			Accounts Payable	O'REILLY AUTO PARTS	$938.76		
104804	01/13/2023	Open			Accounts Payable	PIERCE COLEMAN PLLC	$2,047.50		
104805	01/13/2023	Open			Accounts Payable	PINNACLE MEDICAL GROUP, AZ-P.C	$100.00		
104806	01/13/2023	Open			Accounts Payable	QUINONEZ, FRANCISCO	$720.00		
104807	01/13/2023	Open			Accounts Payable	RADIOTRONICS, INC.	$672.00		
104808	01/13/2023	Open			Accounts Payable	SAN LUIS AZ ROTARY CLUB	$318.00		
104809	01/13/2023	Open			Accounts Payable	SAN LUIS SPEAR POINT SOLAR I, LLC	$20,546.51		
104810	01/13/2023	Open			Accounts Payable	SANTANA, PEDRO, LUIS	$800.00		
104811	01/13/2023	Open			Accounts Payable	SHERWIN WILLIAM	$367.44		
104812	01/13/2023	Open			Accounts Payable	TERRITORIAL LAW, LLC	$1,542.44		
104813	01/13/2023	Open			Accounts Payable	YUMA COUNTY PUBLIC HEALTH	$195.00		
104814	01/13/2023	Open			Accounts Payable	SPARTAN TRUCK COMPANY	$2,731.07		
104815	01/13/2023	Open			Accounts Payable	AISPURO TORRES, ZENON	$2.67		
104816	01/13/2023	Open			Accounts Payable	ALONZO, MAGNOLIA	$7.12		
104817	01/13/2023	Open			Accounts Payable	CARAVEZ, ANA	$3.56		
104818	01/13/2023	Open			Accounts Payable	CASTILLO, ALEXIS	$9.79		
104819	01/13/2023	Open			Accounts Payable	CUEVAS, VICTOR, F	$4.45		
104820	01/13/2023	Open			Accounts Payable	GARCIA, JAQUELINE	$1.33		
104821	01/13/2023	Open			Accounts Payable	GONZALEZ, VANESSA	$3.56		

City of San Luis

Payment Register

From Payment Date: 1/9/2023 - To Payment Date: 1/13/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
104822	01/13/2023	Open			Accounts Payable	HERNANDEZ, JANET, M	$8.45		
104823	01/13/2023	Open			Accounts Payable	HERNANDEZ MARQUEZ, DAVID	$7.12		
104824	01/13/2023	Open			Accounts Payable	JAUREGUI, ABEL	$2.22		
104825	01/13/2023	Open			Accounts Payable	JULIAN, REBECA	$1.33		
104826	01/13/2023	Open			Accounts Payable	KALLEN, CID, RIGEL	$15.13		
104827	01/13/2023	Open			Accounts Payable	LARA LOPEZ, RUBEN	$2.67		
104828	01/13/2023	Open			Accounts Payable	MANARY, DANIEL, E	$15.57		
104829	01/13/2023	Open			Accounts Payable	MOLINA, SERGIO, G	$10.68		
104830	01/13/2023	Open			Accounts Payable	MORA, JOSELINNE	$8.90		
104831	01/13/2023	Open			Accounts Payable	NEGRETE, FRANCISCO, G	$10.68		
104832	01/13/2023	Open			Accounts Payable	NEGRETE MARTINEZ, JAVIER	$8.90		
104833	01/13/2023	Open			Accounts Payable	PRIETO, ERNESTO	$8.90		
104834	01/13/2023	Open			Accounts Payable	RAMIREZ, MANUEL, D	$10.68		
104835	01/13/2023	Open			Accounts Payable	RANGEL ARMENTA, LUIS, R	$13.35		
104836	01/13/2023	Open			Accounts Payable	RODRIGUEZ BRACAMONTE, MARINA	$4.45		
104837	01/13/2023	Open			Accounts Payable	ROSAS, DIEGO	$8.90		
104838	01/13/2023	Open			Accounts Payable	SANTOS RIVERA, ISMAEL	$3.11		
104839	01/13/2023	Open			Accounts Payable	SOTO, VICTOR, M	$1.78		
104840	01/13/2023	Open			Accounts Payable	STULTZ, MONICA	$15.57		
104841	01/13/2023	Open			Accounts Payable	TAPIA, HECTOR	$10.68		
104842	01/13/2023	Open			Accounts Payable	TORRES, CLAUDIA, G	$8.90		
104843	01/13/2023	Open			Accounts Payable	VALTIERRA, ARACELI, A	$8.90		
104844	01/13/2023	Open			Accounts Payable	VALTIERRA-LUNA, JOANA	$13.35		
104845	01/13/2023	Open			Accounts Payable	WATSON, JOHN, H	$17.80		
104846	01/13/2023	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$136.50		
104847	01/13/2023	Open			Accounts Payable	AZ STATE PRISON COMPLEX - YUMA	$101.50		
Type Check Totals:					109 Transactions		$323,103.78		
EFT									
2668	01/13/2023	Open			Accounts Payable	FRUTH GROUP INC	$1,292.79		
2669	01/13/2023	Open			Accounts Payable	4 IMPRINT	$745.52		
2670	01/13/2023	Open			Accounts Payable	ALSCO, INC	$5,139.57		
2671	01/13/2023	Open			Accounts Payable	AMAZON WEB SERVICES INC	$1.41		
2672	01/13/2023	Open			Accounts Payable	AMAZON.COM SALES, INC.	$2,268.24		
2673	01/13/2023	Open			Accounts Payable	AMBERLY'S PLACE	$7,000.00		
2674	01/13/2023	Open			Accounts Payable	AMERICANA POLYGRAPH & PRIVATE INVESTIGATION	$175.00		
2675	01/13/2023	Open			Accounts Payable	APPLIED PRODUCTS GROUP LLC	$24,043.61		
2676	01/13/2023	Open			Accounts Payable	ARK WIRELESS & NETWORKING	$100.00		
2677	01/13/2023	Open			Accounts Payable	BILL ALEXANDER FORD	$267.49		
2678	01/13/2023	Open			Accounts Payable	BLT READY MIX CONCRETE LLC	$2,016.62		
2679	01/13/2023	Open			Accounts Payable	CHAPMAN DCJR YUMA LLC	$112.77		
2680	01/13/2023	Open			Accounts Payable	CSC OF YUMA	$710.70		
2681	01/13/2023	Open			Accounts Payable	DANA KEPNER COMPANY LLC	$13,976.64		
2682	01/13/2023	Open			Accounts Payable	DESERT VALLEY POWER SYSTEMS	$431.10		
2683	01/13/2023	Open			Accounts Payable	DESERT WATER STORE INC	$223.02		
2684	01/13/2023	Open			Accounts Payable	FRESH TERRA SERVICES LLC	$2,442.00		

City of San Luis

Payment Register

From Payment Date: 1/9/2023 - To Payment Date: 1/13/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
2685	01/13/2023	Open			Accounts Payable	GALINDO, CARMEN	$1,200.00		
2686	01/13/2023	Open			Accounts Payable	CORRAL, RICARDO	$40.00		
2687	01/13/2023	Open			Accounts Payable	HILL BROTHERS CHEMICAL CO.	$14,541.80		
2688	01/13/2023	Open			Accounts Payable	HUGHES FIRE EQUIPMENT, INC.	$32.27		
2689	01/13/2023	Open			Accounts Payable	LOGICAL CONCEPTS, INC	$3,471.26		
2690	01/13/2023	Open			Accounts Payable	MCNEECE BROS. OIL COMPANY, INC	$39,662.11		
2691	01/13/2023	Open			Accounts Payable	MENDEZ ROBLES, NAZZER, O	$4,755.90		
2692	01/13/2023	Open			Accounts Payable	METRO FIRE EQUIPMENT INC	$242.50		
2693	01/13/2023	Open			Accounts Payable	MUNICIPAL EMERGENCY SERVICES, INC	$81.84		
2694	01/13/2023	Open			Accounts Payable	NAPA AUTO PARTS	$406.86		
2695	01/13/2023	Open			Accounts Payable	ODP BUSINESS SOLUTIONS LLC	$2,664.02		
2696	01/13/2023	Open			Accounts Payable	ORDUNO-CROUSE, CANDICE	$1,200.00		
2697	01/13/2023	Open			Accounts Payable	PRECISION PROTECTIVE SERVICES LLC	$169.11		
2698	01/13/2023	Open			Accounts Payable	RDO EQUIPMENT CO.	$436.61		
2699	01/13/2023	Open			Accounts Payable	REAL PURIFIED WATER LLC	$155.27		
2700	01/13/2023	Open			Accounts Payable	RM GRAPHICS	$510.40		
2701	01/13/2023	Open			Accounts Payable	ROACH PEST CONTROL	$1,575.00		
2702	01/13/2023	Open			Accounts Payable	RON TURLEY ASSOCIATES INC.	$1,605.24		
2703	01/13/2023	Open			Accounts Payable	SAM'S CLUB	$4,819.52		
2704	01/13/2023	Open			Accounts Payable	SIMS MACKIN, LTD.	$220.00		
2705	01/13/2023	Open			Accounts Payable	SUN GRAPHICS	$423.06		
2706	01/13/2023	Open			Accounts Payable	SUPREME PLUMBING SOLUTIONS LLC	$180.00		
2707	01/13/2023	Open			Accounts Payable	TELEFLEX MEDICAL INCORPORATED	$1,720.55		
2708	01/13/2023	Open			Accounts Payable	ULINE, INC.	$151.50		
2709	01/13/2023	Open			Accounts Payable	UNITED LABORATORIES INC.	$1,709.76		
2710	01/13/2023	Open			Accounts Payable	VAPEX ENVIRONMENTAL TECHNOLOGIES, LLC	$2,574.05		
2711	01/13/2023	Open			Accounts Payable	WESTERN SUN SYSTEMS, INC	$1,004.08		
2712	01/13/2023	Open			Accounts Payable	WILLDAN ENGINEERING	$3,276.00		
2713	01/13/2023	Open			Accounts Payable	YUMA COUNTY RECORDER'S OFFICE	$13,684.01		
2714	01/13/2023	Open			Accounts Payable	YUMA COUNTY SHERIFF'S OFFICE	$750.00		
2715	01/13/2023	Open			Accounts Payable	YUMA COUNTY TREASURER'S OFFICE	$113.76		
2716	01/13/2023	Open			Accounts Payable	YUMA FARM & HOME SUPPLY INC.	$279.64		
2717	01/13/2023	Open			Accounts Payable	YUMA SUN INC	$3,678.89		
2718	01/13/2023	Open			Accounts Payable	YUMA TRUCK PARTS	$37.57		
2719	01/13/2023	Open			Accounts Payable	ZOLL MEDICAL CORP	$1,057.08		
Type EFT Totals:					52 Transactions		$169,376.14		

1BYPAYABLE - 1st BY Accounts Payable Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	105	$322,862.78	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	4	$241.00	$0.00
	Stopped	0	$0.00	$0.00

City of San Luis

Payment Register

From Payment Date: 1/9/2023 - To Payment Date: 1/13/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source		Payee Name	Transaction Amount	Reconciled Amount	Difference
					Total	109		$323,103.78	$0.00	

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	52	$169,376.14	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	52	$169,376.14	$0.00

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	157	$492,238.92	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	4	$241.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	161	$492,479.92	$0.00

Grand Totals:

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	**105**	**$322,862.78**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**4**	**$241.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**109**	**$323,103.78**	**$0.00**

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	**52**	**$169,376.14**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**0**	**$0.00**	**$0.00**
	Total	**52**	**$169,376.14**	**$0.00**

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	**157**	**$492,238.92**	**$0.00**
	Reconciled	**0**	**$0.00**	**$0.00**
	Voided	**4**	**$241.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**161**	**$492,479.92**	**$0.00**

Karla Plascencia

Digitally signed by: Karla Plascencia
DN: CN = Karla Plascencia email = kplascencia@sanluisaz.gov C = US O = City of San Luis OU = Finance
Date: 2023.01.13 17:03:51 -07'00'

AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. A.**

Meeting Date: 01/25/2023

Department Head: Jose A. Guzman, Director of Planning & Zoning, Planning & Zoning Department

Submitted By: Jose A. Guzman, Director of Planning & Zoning, Planning & Zoning Department

Action Requested: Discussion Item - No Action to be Taken

ITEM:

Presentation, discussion, and possible directions to staff on any and all matters regarding fire, building, and zoning regulations pertaining to the construction of cloth shade structures within the required building setback. **(Jose A. Guzman, Director of Planning & Zoning)**

SUMMARY:

This item was requested to be placed on the Agenda by Mayor Nieves Riedel. The purpose of this item is to provide information to the city council regarding the current city regulations and explore options for permitting the construction of cloth shade structures within the required building setbacks.

The city's current regulations allow for the construction of cloth shade structures as long as they comply with building code regulations, including engineering design and zoning regulations pertaining to the required building setbacks. This means that the structure must be designed and constructed to meet all safety and structural requirements and must be placed at the appropriate distance from property lines and other buildings as specified by the zoning regulations regarding building setbacks.

Engineered design is required for metal structures under the International Building Code (IBC) to ensure that these structures are safe and able to withstand the loads and forces that they will be subjected to. The IBC sets out specific requirements for the design and construction of metal structures, including requirements for load-bearing capacity, stability, and resistance to wind, seismic and other forces.

Building setback requirements are to ensure that buildings are constructed at a safe distance from each other and from property lines, reducing the risk of fire and other hazards. This also provides space for emergency vehicles and other large vehicles to access the property in case of emergencies. Additionally, building setbacks also help to provide privacy, natural light, and ventilation for buildings and their occupants.

RECOMMENDATION / SUGGESTED MOTION:

Discussion and possible directions to staff only, no action item.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	N/A
CITY/STATE/FEDERAL FUNDS:	N/A
TOTAL:	N/A

BUDGETED AMOUNT: N/A

AVAILABLE AMOUNT TO TRANSFER: N/A

ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE: N/A

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

N/A

AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. B.**

Meeting Date: 01/25/2023

Department Head: Adela Cortez, Director Human Resources, Human Resources Department

Submitted By: Adela Cortez, Director Human Resources, Human Resources Department

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding consulting services to conduct a Total Compensation Study and a Classification & Analysis/Total Compensation Study. **(Adela Cortez, Human Resources Director)**

SUMMARY:

The Human Resources Department is seeking the City Council's approval to secure HR consulting services to conduct studies of Classification and Compensation.

In order to determine appropriate salaries for positions so that we are not underpaying and risking losing talent nor overpaying and negatively impacting the bottom line, we need to have dependable and up-to-date compensation data.

The last Total Compensation Study was conducted by CPS HR Consulting in July 2018, after which a four-year salary plan was prepared with specific market target rates to reach. Since then, the City has incrementally increased salaries within budgetary and statutory constraints to meet the target market rate goals of the salary plan. These rates are outdated.

Research of vendors was conducted, which included a breakdown of completing a complete Classification and Total Compensation Study vs. a Total Compensation Study alone.

Public Sector Personnel Consultants

- Complete study inclusive of Classification Review & Analysis and Total Compensation Analysis – ***$71,000.00*** (*Duration of project: 12 - 14 months*)
- Total Compensation Study (*Salary & Benefits*) – $38,000.00 (*Duration of project 6 -7.5 months*)
- Will not accept new projects until the end of 2023/beginning of 2024
- Provides a warranty of one (1) year to ensure effective implementation of the new plan
- Based out of Mesa, AZ

CPS HR Consulting

- Complete Study inclusive of Classification Review & Analysis and Total Compensation Analysis - **$196,050.00** (*Duration of project 14 - 17 months*)
- Total Compensation Study (*Salary & Benefits*) - **$53,970.00** (*Duration of project 6 -7.5 months*)
- Can start on March 2023
- Based out of Sacramento, CA

Total Rewards Solutions

- Complete Study inclusive of Classification Review & Analysis and Total Compensation Analysis -

$99,750.00 (*Duration of project 8 - 10 months*)
- Total Compensation Study (*Salary & Benefits*) - **$55,750.00** (*Duration of project 4 - 6 months*)
- Can start on March 2023
- Based out of Indianapolis, IN

The agency that provided a proposal with the best scope of the project and cost is Public Sector Consultants. However, they are not taking on new projects until the end of 2023/beginning of 2024. We would like to receive approval to enter into a contract in order to save a spot on their project calendar.

In the meantime, since the current benchmarks are outdated, we are also asking for approval to contract with CPS HR Consulting to conduct just a ***Total Compensation Study*** (*base pay & benefits package*), which can be completed in 6-7.5 months to analyze and update current pay plan and have up-to-date benchmarks. Updating the current pay plan can carry us on for two (2) years while the full study of Classification Analysis and Total Compensation gets completed.

The total for these two (2) studies will be $124,970, which is well below the total amount budgeted of $151,650. Purchasing procedures under the San Luis City Code § 3.05.080 require City Council approval for professional services in excess of $45,000.

Furthermore, due to the urgency of updating our current pay plan, staff would like to ask to move forward with the Total Compensation Study and use the allocated budget.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO DIRECT STAFF TO ANALYZE THE RAW DATA THE CITY HAS AND PROVIDE A SALARY STRUCTURE.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	YES
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$124,970
BUDGETED AMOUNT:	Yes
AVAILABLE AMOUNT TO TRANSFER:	See fiscal impact statement
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Contractual Services 100-999-80000 $149,582

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

We have budget available this fiscal year to complete the two compensation studies. Due to constraints from providers we will do a portion this year, and the remaining part of the compensation will be done with a different firm in FY 2024. We will budget accordingly in FY 2024.

Attachments

Public Sector Personnel Class & Comp

CPS HR Comp

CPS HR Class & Comp

Total Reward Solutions Class & Comp

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY

FOR THE

CITY OF SAN LUIS

SEPTEMBER 2022

PREPARED BY

Matthew Weatherly, President (480) 947-6164
National Office: 2824 N. Power Road #113-486 Mesa, AZ 85215

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

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Please visit www.pspc.us for work samples and additional resources

PUBLIC SECTOR PERSONNEL CONSULTANTS

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

COVER LETTER

PUBLIC SECTOR PERSONNEL CONSULTANTS

PUBLIC SECTOR PERSONNEL CONSULTANTS

September 1, 2022

Ms. Maria Munoz
Human Resources Analyst
City of San Luis
1090 E. Union Street
San Luis, AZ 85349

Dear Selection Team,

Pursuant to your request, we are pleased to provide you with a proposal and qualifications to assist the City with a classification and compensation study. We specialize in these services and have implemented classification and compensation plans for more than 1,100 public employers nationwide, including more than 400 municipal employers and over 100 public employers in Arizona.

Current and recently completed studies include those for the Cities of Yuma, Scottsdale, Paradise Valley, Winslow, Cottonwood, Pinetop-Lakeside, as well as Huntington Beach, Riverside, San Bernardino, Escondido and Ventura in California.

We believe our firm is uniquely qualified for this study. We will utilize only full-time, certified Human Resources professionals for the study, with combined greater than 100 years of experience in the fields of human resources, compensation, and labor relations.

Our proposed approach will be customized to meet the City's needs. We are confident that our extensive public employers classification and compensation experience, knowledge of public employers in Arizona, large specialized and highly qualified full-time staff, proven methods, unique ***EZ COMP™*** application to ensure your self-sufficiency, and one year of implementation support and assistance at no cost, will achieve all of the City's objectives for an important project of this nature.

Thank you for your interest in our firm's services. If we can provide any additional information, such as samples of recent similar studies, or if you would like to visit further about the City's project needs, please contact me at any time.

Sincerely,

Matthew Weatherly

Matthew Weatherly, President
(888) 522-7772
matt@pspc.us

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

EXECUTIVE SUMMARY OF SERVICES PROPOSED

PUBLIC SECTOR PERSONNEL CONSULTANTS

SUMMARY OF SERVICES FOR THE CITY OF SAN LUIS

PUBLIC SECTOR PERSONNEL CONSULTANTS (PSPC) proposes the following program of consulting services and implementation support to conduct a classification and compensation study.

Project Planning and Communication

1. Virtual project planning and scheduling meeting with City's Human Resources Staff, project designee(s)
2. Policy input and project direction meeting and briefing with Council, Human Resources and designee(s)
3. Virtual/online project briefing presentation for employees, Council, City officials, City's project leaders*
4. Management and employee communication, progress reports throughout all project phases
5. Assistance with development and communication with a committee of employee representatives

Classification Project Tasks

6. Occupational familiarization by review of City's current class specifications and compensation plans
7. Organizational familiarization by review of City organization charts, budgets, and annual reports
8. Job Analysis Questionnaire (JAQ) customized for gathering City employee occupation data
9. Meetings to distribute and explain the JAQ and the project for all City officials and employees *
10. Job interviews, desk audits / field observations with representatives of each class *(100 included)*
11. Recommended title modifications and reclassifications for consideration by department heads
12. Modeling of job families and career ladders to include possible job title consolidation / creation
13. Review of position classification recommendations with City's project staff and respective departments
14. Facilitation of employee participation and feedback process on any proposed classification changes
15. Preparation of updated classification specifications for each City job classification *(100 included)*

Compensation Survey

16. Confirmation of survey cities to include in external total compensation comparisons
17. Identification of City occupations to utilize as survey benchmark job classifications
18. Solicitation of comparator employers and agencies for participation in external compensation surveys
19. Extraction of data from public employer compensation plans, questionnaires, reliable published surveys
20. Consolidation of data from all sources and calculation of prevailing rates for benchmark jobs
21. Computation of extent City's compensation offerings vary from external prevailing rates and practices
22. Review of competitiveness analysis with Human Resources, City Officials and City's project designees

Compensation Plan Development

23. Construction of optional salary range structures for review and selection by City's project leaders
24. Assignment of job classes to salary ranges by internal equity and external competitiveness
25. Assistance with City Council identification of desired, affordable salary competitiveness policy
26. Fiscal impact estimates at various levels of external prevailing rates competitiveness policies
27. Review and critique of draft salary and implementation plans with Human Resources, project leaders

Communication of Results and Implementation Strategies

28. Preparation and presentation of final project reports for the City Council, staff, and City Officials
29. Development of a plan for the implementation of City's updated classification and compensation plan
30. Uploading of ***EZ COMP™*** program files on a Human Resources Department computer, staff training
31. Development and provision of process for ongoing plan maintenance and subsequent plan updates
32. Assistance with communicating the City's updated plans for all City officials and employees

*** can be in person, virtual, video recording, or a combination of each**

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

BUSINESS HISTORY

HISTORY AND FACTS ABOUT OUR FIRM

PUBLIC SECTOR PERSONNEL CONSULTANTS

HISTORY AND FACTS ABOUT OUR FIRM

- ***HISTORY OF OUR FIRM***

  Public Sector Personnel Consultants (PSPC) originated in 1972 with the Public Sector Group of the international human resources consulting firm of Hay Associates. *PSPC* was established as an independent firm in 1982. We are a single-owner, debt-free subchapter-S corporation.

- ***REGIONAL STAFF***

  We have regional offices or affiliates in Phoenix (Mesa), AZ, Los Angeles, CA, Sacramento, CA, Austin, TX, Dallas, TX, Chicago, IL, and St. Paul, MN

- ***SPECIALIZED IN COMPENSATION SERVICES***

  We are "super-specialists" in compensation, providing services in job analysis, position classification, job content evaluation, compensation, and directly related services. ***Over 98% of our classification and compensation studies have been successfully implemented by our clients.***

- ***SPECIALIZED IN PUBLIC SECTOR CLIENTS***

  We provide services exclusively to public sector employers including municipalities, counties, utility districts, library districts, special districts, state governments, housing and redevelopment agencies, airport authorities, school districts, higher education, and tribal governments.

- ***SPECIALIZED COMPENSATION STAFF***

  Our staff is comprised of eight (8) full time and an additional five (5) part time senior human resources professionals with very extensive experience as compensation managers and consultants for public employers. Our staff has more than 100 years of combined experience working for and consulting to public sector employers.

- ***OVER 1,100 PUBLIC EMPLOYERS SERVED***

  Our staff members have provided compensation, human resources, training and related consulting services to more than 1,100 public and 200 private employers throughout the U.S.

- ***AMERICAN COMPENSATION ASSOCIATION PARTICIPATION (ACA) (NOW WORLDATWORK)***

  Our consultants are active members of ACA, including serving as instructors for the ACA certification courses.

- ***SPECIALIZED COMPENSATION AND RELATED RESOURCES***

  We utilize our ***EZ COMP™*** salary survey and plan program, modified ***FES*** point-factor job evaluation system, ***AEP™*** performance evaluation plan, and ***SNAP™*** staffing needs analysis program.

- ***FIRST YEAR IMPLEMENTATION WARRANTY***

  We provide our clients with extensive implementation support during the first year, and we will analyze, evaluate, classify, and provide a salary range recommendation for any new or changed position or entire job class, at no additional cost.

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

WORK PLAN AND METHODOLOGY

PROJECT SCOPE, APPROACH AND TIMELINE

PUBLIC SECTOR PERSONNEL CONSULTANTS

PROJECT APPROACH AND METHODOLOGY

Following is our overall work plan and approach to achieving the City's objectives for the conduct of a classification and compensation study.

A. OBJECTIVES OF THE PROJECT

The recommended plans, programs, systems and administrative procedures will meet these ten most important criteria.

- Internally equitable
- Externally competitive
- Readily understood
- Easily updated & maintained
- Legally compliant & defensible
- Financially responsible
- Efficiently administered
- Inclusive of employee input
- Reflective of City's values
- Reflective of prevailing "best practices"

B. SCOPE OF THE PROJECT

The project could include: a management and employee communication plan; partnership with the City's Human Resources staff, City Manager, Council, and project designee(s); occupational, organizational, and operational familiarization; Job Analysis Questionnaire (JAQ) and job analysis for all classifications; up to 100 desk audits; position classification and job title recommendations for all employees and classifications; FLSA interpretation; updated classification specifications; ***EZ COMP™;*** internal equity and external competitiveness evaluation; base pay compensation survey and competitiveness analysis; salary range recommendations; fiscal impact estimates and multiple implementation scenarios; updated classification and compensation plan and classification and compensation plan implementation support for all included employees in all job classifications.

C. PROJECT METHODOLOGY

1. Quality Assurance

To ensure a high-quality project, we have built in several layers of procedural and statistical controls, in addition to those already in ***EZ COMP™***. Internally, we follow a prescribed series of steps in each project phase, which are reviewed by our Project Director. We request that the Human Resources and City's Project Manager(s) review our work to minimize the chance of errors and to ensure that it reflects the City's organizational values.

2. Project Planning Meetings and Communication Plan Development

We will consult with the Human Resources Team and City Officials or representatives on a communication strategy, plan, and materials, beginning prior to the project and extending to the post-project information meetings. We can conduct virtual group pre-project meetings for all City officials and employees where we will discuss the project's scope, answer questions, and distribute and explain the Job Analysis Questionnaire.

D. POSITION CLASSIFICATION ANALYSIS

1. Review of Essential Tasks – Job Analysis Questionnaire

We will review and analyze the current essential tasks, duties and responsibilities, and minimum qualifications of each included position through the Position Analysis Questionnaire (JAQ) to be completed by each employee (or group of employees with identical jobs) in print or electronic format. If the information on the JAQ does not clearly delineate the position's scope of responsibilities, we may return the JAQ to the position's incumbent for additional information or focus on the data gap during a worksite job information interview.

2. Employee Worksite Job Information Interviews (100 included)

We can conduct a job information interview with a representative incumbent of every requested job classification or for those we propose to change. The purpose of these interviews is to verify the data on the JAQ, obtain additional insight into the scope and complexity of the job duties, observe technical processes and working conditions, and to provide employees with an additional method of participation in the project. This process also ensures that we make all internal and external comparisons on the basis of ***actual job content*** and not merely job title.

3. FLSA Status Determination

We will review the essential tasks and minimum qualifications of each of the City's job classifications and subject them to the Fair Labor Standards Act tests to determine their exempt or non-exempt status.

4. Position Classification

Each of the City's positions will be analyzed and evaluated to determine their primary characteristics, including:

- Is there a current City occupational job group comprised of job classes with essential functions similar to the subject position; if so:

- To which of the group's job classes, and at what level, are the subject position's essential functions similar to the subject position, and if so:

- Are they sufficiently comparable (+/- 20% guideline) to be allocated to that job class, utilize the same job title, require the same minimum qualifications, and be assigned to the same salary range.

- If the City does not currently have a sufficiently comparable job class, what should be the subject position's occupational job class and title, and:

- What should the recommended occupational classification action be, No Change (N), Title Change (T), Merge With Other Job Class (M), New Job Class (J).

- We may find that a job class is overly broad and encompasses several job activities which are regarded with significant salary difference in the marketplace. In such an instance, we will recommend "splitting" the job class into the current job class and a new job class which encompasses the different job activities.

5. ***Updated Classification Specifications***

We can prepare an updated class specification in the City's standard or other selected format for each occupational job class. Focus will be on the Essential Functions and Minimum Qualifications. The specifications or descriptions may include (not limited to) the following components:

Job Title – Definition	Education, Training and Experience	Physical Requirements
Distinguishing Characteristics	Licenses and Certifications	Non-Essential Functions
Essential Functions	FLSA Exempt/Non-Exempt Status	Mental Requirements
Desired Knowledge and Skills	Supervision Exercise/Received	Working Conditions

6. ***Draft Classification Plan Review with Human Resources and Department Heads***

We will conduct a review of our initial position classification recommendations and draft job descriptions with the City's Project Team and respective department heads to identify possible errors, obtain feedback, and solicit suggestions for clarification.

E. COMPENSATION SURVEY AND ANALYSIS

1. ***City Involvement in Compensation Plan Development***

We will obtain policy direction from the City Council, Human Resources staff, and/or City Officials on the following key components of the salary plan development process:

- Comparator Employer Selection
- Benchmark Job Class Selection
- Compensation Competitiveness Policy
- Salary Structure Selection
- Internal Equity-Salary Plan Linkage
- Draft Compensation Plan Review / Critique
- Compensation Points for Analysis
- Project Implementation Plan

2. ***Comprehensive Compensation Survey***

a. Data Collection Protocol will be developed in consultation with the City's project leaders to determine which salary data elements to include, such as:

Base Salary Information

- Salary grade/step or open range salary plan structure
- Salary range structure Minimum, Midpoint, and Maximum
- Method of salary administration – longevity, performance, or skill

b. Benchmark Job Selection will be made by identifying City job classes common to its employment-competitive public and private employers in the immediate area and throughout the region or State, clearly identifiable, and representative of standard occupational job groups.

c. Comparator Employers Identification will include City input on employee sourcing and turnover.

d. Compensation Data Collection will be made by one or more of the following methods.

- Customized compensation survey requests for local governments and other public employers.
- Data extraction from established salary surveys for inclusion of private sector and industry.

e. Data Quality Control includes editing data for accuracy and proper matching to the City's survey benchmark jobs, and phone/fax/E-mail follow-ups for data clarification and to obtain comparators' benchmark job descriptions.

3. ***Prevailing Rates Calculation***

We will consolidate the compensation data from all sources, enter the information into the ***EZ COMP™*** program, and compute the prevailing rates, inclusive of cost-of-living differentials, as the statistical mean of the survey data for each benchmark job class. Data will be projected forward from the date of collection to a common date relating to the City's salary plan year by the annual Prevailing Rate Increase Factor (PRI) applicable at that time.

4. ***Compensation Competitiveness Comparison***

We will provide the City with charts comparing its current salary structures to those of the selected public and private comparator employers. We will calculate the extent that the City's offerings vary from the prevailing rates and practices of other relevant employers.

F. PAY PLAN DEVELOPMENT OR UPDATING

1. ***Compensation Competitiveness Policy***

We will assist the City to select a compensation competitiveness policy which best fits its compensation strategy and financial resources, by providing fiscal impact estimates at various percentage relationships to the prevailing rates.

2. ***Salary Plan Structure Development***

We will review the City's current wage plans and ***1)*** utilize the City's current wage plan structures to identify internally equitable and externally competitive salary ranges for each City job class or ***2)*** prepare alternative salary range structures and schedules for the City to select the best fit for its competitiveness strategy, with these optional criteria:

- Method of administration, i.e.: measured job performance, longevity, or skill
- Width of the salary ranges, grades, or broad bands, from Minimum to Maximum
- Varying salary range widths for FLSA non-exempt or exempt positions
- Open salary ranges for pay-for-performance or variable compensation plan
- If steps within the salary ranges, number of steps, percentage separation
- Number of salary ranges, grades, or broad bands in the salary schedule
- Percentage of separation between salary ranges, grades or broad bands
- Recognition for longevity, unique assignments, and special skill requirements
- Remuneration for required special licenses, certifications and registrations
- Linkage of performance evaluations to performance increase opportunities

3. ***Salary Range Assignment Development***

We will assign each job classification to a salary range in the City's current or selected new salary structure on the basis of a combination of factors, including:

- the prevailing rates for the benchmark job classes
- its current relationship to similar or occupationally related job classes
- the 15% guideline for salary range separation between sequential job classes
- the 25% guideline for salary separation of a department head job class

4. ***Implementation Plan Development***

We will consult with the Human Resources staff and Project Team on a plan for transition to the recommended plan, including a timetable for the principal activities, employee communication, impact on budget processes, and estimates of required financial resources.

G. ENSURING THE CITY'S SELF-SUFFICIENCY

The City will be self-sufficient in all aspects of maintenance of the updated position classification and compensation plan through these services.

1. ***Procedure Manuals***

   - *PSPC Position Classification Procedure Guide*
   - *PSPC Salary Administration Procedure Guide*
   - *City of San Luis* ***EZ COMP™*** *Procedure Guide*

2. ***Training Workshop*** – for City staff in position classification, job evaluation, compensation surveys, and compensation plan design and administration.

3. ***Electronic Class Specification Library*** – we can provide the City with all updated classification specifications in hard copy and electronic library format for internal maintenance.

4. ***EZ COMP™*** – program and project files on one of the City's computers, a custom user's manual, and system training for key City and Human Resources staff.

5. ***Initial Year's Implementation Warranty Support*** – we will analyze, evaluate, classify, and provide a salary range recommendation for any new or changed position or entire job classification, ***at no cost to the City*** for one year.

H. EXTENSIVE EMPLOYEE INCLUSION AND COMMUNICATION

Very important factors for successful implementation of new or updated classification and compensation plans are ***1)*** extensive employee inclusion, and ***2)*** extensive employee communication. City officials and employees will participate in one or more of the following activities:

- Attending pre-project briefings and question and answer sessions
- Completing a Position Analysis Questionnaire (JAQ) describing their position
- Elaborating on their jobs in individual or group job information interviews (option)
- Requesting a second review of their position's occupational job classification
- Receiving information pamphlet/booklet describing the updated salary plan

I. MINIMAL CITY SUPPORT REQUIRED

We are completely self-sufficient in projects of this nature and do not require any substantive staff support from the City other than payroll data, and arrangements for group and individual meetings. We appreciate, but do not require, any office space, telephone, clerical assistance, computers, or office equipment. We will provide all data entry, data processing, duplicating, and related report preparation functions.

J. REPORTS AND PRESENTATIONS

1. Draft and Final Report Preparation

We will provide the City's project leader(s) with a draft of our report for review and critique, including the classification plan, compensation market data, salary comparison tables, fiscal estimates, salary range listings, and implementation procedures. We will incorporate their critique into the development of a final report summarizing the project's findings, recommendations, and detailed description of the City's updated position classification and compensation plans.

2. Final Report Presentations

We will conduct a workshop or formal presentation of our final report and recommendations to the Human Resources staff, City Officials, and employees.

3. EZ COMP™ Program Installation

We can install our ***EZ COMP™*** program and project files on one of the Human Resources Department's computers and provide training to key staff in the maintenance and update of the classification and compensation plan.

4. Implementation Warranty

To ensure effective implementation of the new plan, we will analyze, evaluate, and provide a salary range recommendation for any new or changed job class, ***at no cost to the City*** for one year.

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

EXPERIENCE

ACTIVE AND RECENT STUDIES

PUBLIC SECTOR PERSONNEL CONSULTANTS

RECENT MUNICIPAL EMPLOYERS SERVED BY OUR STAFF

Addison, Town of, TX
Aliso Viejo, City of, CA
Allen, City of, TX
Benbrook, City of, TX
Bothell, City of, WA
Bozeman, City of, MT
Carrollton, City of, TX
Casa Grande, City of, AZ
Cottonwood, City of, AZ
Culver City, City of, CA
Dallas, City of, TX
Denton, City of, TX
Edmonds, City of, WA
El Paso, City of, TX
Fairview, Town of, TX
Fort Worth, City of, TX
Frisco, City of, TX
Georgetown, City of, TX
Grand Forks, City of, ND
Grapevine, City of, TX
Haltom City, City of, TX
Highland Park, Town of, TX
Indian Wells, City of, CA
Kerrville, City of, TX
Killeen, City of, TX
Lamar, City of, CO
Las Cruces, City of, NM
Lisle, Village of, IL
Maricopa, City of, AZ
Minot, City of, ND
Mountain Village, Town of, CO
Nogales, City of, AZ
Odessa, City of, TX
Pearland, City of, TX
Plano, City of, TX
Prosper, Town of, TX
Rio Rancho, City of, NM
Rockwall, City of, TX
Roswell, City of, NM
Rowlett, City of, TX
Salinas, City of, CA
San Clemente, City of, CA
San Juan Capistrano, City of, CA
Santa Ana, City of, CA
Scottsdale, City of, AZ
Southgate, City of, CA
Tomball, City of, TX
Upland, City of, CA
Vernon, City of, CA
Victorville, City of, CA
Westlake Village, CA
Winslow, City of, AZ
Woodlands Township, TX
University Park, City of, TX

Active May 2022: Yuma, Paradise Valley, Mesa Gateway Airport, St. Johns, Chino Valley

ADDITIONAL ACTIVE PROJECTS

Allen, City of, TX
Azle, City of, TX
Banning, City of, CA
Bridgeport, City of, TX
Copperas Cove, City of, TX
Dallas, City of, TX
El Paso County, CO
El Paso County, TX
Escondido, City of, CA
Fargo Public Schools, ND
Forney, City of, TX
Fountain Valley, City of, CA
Gillespie County, TX
Granbury, City of, TX
Grand Forks County, ND
Great Falls, City of, MT
Greater Harris County 911, TX
Hidden Hills, City of, CA
Housing Authority San Bernardino, CA
Huntington Beach, City of, CA
Irving, City of, TX
Lawndale, City of, CA
Lincoln County, WY
Little Elm, Town of, TX
Llano, City of, TX
Los Angeles County, CA
Luna County, NM
Manitou Springs, City of, CO
Montebello, City of, CA
Mount Vernon, City of, WA
Norco, City of, CA
Palestine, City of, TX
Mesa Gateway Airport, AZ
Plano, City of, TX
Rancho Palos Verdes, City of, CA
Sarasota Airport Authority, FL
Sierra County, NM
St. Johns, City of, AZ
Texarkana, City of, TX
Truth or Consequences, NM
Vancouver, City of, WA
Ventura, City of, CA

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

PROJECT TEAM

STAFF RESUMES

PUBLIC SECTOR PERSONNEL CONSULTANTS

MATTHEW E. WEATHERLY, PRESIDENT

Mr. Weatherly has over 20 years of experience as a human resources management professional and consultant, specializing in position classification, compensation, recruitment and selection. He has served as a Human Resources Manager with Employee Solutions, Inc. and Staffing Consultant with Initial Staffing Services.

He has completed projects in staff development, recruitment, selection, job descriptions, salary survey, and salary plan development. Among his current and recently completed consulting projects are those for:

Addison, Town of, TX	*Frisco, City of, TX*	*Maricopa Ass'n of Govt's*
Allen, City of, TX	*Grapevine, City of, TX*	*Scottsdale, City of, AZ*
Carrollton, City of, TX	*Highland Park, Town of, TX*	*State of AZ Health Department*
Chino Valley, Town of, AZ	*Maricopa County PWD*	*University Park, City of, TX*

Mr. Weatherly holds a BS degree in Human Resources Management from Arizona State University. He has been a featured speaker at TMHRA and regional HR Regional meetings in Arizona.

ELIZABETH J. LOCURTO, CCP, VICE PRESIDENT

Ms. LoCurto has over 30 years of experience as a compensation manager and consultant for public and private employers, specializing in job analysis, salary surveys, and salary plan development. She has served as Compensation Research Associate for Hayes/Hill, Inc., Senior Compensation Analyst for AON Corporation, Compensation Manager for Loyola University, and Project Manager for the American Compensation Association.

She has conducted projects in job audits, job descriptions, salary surveys, compensation database management, compensation plan development, compensation training course development, and compensation trend research. Among her consulting projects are:

Apache County, AZ	*Georgetown, City of, TX*	*Osborn School District, AZ*
Austin Community College, TX	*Huntington Beach, City of, CA*	*Sacramento, City of, CA*
CA Family Health Council	*Los Alamos County, NM*	*State Bar of Texas*
El Paso, City of, TX	*Norman, City of, OK*	*Texas Office of Attorney General*

Ms. LoCurto holds a BS degree in Business Administration from Arizona State University. She holds the Certified Compensation Professional (CCP) designation from the American Compensation Association.

KATHERINE TILZER, SPHR

Ms. Tilzer has more than 25 years of experience as a human resources manager and consultant, specializing in employee relations, compensation, and recruitment. She has served as Personnel Manager for Laboratory Corporation of America, Director of Human Resources for Plaza Healthcare, Inc., and Director of Human Resources for American Baptist Homes.

Aleutian Housing Authority, AK	*Cottonwood, City of, AZ*	*Pueblo West Metro Dist, CO*
Boone County, MO	*Huntington Beach, CA*	*Rowlett, City of, TX*
Cochise College, AZ	*Lake Tahoe College, CA*	*San Marcos, City of, TX*
Colleyville, City of, TX	*Plano, City of, TX*	*Winslow, City of, AZ*

She holds a BS degree in Management from the University of Phoenix, and certification as Senior Professional in Human Resources from the Society for Human Resources Management.

BOB LONGMIRE, PMP

Mr. Longmire has more than 10 years of project management experience and consulting for public employers, specializing in employee development, classification, and compensation. He has served as National Sales Director for Connexion Technologies and Brand Marketing Manager for Plink.

He has completed projects in job analysis, position classification, compensation surveys and plan development. Among his recent consulting projects are those for:

City of Frisco, TX	*City of Plano, TX*	*Northern AZ Council of Gov'ts*
City of Kingsville, TX	*City of Salinas, CA*	*Pitkin County, CO*
City of Monterey, CA	*Greater Orlando Airport, FL*	*Sacramento City School District, CA*
City of Plainview, TX	*King County Library Systems, WA*	*Tacoma Metro Parks, WA*

Mr. Longmire holds a BS degree in Administration from Colorado Christian University and designation as Project Management Professional from the Project Management Institute.

SAMUEL HEINZ, MPA, PHR

Mr. Heinz has conducted projects in job analysis, position classification, job evaluation, compensation surveys, and compensation plan development. Among his recent client projects are those for:

Addison, Town of, TX	*DeSoto, City of, TX*	*Prosper, Town of, TX*
Apache Junction, City of, AZ	*Galveston, City of, TX*	*Teton County, WY*
Bismarck, City of, ND	*Midland, City of, TX*	*The Colony, City of, TX*
Clarkdale, City of, AZ	*Odessa, City of, TX*	*Winslow, City of, AZ*

Mr. Heinz holds a MA degree in Public Administration from Texas Tech.

PUBLIC SECTOR PERSONNEL CONSULTANTS proposes to utilize only full-time members of our firm to complete all of the project tasks and objectives. In order to maintain complete control of the project tasks and deadlines, we will not utilize subcontractors for the completion of any projects.

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

CLIENT REFERENCES

REPRESENTATIVE PROJECT REFERENCES

Following is a listing of agencies which are representative of more than 1,100 employers, for whom members of our firm have services similar to those requested by the City.

SCOTTSDALE, CITY OF, AZ
Mr. Jim Thompson, City Manager
3939 N. Drinkwater Blvd
Scottsdale, AZ 85251
(480) 312-2800
jthompson@scottsdaleaz.gov

FY 2022 Compensation Study Update
FY 2018 Class and Compensation Study

PARADISE VALLEY, CITY OF, AZ
Ms. Jill Keimach, City Manager
6401 E. Lincoln Drive
Paradise Valley, AZ 85253
(480) 348-3960
jkeimach@paradisevalleyaz.gov

FY 2022 Compensation Study

YUMA, CITY OF, AZ
Ms. Monica Welch, HR Director
One City Plaza
Yuma, AZ 85364
(928) 373-5137
Monica.Welch@YumaAz.Gov

FY 2023 Classification and Compensation Study

CASA GRANDE, CITY OF, AZ
Mr. Scott Barber, HR Director
510 E. Florence Blvd.
Casa Grande, AZ 85122
(520) 421-8600
sbarber@casagrandeaz.gov

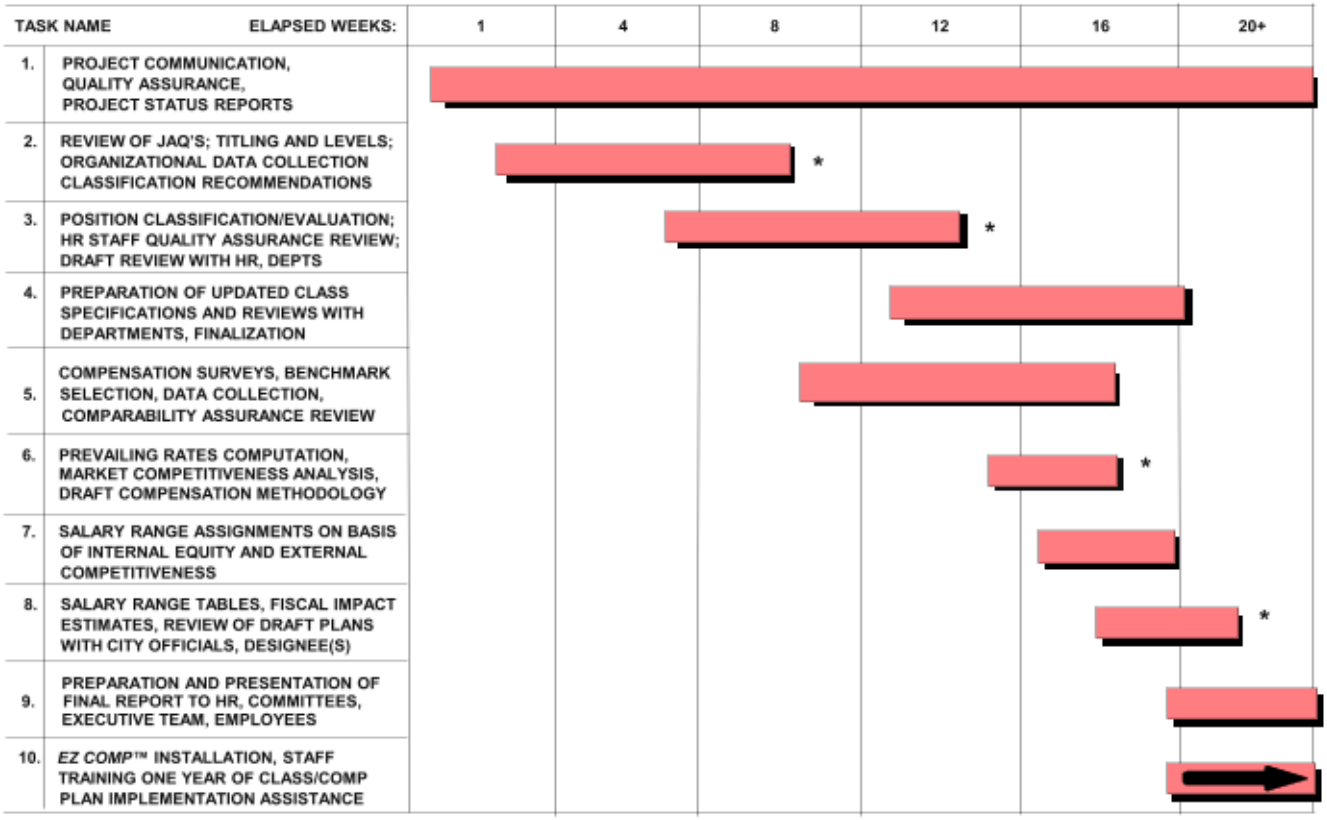
FY 2022 Classification and Compensation Study
(4 studies previously 2001 – Present)

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

TIMEFRAME

PUBLIC SECTOR PERSONNEL CONSULTANTS

ESTIMATED PROJECT ELAPSED TIME CHART



We are currently unable to guarantee classification specification within 6 months of project completion; best estimate is 12-14 months from project start

PROPOSAL TO CONDUCT AN EMPLOYEE CLASSIFICATION AND COMPENSATION STUDY FOR THE CITY OF SAN LUIS

FEE PROPOSAL

PUBLIC SECTOR PERSONNEL CONSULTANTS

PROJECT RATES BY MAJOR TASK

A. PROJECT COST ESTIMATE

We estimate that the project's total cost, including all fees for professional services and reimbursement for out-of-pocket expenses, ***will not exceed*** the indicated amounts.

Major Project Components

- Planning Meetings, Kick Off, Communication and JAQ Intro (Virtual or On-Site)	***$ 4,000***
- Position Classification Review, Job Titling Recommendations	***$ 6,000***
- Job Information Interviews (100)	***$ 13,000***
- Updated Class Specifications (100)	***$ 10,000***
- Compensation Survey	***$ 20,000***
- Pay Plan Modeling, Implementation Options and Costing	***$ 8,000***
- Contingency – Additional Meetings, Employee Communication	***$ 5,000***
- Reporting and Presentations	***$ 5,000***
Total:	***$ 71,000***

B. FLEXIBLE WORK PLAN, NEGOTIABLE TOTAL COST, TERMS

Our work plan is flexible and total project cost negotiable, and we will discuss, modify, add or delete, any work task to increase the project's responsiveness to the City's needs and financial resources. We will provide the City with monthly invoices for the professional services provided and out-of-pocket expenses incurred during the month. We request that the City pay the invoices within thirty (30) days of their receipt.

C. ESTIMATED TIMELINES

We estimate that the project can be completed in 120-150 days; classification specifications often require an additional 120+ days to complete.

blank

RE: [EXTERNAL] RE: Contact from Maria Munoz - City of San Luis - City of San Luis - Classification and Comp..

mweatherly@compensationconsulting.com
To Adela Cortez; Maria Munoz

Reply | Reply All | Forward

Thu 1/5/2023 2:41 PM

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

If I pull the line items by topic, see below:

- Planning Meetings, Kick Off, Communication and JAQ Intro (Virtual or On-Site)		*$ 4,000*
- Position Classification Review, Job Titling Recommendations		*$ 6,000*
- Job Information Interviews (100)		*$ 13,000*
- Updated Class Specifications (100)		*$ 10,000*
	Classification	*$33,000*
- Compensation Survey		*$ 20,000*
- Pay Plan Modeling, Implementation Options and Costing		*$ 8,000*
- Contingency – Additional Meetings, Employee Communication		*$ 5,000*
- Reporting and Presentations		*$ 5,000*
	Compensation	*$38,000*

CPS HR CONSULTING

PROPOSAL

City of San Luis, AZ

Compensation Consulting Services

November 28, 2022

SUBMITTED BY:
VICKI QUINTERO BRASHEAR
Director of Products and Services

CPS HR Consulting
2450 Del Paso Road, Suite 220
Sacramento, CA 95834
P: 916-471-3481
vbrashear@cpshr.us
Tax ID: 68-0067209

www.cpshr.us

Your Path to Performance

CPS HR CONSULTING

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CPS HR CONSULTING

November 28, 2022

Adela Cortez
Human Resources Director
City of San Luis
1090 E. Union Street
San Luis, AZ 85349

Sent via e-mail to: acortez@sanluisaz.gov

Dear Ms. Castro:

CPS HR Consulting (CPS HR) is pleased to submit this cost letter to City of San Luis (City) to provide compensation consulting services. With a rich history of assisting government agencies with their studies, we are confident that we can provide expert solutions to meet the City's requirements and objectives.

ORGANIZATION IDENTIFICATION INFORMATION	
Legal Name and DBA	Cooperative Personnel Services dba CPS HR Consulting
Main Office	2450 Del Paso Road, Suite 220, Sacramento, CA 95834 Main: (800) 822-4277; FAX: (916) 263-3613; WEB: www.cpshr.us
Regional Offices	100 Congress Avenue, Suite 2000, Austin, TX 78701 4 West Dry Creek Circle, Suite 100, Littleton, CO 80120 1968 S. Coast Hwy # 961, Laguna Beach, CA 92651
Year Established	1985
Federal Tax ID#/TIN/EIN	68-0067209
Type of Organization	Joint Powers Authority (Public Agency)
CONTACT INFORMATION	
Proposal Process Contact and Contract Authorized Representative	Vicki Quintero Brashear, Director of Products and Services (916) 471-3481; vbrashear@cpshr.us

Thank you for this opportunity; we very much look forward to continuing our professional relationship with the City of San Luis. Should you have any questions, please do not hesitate to contact ***me at the contact information above.*** I have the authority to bind CPS HR Consulting.

Sincerely,

Vicki Quintero Brashear
Director of Products and Services

Scope, Timeline, and Cost Details

Our Understanding of the Scope of Work

CPS HR understands that the City of San Luis is seeking a consulting firm to conduct a compensation study within the following parameters.

- **Base salary[1] collection, analysis, and comparison**
  - Up to **39** benchmark classifications[2]
  - Labor market pool inclusive of:
    1. City of Yuma, AZ
    2. Use of private sector data obtained from the Economic Research Institute (ERI; CPS HR has a current subscription)
    3. Use of aggregated survey data from League of AZ Cities/Towns Published Survey (cost to obtain data is the responsibility of the client)
  - Salary recommendations for all **21** salary grades

Project Timeline

CPS HR approximates 4.5-5.5 months for the base salary study[3]. We will be able to commence work on or after March 1, 2023, and we require that contracts be executed prior to proceeding with the work.

Cost

CPS HR has prepared the following ***professional fixed fee*** menu of options based on the scope of work outlined above.

Study	Professional Fixed Fee
Base Salary Study	$46,970
Total Compensation Study	$53,970
Not-to-Exceed Contract Amount:	**Fee is dependent on client selection of base salary versus total compensation type of study**

1 Pricing for a total compensation (salary + benefits) has been included as an option. CPS HR's list of standard benefit elements will be provided upon request. The City may request the collection of more benefits at an additional cost.

2 At the City's request, the benchmarks from the 2018 study will be utilized.

3 Add 1.5-2 months for a total compensation study.

Pricing Assumptions

Not included in the fixed fee:	
Materials Production	CPS HR provides all documents electronically. Hard copy printing of documents for this engagement will be the responsibility of the client.
Consultant Travel Expenses	We have not provided for travel costs since all work will be conducted virtually through the use of tele- and web-conferences and the sharing of documents through an online portal provided by CPS HR.

Billing Terms

CPS HR will bill in equal installments at the following milestones.

1. After kick-off meeting
2. Finalization of labor market agency pool/survey data sources and benchmarks
3. Submission of draft matches
4. Submission of draft salary recommendations
5. Provision of compensation report

It is assumed that the client will be responsive to the delivery of all draft deliverables and all subsequent revisions as defined in an agreed upon project timeline. **Unanticipated revisions or delays to the project timeline could result in a need for an addendum to the contract related to contract end date, staff assignments, and/or pricing. Any addenda will be discussed in a timely manner with the client.**

Pricing Philosophy

CPS HR is flexible with the proposed work plan; alternate approaches may be discussed with the client which may in turn change the proposed cost of the project. As described in this proposal, the methods, approach, timelines, as well as the proposed fee, have been prepared as accurately as possible based upon the services requested and study objectives described in the information provided to CPS HR. The proposed professional fees reflect the steps and time necessary to conduct the study in a sound, thorough, and sustainable manner, including important input and review by the client's Internal Project Manager and designated stakeholders to accomplish the study objectives. If changes or additional services are required, we will be happy to discuss changes to the project activities, schedule, and/or fee proposal.

CPS HR CONSULTING

PROPOSAL

City of San Luis, AZ

Classification and Compensation Consulting Services

December 8, 2021

SUBMITTED BY:
VICKI QUINTERO BRASHEAR
Director of Products and Services

CPS HR Consulting
2450 Del Paso Road, Suite 220
Sacramento, CA 95834
P: 916-471-3481
vbrashear@cpshr.us
Tax ID: 68-0067209

www.cpshr.us

Tiffany Bose
916-471-3390

Your Path to Performance

CPS HR CONSULTING

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Pricing Philosophy 5

CPS HR CONSULTING

December 8, 2021

Monica Castro
City of San Luis
751 B 4th Ave
San Luis, AZ 85336
mcastro@sanluisaz.gov

Subject: Request for Proposal – Classification and Compensation Consulting Services

CPS HR Consulting (CPS HR) is pleased to submit this cost letter to City of San Luis (City) to provide classification and compensation consulting services. With a rich history of assisting government agencies with their studies, we are confident that we can provide expert solutions to meet the City's requirements and objectives.

At CPS HR, we pride ourselves in establishing and nurturing long-term relationships with the agencies we serve as we live out our mission of bringing excellence in Human Resources to the public sector.

ORGANIZATION IDENTIFICATION INFORMATION	
Legal Name and DBA	Cooperative Personnel Services dba CPS HR Consulting
Main Office	2450 Del Paso Road, Suite 220, Sacramento, CA 95834 Main: (800) 822-4277; FAX: (916) 263-3613; WEB: www.cpshr.us
Regional Offices	100 Congress Avenue, Suite 2000, Austin, TX 78701 4 West Dry Creek Circle, Suite 100, Littleton, CO 80120 1968 S. Coast Hwy # 961, Laguna Beach, CA 92651
Year Established	1985
Federal Tax ID#/TIN/EIN	68-0067209
Type of Organization	Joint Powers Authority (Public Agency)
CONTACT INFORMATION	
Proposal Process Contact and Contract Authorized Representative	Vicki Quintero Brashear, Director of Products and Services (916) 471-3481; vbrashear@cpshr.us

Thank you for this opportunity; we very much look forward to working the City of San Luis. Should you have any questions, please do not hesitate to contact ***me at the contact information above.*** I have the authority to bind CPS HR Consulting.

Sincerely,

Vicki Quintero Brashear
Director of Products and Services

Scope, Timeline, and Cost Details

Our Understanding of the Scope of Work

CPS HR understands that the City of San Luis is seeking a consulting firm to conduct a classification and compensation study within the following parameters.

- Classification study:
  - Up to **110** classifications and up to **255** incumbents
    - Two online orientations for incumbents/ Department Heads / Managers/ Supervisors[1]
    - Online position description questionnaire with online supervisor review process[2]
    - Incumbent/supervisor job evaluation interviews of selected study participants[3]
    - Update of **all** existing classification specifications and create up to **5** new classification specifications
    - Update of the classification structure
- Compensation study:
  - Base salary collection, analysis, and comparison
  - Up to **39** benchmark classifications[4]
  - Labor market pool inclusive of:
    1. City of Yuma, AZ
    2. Use of private sector data obtained from the Economic Research Institute (ERI; CPS HR has a current subscription)
    3. Use of aggregated survey data from League of AZ Cities/Towns Published Survey (cost to obtain data is the responsibility of the client)
  - Salary recommendations for all **21** salary grades

---

[1] One orientation will be recorded and provided to the City.

[2] PDQs will be completed online, and our pricing assumes that up to 70% of incumbents will provide completed PDQs (therefore, we will review up to 179 completed PDQs). We will provide a process allowing for a 1-level supervisory review.

[3] CPS HR retains the right to select the interviewees; we will create interview questions for up to 60% of the PDQ respondents (therefore, we will conduct up to 107 incumbent interviews and up to 40 supervisor interviews). For single position classifications lacking a completed PDQ, we will provide the opportunity for the appropriate supervisor to provide commentary on that position's duties and scope.

[4] At the City's request, the benchmarks from the 2018 study will be utilized.

Project Timeline

CPS HR approximates 10-12 months for completion of the classification project work and 4-5 months for the compensation study. We will be able to commence work on or after February 14, 2022. We request a minimum two-week lead time between notice to proceed and initial project meeting and require that contracts be executed prior to proceeding with the work.

Cost

CPS HR has prepared the following ***professional fixed fee*** menu of options based on the scope of work outlined.

Study	Professional Fixed Fee
Classification Study	$151,650
Base Salary Study	$44,400
Not-to-Exceed Contract Amount:	**Dependent on client selections**

Pricing Assumptions

General Scope	
Number of Classifications	Up to 110
Number of Incumbents	Up to 255
Number of Benchmarks	Up to 39
Number of Labor Markets	Up to 3
Not included in the fixed fee:	
Materials Production	CPS HR provides all documents electronically. Hard copy printing of documents for this engagement will be the responsibility of the client.
Consultant Travel Expenses	We have not provided for travel costs since all work will be conducted virtually through the use of tele- and web-conferences and the sharing of documents through an online portal provided by CPS HR.

Billing Terms

CPS HR will bill in equal installments at the following milestones.

CLASSIFICATION ($30,330 each installment):

1. After kick-off meeting
2. Dissemination of PDQ link to incumbents
3. Completion of job evaluation interviews
4. Submission of draft classification report
5. Provision of final classification report

COMPENSATION ($8,880 per installment):

1. After kick-off meeting
2. Finalization of labor market agency pool/survey data sources and benchmarks
3. Submission of draft matches
4. Submission of draft compensation report
5. Provision of final compensation report

It is assumed that the client will be responsive to the delivery of all draft deliverables and all subsequent revisions as defined in an agreed upon project timeline. **Unanticipated revisions or delays to the project timeline could result in a need for an addendum to the contract related to contract end date, staff assignments, and/or pricing. Any addenda will be discussed in a timely manner with the client.**

Hourly Rates

Provided below are the hourly rates for any work requested outside of the scope presented in this proposal.

Labor Code	Hourly Rate
Project Manager	$150
Principal Consultant/Technical Specialist	$145
Senior Consultant/Senior Program Coordinator	$120
Administrative Technician	$80

Pricing Philosophy

CPS HR is flexible with the proposed work plan; alternate approaches may be discussed with the client which may in turn change the proposed cost of the project. As described in this proposal, the methods, approach, timelines, as well as the proposed fee, have been prepared as accurately as possible based upon the services requested and study objectives described in the information provided to CPS HR. The proposed professional fees reflect the steps and time necessary to conduct the study in a sound, thorough, and sustainable manner, including important input and review by the client's Internal Project Manager and designated stakeholders to accomplish the study objectives. If changes or additional services are required, we will be happy to discuss changes to the project activities, schedule, and/or fee proposal.

November 19, 2022

Adela Cortez
Human Resources Director
City of San Luis, AZ
1090 E. Union Street
San Luis, AZ 85349

Dear Adela:

Following is the proposal to perform a compensation study for the City of San Luis, AZ, herein referred to as City of San Luis. We are excited about the potential opportunity to work with the City of San Luis to complete this compensation review.

Overview

The purpose of this proposal is to plan and conduct a market review to establish and confirm current market values for all of the positions at the City of San Luis. The proposal includes the project deliverables, survey sources, investment, and project resources.

The information contained herein is of a confidential nature and is intended for the exclusive use of the City of San Luis, AZ. Reproduction, publication, or dissemination or portions hereof may not be made without the prior written approval of Total Reward Solutions, LLC, herein referred to as TRS.

Compensation Project Deliverables

- Develop compensation philosophy and market data scopes by employee group.
- Review job documentation and pull matches from two databases and send them to the City for review and approval.
- The City would match their jobs to the Arizona League of Cities survey and obtain two other local salary resolutions and match their jobs to those as well. The combination of these would be considered another source of data beyond TRS databases. Both databases and the combination of the surveys from Arizona would be weighted evenly thus resulting in 3 sources all weighted evenly.
- Market benchmarking data would be aggregated for up to 110 jobs from all three sources and would be provided at the 25th, 50th, and 75th percentiles of base pay and total cash compensation as well as market pay mix and bonus dollars at the 50th percentile.
- Develop a base pay structure based on market benchmarking.
- Slotting of all positions into the new pay structure.
- An incumbent analysis of approximately 255 employees to include percent of base pay relative to new midpoint, any employees under range minimum, any employees

over range maximum, and the cost impact to increase employees to the minimum of their pay range.
- Executive slide presentation and a written report to include findings and recommendations for this compensation project, and
- Completion of the project by a date agreed to by both parties. We believe this project can be completed in approximately 4 to 5 months. The project could be started in early January 2023 and completed by May 28, 2023.

Survey Sources

A total of two survey sources will be utilized by TRS to complete the market review. TRS survey sources include:

Economic Research Institute (ERI) is a database that contains a compilation of more than 13,000 jobs. The data is available by SIC code, revenue size, experience required for job, and location.

CompAnalyst is a database that contains a compilation of more than 15,000 jobs. The data is available by industry, employee size, revenue, and location.

Additionally, the other surveys described in the deliverables from the City of San Luis would be utilized.

Investment & Billing

The total investment for this project is $55,750.00. The project will be billed monthly based upon the total months agreed upon to complete the project. Invoices are due upon receipt and a late fee is added after 15 days. Should the number of positions increase for this market review, the project fee will be revised.

Additional Expenses

All conference calls needed to complete this project have been included in the proposal. No on-site meeting hours have been included in this proposal. Should the scope of this project change at any time during the project, a revised proposal or addendum will be made to the original proposal. Travel, lodging, and IRS approved mileage rates will be billed for travel outside the Indianapolis market.

Project Resources

Cassandra Faurote, Shellye Kaplin, and/or Amanda Gleason will be assigned to this project. Bios for all individuals can be found at the end of this proposal.

Indemnification and Hold Harmless

To the extent permitted by law, the City of San Luis, AZ agrees to defend, indemnity and hold harmless Total Reward Solutions and its officers, directors, agents and employees from and against any and all claims, suits, liens, judgments, damages, losses and expenses including reasonable legal fees and costs arising in whole or in part and in any manner from acts, omissions, breach or default of Total Reward Solutions, in connection with performance of any work completed for them.

Cancellation Policy

Should the City of San Luis cancel this project prior to a minimum of 50% completion of this project, an amount equal to 50% of the total project cost will be due immediately upon invoicing. Additionally, any hours of work completed beyond 50% will be calculated, invoiced, and due immediately after receipt of invoice.

We appreciate the opportunity to submit this proposal. I will contact you within the next few days to review the proposal. Upon approval and agreement on the scope, and investment of the project, I ask that you sign below and return a copy via electronic means to my office.

Sincerely,

Cassandra Faurote

Cassandra Faurote, CCP, SPHR, SHRM-SCP
CEO and Founder
Total Reward Solutions, LLC

Agreed to Proposal as Stated:

_____ _____

Signature and Printed Name Date

Biographies

Total Reward Solutions was founded in 2005 and is an Indiana certified WBE consulting company that has a passion for designing effective and competitive compensation and total reward programs. They have consulted with companies in over 50+ industries.

Biography for Cassandra E. Faurote, CCP, SPHR, SHRM-SCP

CEO and Founder

Cassandra Faurote is the CEO and Founder of Total Reward Solutions and has over 30 years' experience in human resources. Born in Dayton, Ohio, Cassandra has a bachelor's degree in business management from Indiana Wesleyan University and holds three certifications to include Certified Compensation Professional (CCP), Senior Professional in Human Resources (SPHR), and SHRM Senior Certified Professional (SHRM-SCP). Cassandra is the author of *Compensation $ense 101: Common Sense Answers to Your Questions about Employee Compensation and Total Rewards.*

Professional affiliations include being a member of the Society for Human Resources Management, World at Work, Indy SHRM, and NAWBO. She has authored articles in World at Work, Inside Indiana, Louisville Business Journal, HR Professionals Magazine, Kentucky SHRM and is frequently a speaker at conferences.

Biography for Shellye Kaplin

Managing Director

Shellye Kaplin possesses over 25 years' hands-on experience both as a practitioner and consultant in Human Resources with specialization in compensation and benefits. Shellye was a consultant with two of the large human resources consulting firms in the United States as well as worked for a pharmaceutical company. She has extensive experience in developing, directing, and implementing compensation and benefit programs and strategies for numerous organizations in a variety of industries. Some industries include universities, hospitals, retail, financial services, pharmaceutical, and life sciences organizations. Shellye has a bachelor's degree in Liberal Arts from the University of Louisville.

Biography for Amanda Gleason

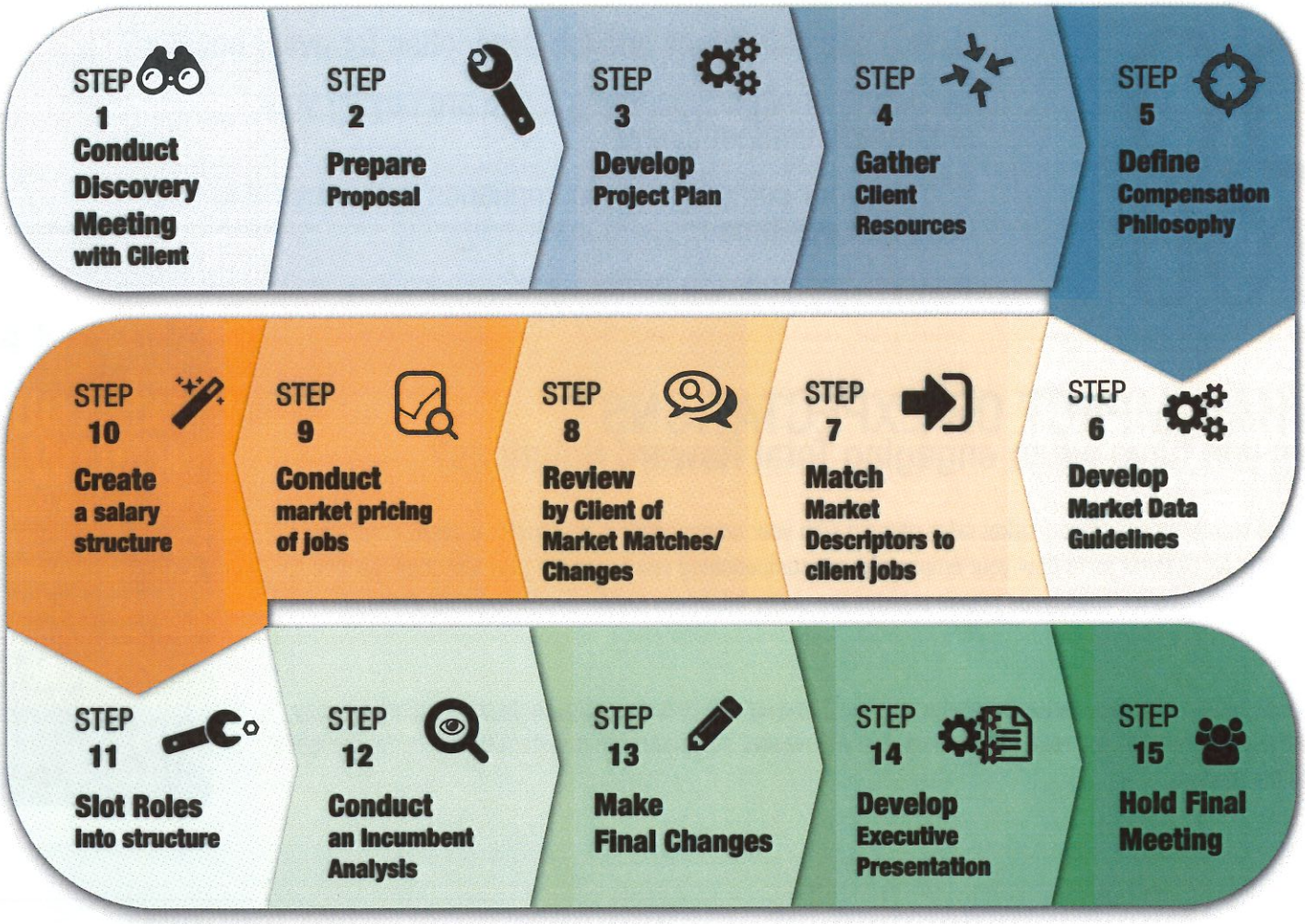
Compensation Consultant

Amanda Gleason has over 18 years progressive Human Resources experience with significant experience in human resources compliance, benefit administration, employee lifecycle management, human resources functional audits and executing tactical plans for HR compliance. Her compensation experience includes leading organizations through researching, benchmarking, and building base pay programs to implement pay practices that attract and retain talent.

Amanda has a master's degree in Management/Human Resources, is certified as a SHRM-CP, and has a Certificate in Conducting Lawful Workplace Investigations (IAML).

317-589-8529
www.totalrsolutions.com

BASE PAY PROJECT DEVELOPMENT PROCESS



OPTIONAL PROGRAM DELIVERABLES

- Job Families/Level/Descriptors
- Geographic Differentials
- Cursory or In-depth FLSA Review
- Discrimination Analysis
- Manager's Compensation Guide
- Manager's Training
- Development of Job Descriptions

Total Reward Solutions

Ph: 317.589.8529 | Em: info@totalrsolutions.com

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RETURN ON INVESTMENT – BASE PAY PROJECT

DO YOU

…have a pay philosophy and job description for every position?

…lie awake at night wondering if you are paying your employees competitively?

…know if your company is in compliance with wage and hour laws and overtime regulations?

…truly reward your top performers?

WHAT IMPACT OR EXPECTATIONS
can you have when engaging Total Reward Solutions?

You will receive competitive market rates aligned with your compensation philosophy, a customized pay structure, an analysis as to how your employees are compensated relative to the new structure, as well as recommendations for employees whose salaries are under minimum and/or over maximum of the new pay ranges.

You will additionally have better longevity and less turnover due to less employee dissatisfaction with pay relative to the market and relative to others. You will receive a compensation system that is fair and aligned with the market.

DID YOU KNOW
the turnover expense for just one employee will far exceed the cost of engagement with Total Reward Solutions?

WAYS TO MEASURE YOUR RESULTS

- Total Reward Solutions can perform a survey to measure employee's importance and satisfaction with various pay components and then perform that same measurement months after the program is in place to ensure employees feel compensation has improved.
- Percent of offers accepted before and after project.
- Look at any type of survey currently in place (such as Best Places to Work) to see if compensation scores improve after we have provided you a service.
- Calculate the financial impact of employees underpaid vs. overpaid.
- Determine competitive position in the market and alignment with philosophy before and after project.
- ROI on project via improved turnover or cost per employee.

Total Reward Solutions

Ph: 317.589.8529 | Em: info@totalrsolutions.com

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Maria Munoz

From: Cassandra Faurote <cassandra@totalrsolutions.com>
Sent: Monday, September 26, 2022 1:20 PM
To: Maria Munoz
Subject: [EXTERNAL] Compensation Project Estimate

Maria

I wanted to start by providing an estimate and deliverables to see if we are in the ballpark before preparing a formal proposal. If we are not in the ballpark since we are out of state, I do not want to waste either of our time.

Part 1 - Classification Study Deliverables

- Orientation – up to 2 one-hour zoom or Team calls – staff could be divided in half.
- We would provide a job analysis questionnaire (JAQ) for the supervisor to complete. They can do this with the employee, if they desire. We would need one consolidated JAQ for the compensation study if there are multiple employees in a job and/or that job crosses across departments and is the same job. Collaboration would need to occur internally.
- Interview supervisors via Teams for up to 30 minutes each on the completed job analysis questionnaire.
- Provide a template for all job descriptions to be approved by the City.
- Create 110 new job descriptions based on the job analysis questionnaire and subsequent interview with the supervisor.
- Send completed job description to supervisor and allow for one round of changes.
- Final job description then to be sent to human resources.
- Completion of the project by a date agreed to by both parties. We believe this work will take 90 days and would best occur between January through March, 2023.

The investment for this part of the project is estimated at $44,000. This project would require the use of some City administrative support to schedule the calls with supervisors.

Part 2 – Compensation Study Deliverables

- Development of compensation philosophy and market data scopes.
- Job documentation reviewed and survey match descriptors pulled from two databases and sent to the City for review and approval.
- The City would match their jobs to the Arizona League of Cities survey and obtain two other local salary resolutions and match their jobs to those as well. The combination of these would be considered another source of data beyond TRS databases. Both databases and the combination of the surveys from Arizona would be weighted evenly. Thus resulting in 3 sources all weighted evenly.
- Aggregated market benchmarking for up to 110 jobs from all three sources would be provided at the 25th, 50th, and 75th percentiles of base pay and total cash compensation as well as market pay mix. Bonus at the 50th percentile will also be provided.
- Create a pay structure based on the market benchmarking.
- An incumbent analysis of approximately 255 employees to include percent of base pay relative to new midpoint, any employees under range minimum, and any employees over range maximum.
- Executive slide presentation to include findings and recommendations for this base pay study.
- Completion of the project by a date agreed to by both parties. We believe this work would take 90 – 120 days and would best occur between April through July, 2023.

The investment for this part of the project is estimated at $55,750.

Total investment for both projects is estimated at $99,750. These estimates do not include travel expenses – flight, hotel, and meals. Additionally, meeting hours would be charged at $200/hour. The City would approve all of these expenses prior to travel.

I hope this estimate is in line with your expectations and would be happy to pull together a full proposal if we are in the ballpark and it makes sense for the two of us to continue with this process. I know there is also a 3 hour time difference that would need to be taken into consideration for the interviews. Thank you for your time thus far and let me know if we are moving forward.

Cassandra Faurote, CCP, SPHR, SHRM-SCP
Founder & CEO
Total Reward Solutions
Your Trusted Partner for Compensation Solutions | Certified WBE

Author:
Compensation Sense 101: Common Sense Answers to Your Questions About Employee Compensation and Total Rewards

Office: 317.589.8529 | Mobile: 317.490.7531 | Email: cassandra@totalrsolutions.com
Website: https://www.totalrsolutions.com/
LinkedIn: https://www.linkedin.com/company/total-reward-solutions/
Twitter: https://twitter.com/T_R_Solutions

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AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. C.**

Meeting Date: 01/25/2023

Department Head: Eulogio Vera, Director of Public Works, Public Works Department

Submitted By: Manuel Hernandez, Project Manager, Public Works Department

Action Requested:

ITEM:

Discussion and possible action on any and all matters regarding the purchase of a 7.5-ton bridge crane for the Fleet Maintenance Building Expansion. **(Manuel Hernandez, Public Works Project Manager)**

SUMMARY:

The Department of Public Works and its Fleet Services division are seeking Council approval to purchase a bridge crane for the Fleet Maintenance Building Expansion. A bridge crane will significantly improve the safety and efficiency of our vehicle and equipment repair and maintenance operations. The new bridge crane will help with moving and working on large pieces of equipment and parts such as truck beds, Vactor truck booms for wastewater operations, solid waste truck bodies, and other heavy equipment and parts. Currently, the Fleet Services division is utilizing forklifts and other means to move and lift heavy objects weighing up to 7.5 tons. The Fleet Services division is in need of a bridge crane.

Bridge cranes are specialized equipment and difficult to source. Three companies were solicited to provide a quote. Only two of the companies could provide a quote for delivery and installation. Advanced Industrial Solutions (Irvine, California) came in at $165,730. While Dearborn Crane and Engineering (Mishawaka, Indiana) came in at $103,800. The vendors have informed Public Works that there will be a price increase in February 2023. In order to align with the construction schedule, Public Works would need to purchase the bridge crane as soon as possible. This purchase has a lead time of approximately 10-12 weeks. Public Works anticipates a 25% increase in pricing, totaling approximately $130,000.

The Public Works Department is asking Council to approve this purchase in the amount of $130,000, approve a budget transfer as stated in the fiscal impact of the agenda item, and waive formal procurement procedures. This purchase falls under the provisions of City Code 3.05.010 (F) Procedures Waived.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE THE PURCHASE OF A 7.5-TON BRIDGE CRANE FROM DEARBORN CRANE AND ENGINEERING NOT TO EXCEED $130,000.00, AUTHORIZE BUDGET TRANSFER AS STATED IN THIS AGENDA FISCAL ITEM AND TO WAIVE FORMAL PROCUREMENT PROCEDURES FOR THE REASONS PRESENTED.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$130,000
BUDGETED AMOUNT:	No
AVAILABLE AMOUNT TO TRANSFER:	Yes
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Special Services 100-110-80005 $190,051

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

The bridge crane purchase was not a budgeted item; however, we have budget capacity from the industrial incentive policy. We budgeted 200 K to incentivize industrial businesses to come to the City. Due to the Shires' case and Arizona gift clause statutes, we have put a hold on the incentive program to reduce liability to the City. We are asking council approval to do a budget transfer of $130,000 from account 100-110-80005 to complete the purchase of the Bridge Crane Purchase as follows:

100-999-90015	$ 84,502.36
300-302-90015	$ 16,247.64
310-311-90015	$ 16,247.64
320-321-90015	$ 13,002.36
	$130,000.00

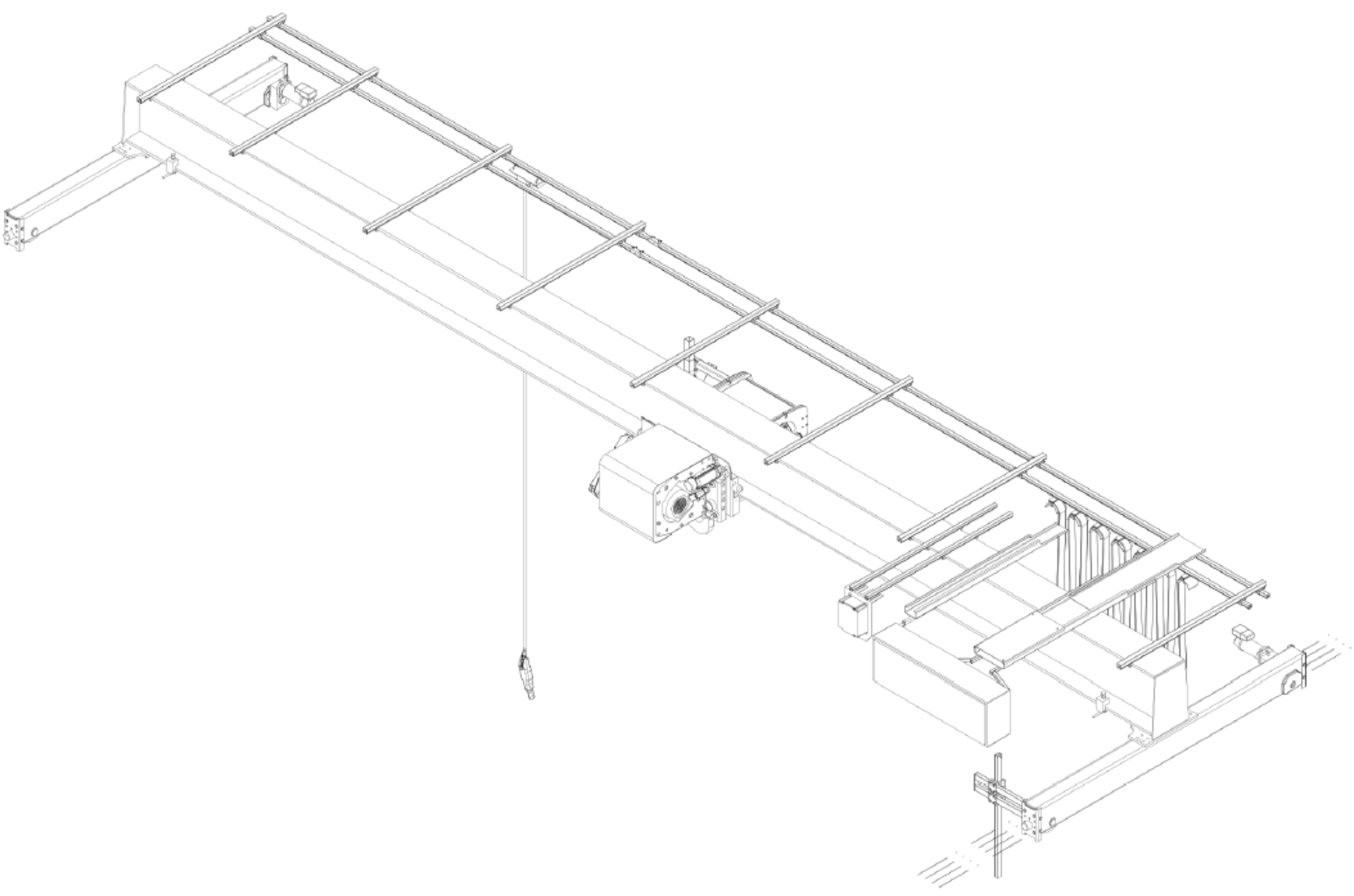
Attachments

Bridge crane drawing

Bridge crane example

Advanced quote

Dearborn quote



314-869-7200
50
TON

City of San Luis
Bridge Crane Proposal
6-15-22

Presented To: Jorge Perez

Table of Contents

1) Proposal	Pages 3-4
2) Crane Drawings	Pages 5-8
3) Components and Additional Features	Page 9
4) Crane Data	Pages 10-11
5) Crane Runway and Power Supply	Page 12
6) Electrical Component Data	Pages 13-14
7) End Carriage and Traveling Machinery	Page 15
8) Main Girder Data	Page 16
9) Motor Data	Page 17
10) Trolley Wheel Load Data	Page 18
11) Wheel Loadings According to ASCE 7 and AISC 7	Page 19
12) Safe-Lec II Info	Pages 22-23
13) 40# ASCE Rail Info	Page 24

Proposal

48 Maxwell
Irvine, CA 92618
Phone: (800) 517-7247
Fax: (949) 679-2926
www.advancedindustrialsolutions.com

Date: 6/15/2022
Proposal #: 22-0056
Salesman: Mark Nelson
Phone: 949-870-8816
Email: mark@aiscrane.com

Attention: Jorge Perez
Phone: (928) 341-8577
Company: City of San Luis
Application: 7.5 Ton Bridge Crane System

Thank you for considering Advanced Industrial Solutions for your material handling needs. We are pleased to provide the following proposal for your application requirements.

Description	Qty	Price	Total
Freestanding Top Running Bridge Crane System - 7.5 Ton Capacity - 46' 8" Runway Length - 35' Span - 19' 6" Overall Height - 15' 7" Hook Height - VFD Control Bridge Speed (100 fpm Max) - Conductor Bar Electrification for Runway - Includes 40# ASCE Rail for Runway - 208-3-60	1	125,790.00	125,790.00T

Hoist/Trolley Specifications:
- R&M Electric Wire Rope Hoist/Trolley
- 15' 7" Lift
- Dual Speed Hoist (20/3.2 fpm)
- VFD Control Trolley (65 fpm Max)
- Radio Remote Control
- Backup Roving Pendant
- 208-3-60

* Includes Shipping and Handling to San Luis, AZ
* Includes Engineering on Bridge Crane and Structure
* Foundation Supply, Installation, and Engineering by Others

Terms:

Delivery: TBD at time of Order

F.O.B. Ship Point. Freight is prepay & add 18% unless shipped collect or quoted.

This offer is in accordance with Advanced Terms & Conditions - https://www.advancedindustrialsolutions.com/sales-terms-conditions/

Proposal

48 Maxwell
Irvine, CA 92618
Phone: (800) 517-7247
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Date: 6/15/2022
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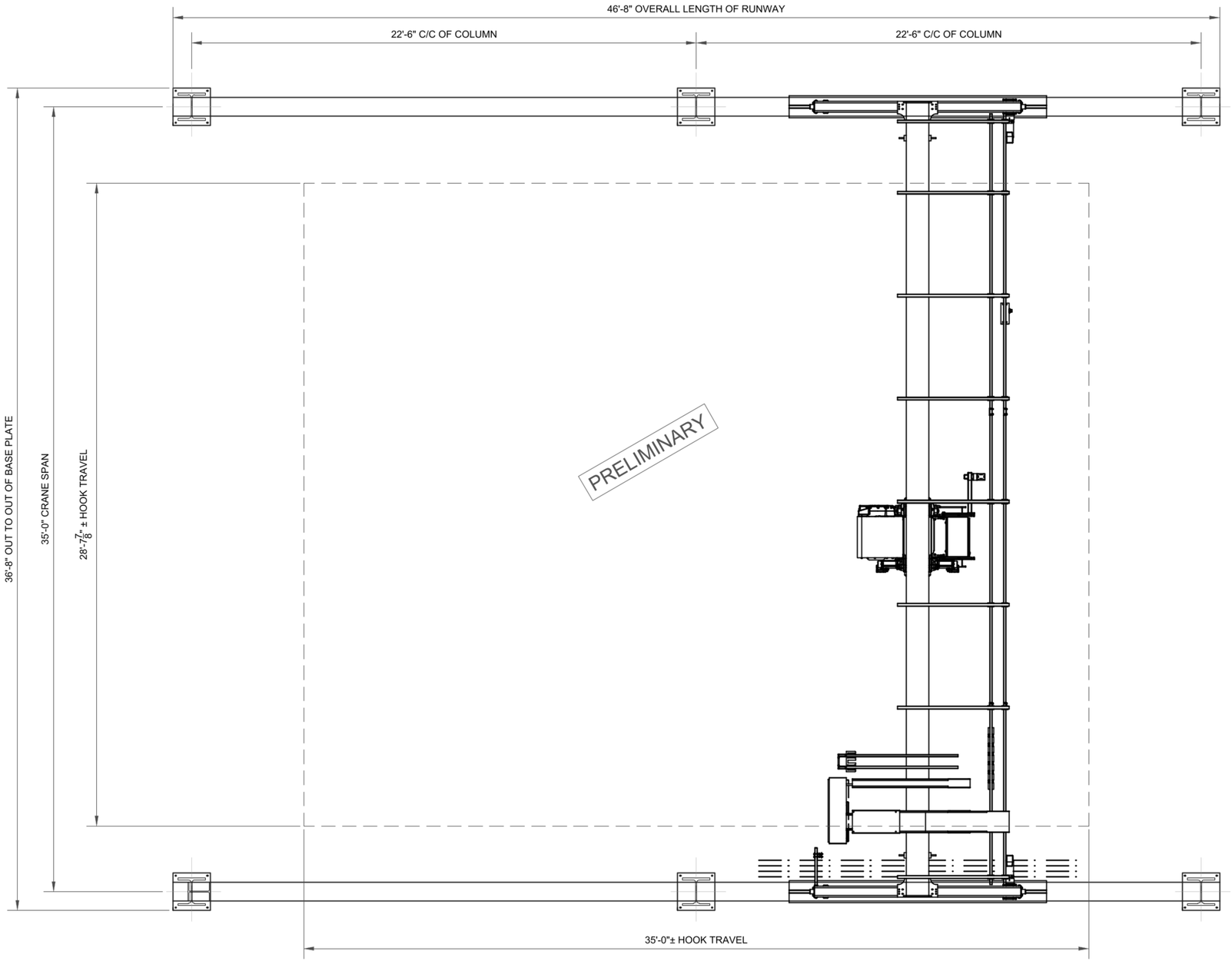
Attention: Jorge Perez
Phone: (928) 341-8577
Company: City of San Luis
Application: 7.5 Ton Bridge Crane System

Thank you for considering Advanced Industrial Solutions for your material handling needs. We are pleased to provide the following proposal for your application requirements.

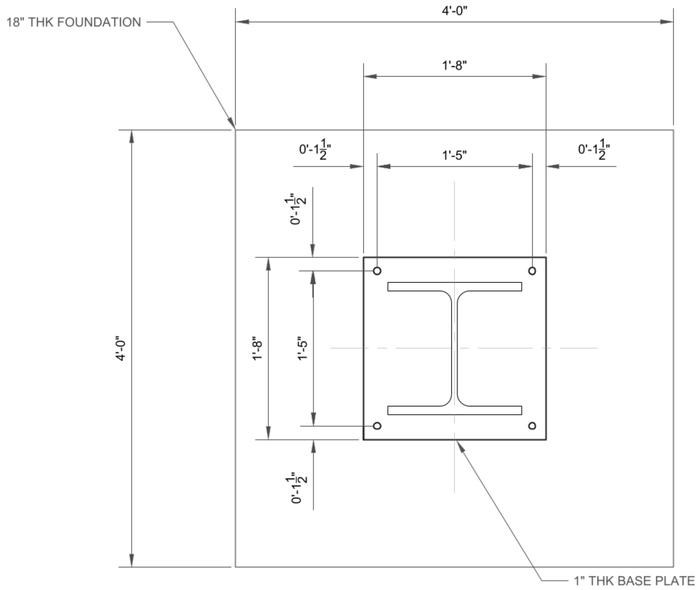
Description	Qty	Price	Total
Installation of Bridge Crane System - Estimated 5 Days to Complete - Load Test and Inspection Upon Completion - Inspection by 3rd Party per OSHA regulations - Equipment Provided if Necessary - Area Free and Clear of Obstruction - Work During Normal Business Hours - Normal Wage Rates - Electrical Hookup to Facility Power by Others - Foundation Supply and Engineering by Others	1	39.940.00	39,940.00

Terms:	**30% w/ order, 60% Upon Readiness to Ship, Balance Net 30 OAC**	**Subtotal**	**$165,730.00**
Delivery:	**TBD at time of Order**	**Sales Tax (0.0%)**	**$0.00**
F.O.B.	**Ship Point. Freight is prepay & add 18% unless shipped collect or quoted.**	**Total**	**$165,730.00**

This offer is in accordance with Advanced Terms & Conditions - https://www.advancedindustrialsolutions.com/sales-terms-conditions/



CRANE PLAN



BASE PLATE AND FOUNDATION DETAILS (TYP 6 PLCS)

TECHNICAL DATA

SPAN	: 35'-0"
LOAD	: 7.5-TON
LIFTING HEIGHT	15'-7"
HOISTING SPEED	: 20.0/3.2 ft/min 2-speed
TRAVERSING SPEED	: 65 ft/min stepless
TRAVELLING SPEED	: 100 ft/min Stepless
WEIGHT OF TROLLEY	: 1400 lbs
WEIGHT OF BRIDGE	: 5500 LBS

Advanced

☐ APPROVED

☐ NOT APPROVED / RESUBMIT WITH CHANGES

X _____ _____
SIGNATURE DATE

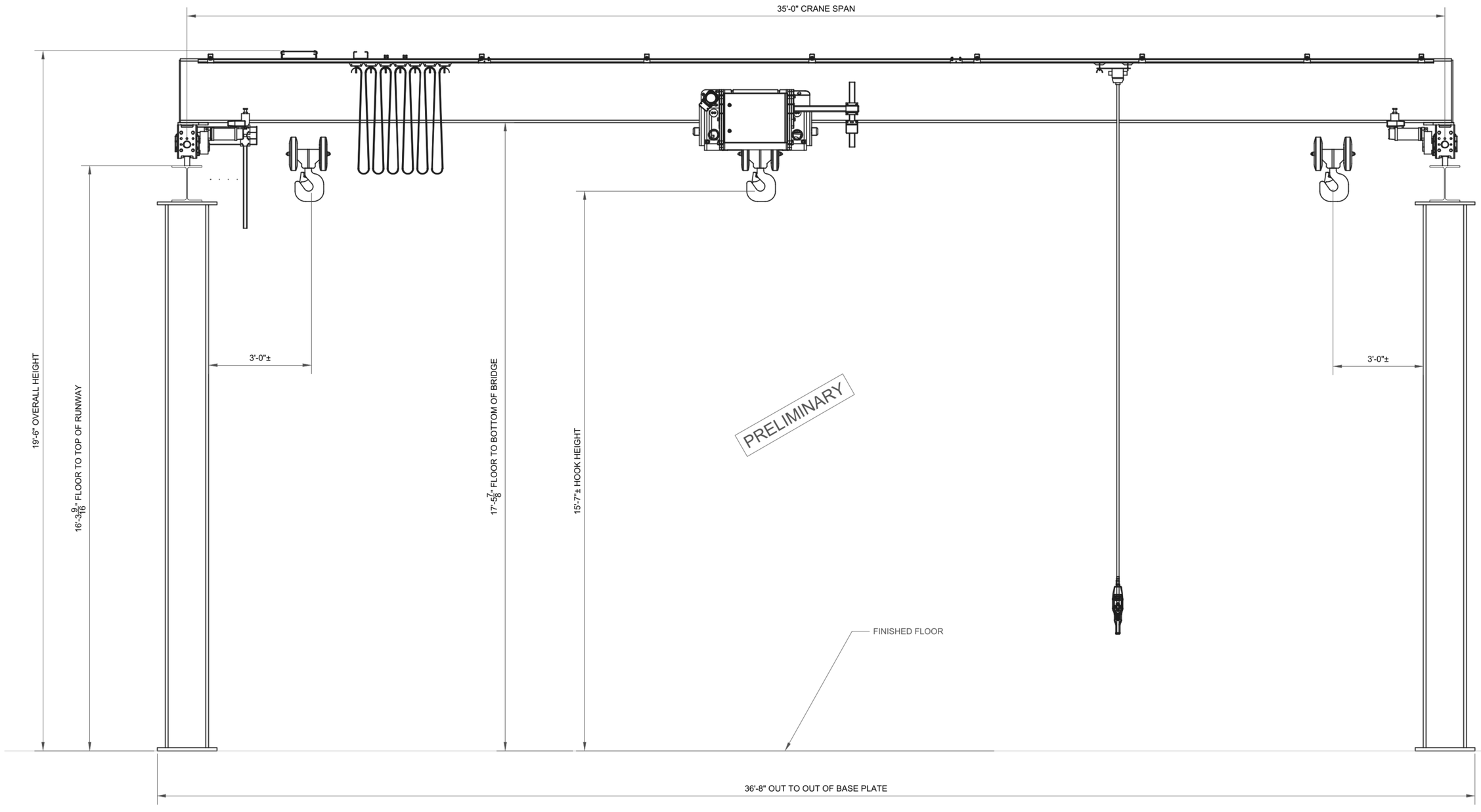
NOTE:
-PLEASE MARK "APPROVED" OR "NOT APPROVED". DRAWINGS RETURNED MARKED "APPROVED AS NOTED" REQUIRE RESUBMITAL FOR FINAL "APPROVED" STATUS.
PROMPT APPROVAL WILL HELP CONFORM TO ANY TENTATIVE DELIVERY DATE.
-DELAYED APPROVAL OR CHANGES TO SYSTEM MAY DELAY TENTATIVE DELIVERY DATE. (SCHEDULING OF CHANGES BASED ON CURRENT ENGINEERING WORKLOAD.)
-CHANGES TO QUOTED SYSTEM MAY RESULT IN ADDITIONAL COSTS.

REVISION HISTORY

REV	COMMENTS	DATE	APPROVED

TITLE: CRANE PLAN
PROJECT: 7.5 TON TRSG CRANE SYSTEM
CUSTOMER: CITY OF SAN LUIS
ADDRESS: PRELIMINARY

DATE:	DRAWN BY:	DWG SIZE:	SCALE:	JOB#	SHEET#	REV#
8/26/21	OSS	D	NTS	PRELIMINARY	L1	NC



CRANE ELEVATION

Advanced

☐ APPROVED

☐ NOT APPROVED / RESUBMIT WITH CHANGES

X _____ _____
SIGNATURE DATE

NOTE:
-PLEASE MARK "APPROVED" OR "NOT APPROVED". DRAWINGS RETURNED MARKED "APPROVED AS NOTED" REQUIRE RESUBMITTAL FOR FINAL "APPROVED" STATUS.
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-DELAYED APPROVAL OR CHANGES TO SYSTEM MAY DELAY TENTATIVE DELIVERY DATE. (SCHEDULING OF CHANGES BASED ON CURRENT ENGINEERING WORKLOAD.)
-CHANGES TO QUOTED SYSTEM MAY RESULT IN ADDITIONAL COSTS.

REVISION HISTORY

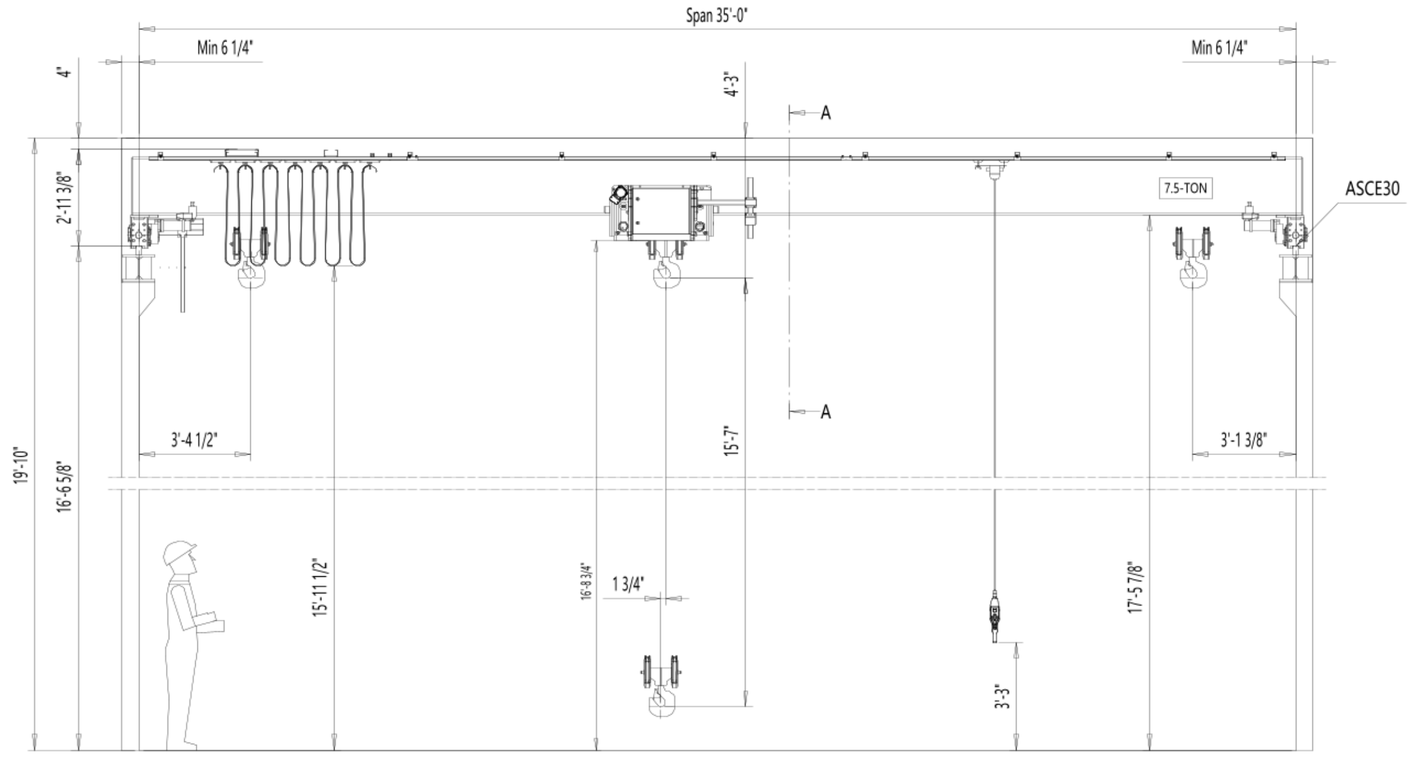
REV	COMMENTS	DATE	APPROVED

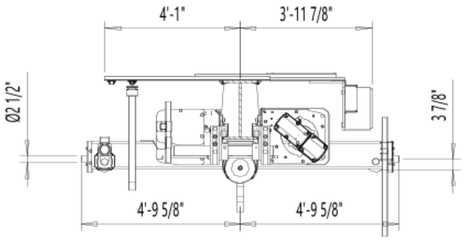
TITLE: CRANE ELEVATION
PROJECT: 7.5 TON TRSG CRANE SYSTEM
CUSTOMER: CITY OF SAN LUIS
ADDRESS: PRELIMINARY

DATE:	DRAWN BY:	DWG SIZE:	SCALE:	JOB#	SHEET#	REV#
8/26/21	OSS	D	NTS	PRELIMINARY	L2	NC

Revised 2-O

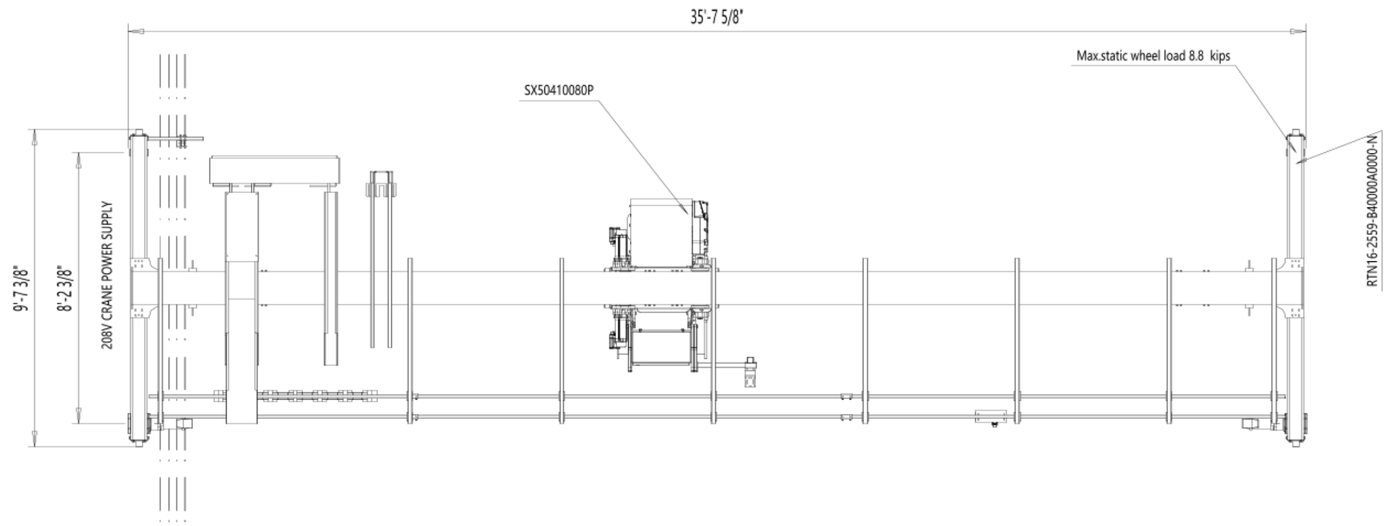
REV	CHANGE DESCRIPTION	ECN	DATE	REVISED BY	APPROVED BY





View A-A

SPECIFY NORTH



TECHNICAL DATA

SPAN	: 35'-0"
LOAD	: 7.5-TON
LIFTING HEIGHT	: 15'-7"
HOISTING SPEED	: 20.0/3.2 ft/min 2-speed
TRAVERSING SPEED	: 65 ft/min stepless
TRAVELLING SPEED	: 100 ft/min Stepless
WEIGHT OF TROLLEY	: 1400 lbs
WEIGHT OF BRIDGE	: 5390 lbs
CRANE CLASSIFICATION	: CMAA Class C
HOIST GROUP	: ASME H4*
CRANE DRIVE GROUP	: CMAA C
MAIN / CONTROL VOLTAGE	: 208 / 115 V; 60 Hz
SUPPLY POWER	: 17.02 Hp
LENGTH OF RUNWAY	: 0"

SURFACE TREATMENT OF CRANE

Bridge color	: Safety Yellow
Paint	: AKRYL /127 µm

Customer organices safe platform for crane service

Indoor Use crane

Radio controlled crane

Pendant as backup

R&M MATERIALS HANDLING

Pos	Amount	Description	Specification

ACCEPTED BY:	MNE/RZO Design	06/14 Date	Irvine Dept	DAS / 2.132.8 Vx proj
COMPANY:	QXSka7.5-TON x 35ft Hol:15.59ft			1:40
DATE:	-			M-film
	-			
	Revised 2-O			Issue

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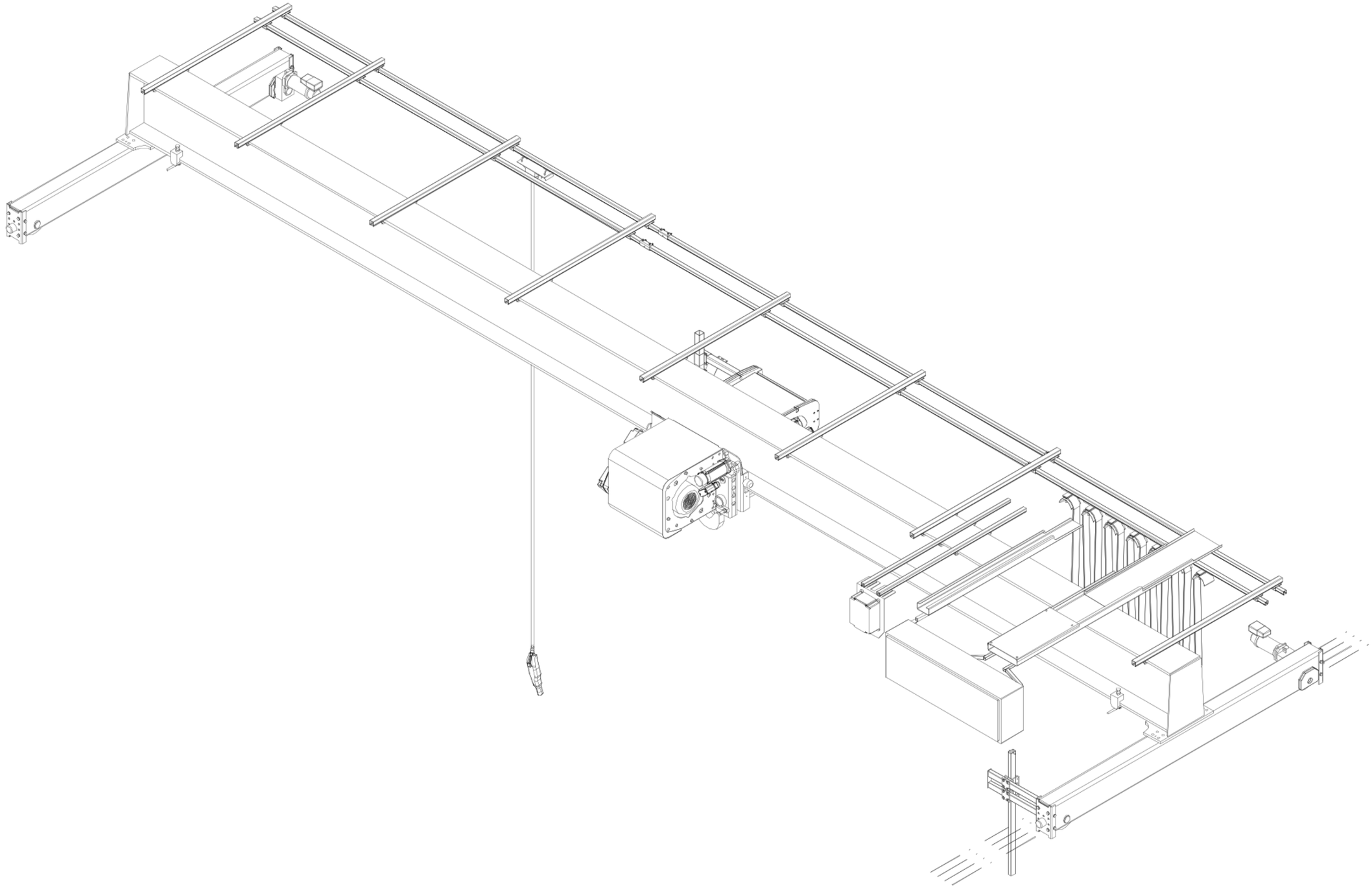
Revised 2-OI

REV	CHANGE DESCRIPTION	ECN	DATE	REVISED BY	APPROVED BY



Pos	Amount	Description	Specification

ACCEPTED BY:

COMPANY:

DATE:

MNE/RZO	06/14	Irvine	DAS / 2.132.8
Design	Date	Dept	Vx proj

QXSka7.5-TON x 35ft Hol:15.59ft

-

-

Revised 2-OI

1:40

M-film

Issue

R&M MATERIALS HANDLING

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COMPONENTS AND ADDITIONAL FEATURES DATA

1 Selected components and additional features

(Included in the component package)

Electric hoist 1: 1 x SX50410080P56FDL0S
- 2 pcs Travelling motor thermal protection (TM05); PTO
- 1 pcs Overload device type (HS03); SG
- 1 pcs Trolley travel inverter braking resistor type (FC02); RL01-120
- 1 pcs Condition monitoring type (HS02); OWL

End Carriages: 2 x RTN16-2559-B40000A0000-N
Joint: P-TOP-B_-STD-S
Buffer: D1801
- 1 pcs End carriages with primer paint only (PAI05); STANDARD

Traveling machinery: 2 x GES342PS3BOF06LA200-6460E
- 1 pcs Bridge travelling motor thermal protection (BM08); PTO

Bridge panel: 1 x BPP5-1NM400-51JE
- 1 pcs 2-step limit switch, bridge traveling (slow+stop) (LIM12); YES
- 1 pcs Horn type (operator controlled) (ELE05); 108
- 1 pcs Bridge travel inverter braking resistor type (FC03); RL01-120
- 1 pcs Number of TD Drive Tools (SER02); 1
- 1 pcs Transformer for the hoist traversing control (ELE68); YES
- 1 pcs Transformer for the bridge traveling control (ELE69); YES

Trolley speed control (Hoist 1): 1 x CMEDGE009E100

Bridge speed control: 1 x CMEDGE009E100

Trolley power supply package (festoon): 1 x QQSMS13L6BP551122-
- 1 pcs Sticker set (ST09); 5
- 1 pcs Trolley festoon rail type (PS63); 230
- 1 pcs Trolley festoon console type (PS78); C40x40x2.5
- 1 pcs Length of hoist cable free end to bridge panel(E1) (PS22); 5500
- 1 pcs Length of hoist cable free end to hoist panel (E2) (PS23); 3500

Push button station: 1 x PRQ062220C00-N059PE300
- 1 pcs Plug-in connector for pendant cable (ELE16); PE3
- 1 pcs Main contactor button function (PE12); 0

Remote control: 1 x RaCon512QU000TCRTCU00ST

CRANE DATA

1 General

Crane type	QXSka7.5-TON x 35ft Hol:19ft
Span	35'-0"
Crane load (SWL)	15 000 lbs
Number of MAIN hoists	1 ps

Hoist 1

Trolley type	Standard
Hoist load	15 000 lbs
Hoisting height MAIN	18'-11 15/16" [max 29'-6 5/16"]
Hoist type MAIN	SX50410080P56FDL0S
Weight of one hoist and trolley	1 400 lbs
Hoist group	ASME H4*
Hoisting speed	20/3.3 ft/min 2 - speed
Trolley traversing group	CMAA C
Trolley traversing speed	65 ft/min

Trolley rail gauge	N/A
Crane use	Indoor
Crane group	CMAA C
Bridge traveling group	CMAA C
Bridge traveling speed	100 ft/min
Dynamic coefficient for load	1.15
Dynamic coefficient dead load	1.10
Sideways pull factor	1.05
Crane acceleration time	4.7 s
Weight of crane (with hoists)	7 350 lbs
Weight of crane bridge (without hoists)	5 950 lbs
Weight of one end carriage	550 lbs
Weight of one crane traveling machinery	30 lbs
Weight of bridge panel	70 lbs
Weight of one main girder	4 190 lbs
Weight of crane service platform	N/A
Main girder type (Profile)	W21x101-MatA992
Service platform type	N/A
Surface preparation type	SSPC6
Painting type	A 5 mil, Safety Yellow

2 Electrical

Main voltage	208 V /60 Hz
Control voltage	115 V
Nominal power of crane	17.4 hp
Main fuse size at bridge panel	60 A
Maximum current of crane*)	183.6 A

Note! The maximum current of crane includes the starting current of hoisting motor(s) and nominal current of trolley and bridge traveling motors. The nominal current of crane includes the nominal current of hoisting, trolley and bridge motors. Maximum or nominal currents of crane do not include the currents of additional accessories, such as lamps, magnets etc.
Note! Do not use estimated main fuse size to define other electrical components.

Nominal current of crane*)	50.9 A
Power factor at starting current	0.75
Power factor at nominal current	0.91
Voltage drop of trolley power supply	<= 2.0 %

Note! The maximum current of crane includes the starting current of hoisting motor(s) and nominal current of trolley and bridge traveling motors. The nominal current of crane includes the nominal current of hoisting, trolley and bridge motors. Maximum or nominal currents of crane do not include the currents of additional accessories, such as lamps, magnets etc.
Note! Do not use estimated main fuse size to define other electrical components.

CRANE RUNWAY AND POWER SUPPLY DATA

1 General

Crane type .....QXSka7.5-TON x 35ft Hol:19ft

2 Runway

Type .....
Length.....46'-8"
Height .....19'-11 5/8"

3 Power Supply

Type x
Description.....
Length.....46'-8"
Environment .....
Feeding point.....
Type of fixing .....Hangers, (No brackets), every 0" (Qty: ps)
Customer main fuse size .....80 A
Power feeding cable type.....
Power feeding cable length.....65'-7 3/8"
Calculated voltage drop of power feeding cable.....10.0 %
Main switch type .....

Number of cranes per runway.....One crane only
Maximum / nominal current of one crane .....183.6 A / 50.9 A
Current of other crane (if different).....0 A
Max/Nom current of all cranes on power supply.....183.6 A / 50.9 A
Power factor at starting / nominal current.....0.75 / 0.91
Main voltage .....208 V
Calculated (konductor) voltage drop (starting)..... % <= 4.0 %

Note!

* The maximum current of crane includes the starting current of hoisting motor(s) and nominal current of trolley and bridge traveling motors.
* The nominal current of crane includes the nominal current of hoisting, trolley and bridge motors.
* Maximum or nominal currents of crane don't include currents of additional accessories (e.g. lamps, magnets etc.)

ELECTRICAL COMPONENT DATA

1 General

Crane type ..... QXSka7.5-TON x 40ft Hol:19ft
Crane main / control voltage ..... 208 V - 60 Hz / 115 V
Nominal power of crane ..... 17.4 hp
Maximum / nominal current of crane*) ..... 183.6 A / 50.9 A
Power factor at starting / nominal current ..... 0.75 / 0.91

2 Bridge panel

Bridge panel type BPP5-1NM400-51JE
Bridge panel length / weight (preliminary) ..... 3'-11" / 70 lbs
Main fuse size at bridge panel ..... 60 A

3 Hoist speed control

Hoist 1

Type MAIN ..... 2 - speed
Control method / Location ..... 2 - step/ Trolley panel

4 Trolley speed control

Hoist 1

Type CMEDGE009E100
Control method / Location ..... EP / Trolley panel
Adjusted acceleration time ..... 3.6 s
Nominal current margin (max. allowed / required) 2.5
Maximum current margin (max allowed / required) 3.6

5 Bridge speed control

Type CMEDGE009E100
Voltage ..... 460 V
Control method / Location ..... EP / Bridge panel
Adjusted acceleration time ..... 4.7 s
Nominal current margin (max. allowed / required) 2.4
Maximum current margin (max allowed / required) 2.5

6 Trolley power supply [festoon]

Hoist 1

Festoon system type QQSMS13L6BP551122-
Hoist main power cable type 4XAWG2
Distance between cable trolleys ..... 6'-0"
Cable trolley type KC-023332-230X100
Free cable length at bridge panel end ..... 18'-1"
Free cable length at hoist panel end ..... 11'-6"

7 Crane control

Pendant type PRQ062220C00-N059PE300
Pendant cable length ..... 19'-2"
Remote control type RaCon512QU000TCRTCU00ST
Radio frequency ..... 2400BAND Hz
Control method ..... Radio + Back-up Pendant

8 Crane power supply

Type .....
Runway length ..... 46'-8"

Note! The maximum current of crane includes the starting current of hoisting motor(s) and nominal current of trolley and bridge traveling motors. The nominal current of crane includes the nominal current of hoisting, trolley and bridge motors. Maximum or nominal currents of crane don't include currents of additional accessories (e.g. lamps, magnets etc.)

Voltage drop of crane (conductor) power supply.. % <= 4.0 %
Power feeding cable type.....
Power feeding cable length.....65'-7 3/8"
Main switch type .....

Note! The maximum current of crane includes the starting current of hoisting motor(s) and nominal current of trolley and bridge traveling motors. The nominal current of crane includes the nominal current of hoisting, trolley and bridge motors. Maximum or nominal currents of crane don't include currents of additional accessories (e.g. lamps, magnets etc.)

END CARRIAGE AND TRAVELING MACHINERY DATA

1 General

Crane type	QXSka7.5-TON x 35ft Hol:19ft
Span	35'-0"
Crane load (SWL)	15 000 lbs

2 End carriage

End carriage type	RTN16-2559-B40000A0000-N
Bridge traveling group	CMAA C
Maximum static wheel load	9.1 kips
Maximum dynamic wheel load	10.7 kips
CMAA Equivalent durability wheel load - Pe	7 693 lbs
CMAA Guide for max. durability wheel load - P	8 920 lbs > Pe
Wheel Hardness	280.0 BHN
Runway rail type	ASCE30
Wheel diameter	6 5/16"
Minimum allowed wheel diameter	5 7/16"
Wheel groove	2 5/16"
Calculated bearing life time	10 180 h > 5 000 h
Joint type	P-TOP-B_-STD-S
Buffer type	D1801
Buffer length	2 1/8"
Buffer diameter	2 1/2"
Buffer centre from top of crane rail	3 7/8"

3 Traveling machinery

Machinery type	GES342PS3BOF06LA200-6460E
Number of traveling machinery	2 ps
Nominal power of motor (High / Low Speed)	0.55 hp
Synchronized speed of motor (High / Low Speed)	3 000 / r/min
Nominal speed of motor (High / Low Speed)	2 600 / r/min
Nominal torque of motor (High Speed)	1.1 lbf-ft
Gear ratio	41.9
Nominal bridge speed (High / Low Speed)	100 ft/min
Practical bridge speed (High Speed)	105.0 ft/min
Acceleration time	5.0 s (< 4.7 s)
Electrical braking distance	5'-3 5/16"
Mechanical braking distance	1'-10 11/16"
Thermal loading per motor	0.41 hp
Number of starts per hour	
Torque margin	2.44 (>=1)
Power margin	1.35 (>=1)

MAIN GIRDER DATA

1 Main girder data

Crane type .....QXSka7.5-TON x 35ft Hol:19ft
Main girder type .....Profile - W21x101-MatA992
Flange width (B__) .....1'-5/16"
Girder height (H__) .....1'-9 3/8"
Girder material: .....34.8 ksi
Trolley rail type .....N/A
Crane service platform type .....N/A

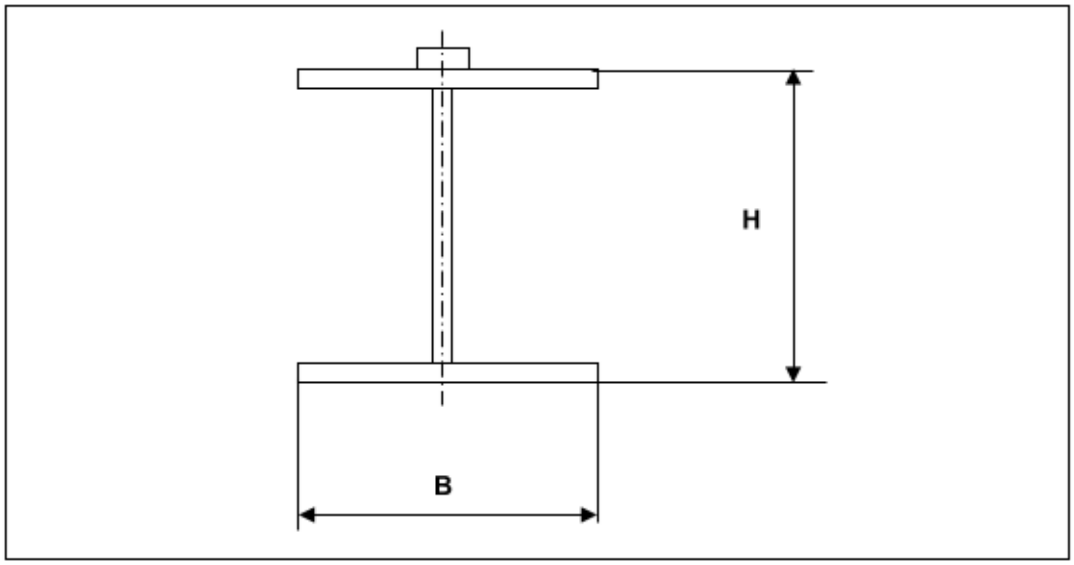
2 Main girder (and service platform) weights

Number of main girders .....1 ps
Weight of one main girder / length unit.....101 lbs/ft
Weight of one main girder.....4 190 lbs
Weight of crane service platform.....N/A

3 Main girder deflection

Vertical deflection (due to load and trolley own weight) 1/2" < 17/32"

4 Main girder drawing



MOTOR DATA

1 General

Crane type	QXSka7.5-TON x 35ft Hol:19ft
Span	35'-0"
Crane load (SWL)	15 000 lbs
Crane voltage	208 V

2 Hoisting motor

Hoist 1

Motor code	P5
Motor type	1 x MF11X-106
Synchronized speed	3 600 / 600 r/min
Duty group	ASME H4*
Nominal power	14.8/2.1 hp
Duty factor	60 % ED
Starting torque (High Speed)	46.5 lbf-ft
Starting current (High Speed)	176.9 A
Nominal current (High Speed)	44.2 A
Power factor at starting current	0.75
Power factor at nominal current	0.91
Motor control	2 Speed

3 Trolley traversing motor

Hoist 1

Motor type	MF06LA200
Motor voltage	360 V
Number of motors	2 ps
Synchronized speed	3 000 / r/min
Nominal speed	2 660 / r/min
Duty group	CMAA C
Nominal power	0.7 hp
Duty factor	40 % ED
Starting torque (High Speed)	5.2 lbf-ft
Starting current (High Speed)	1.7 A
Nominal current (High Speed)	1.6 A

4 Bridge traveling motor

Motor type	MF06LA200
Motor voltage	353 V
Number of motors	2 ps
Synchronized speed	3 000 / r/min
Nominal speed	2 600 / r/min
Duty group	CMAA C
Nominal power	0.55 hp
Duty factor	40 % ED
Starting torque (High Speed)	5.2 lbf-ft
Starting current (High Speed)	2.4 A
Nominal current (High Speed)	1.7 A

Note! The supplied motor data plates have typically power and current values labeled for 40%ED (S3). Therefore the data plate values might vary from the above-calculated actual values, which are based on the actual use and duty group of the crane.

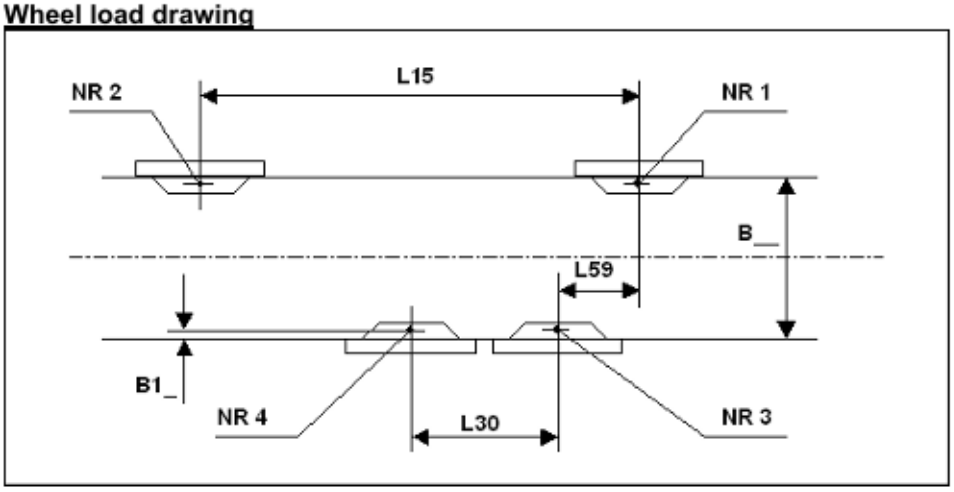
TROLLEY WHEEL LOAD DATA

Hoist 1

1 General

Hoist load (SWL) .....15 000 lbs
Hoisting height .....18'-11 15/16" [max 29'-6 5/16"]
Hoist type SX50410080P56FDL0S
Hoist group .....ASME H4*
Trolley traversing duty group.....CMAA C
Hoisting speed 20/3.3 ft/min2-speed
Trolley traversing speed.....65 ft/minStepless
Dynamic coefficient for live load.....1.15
Dynamic coefficient for dead load 1.10
Sideways pull factor.....1.05
Weight of hoist and trolley.....1 400 lbs
Trolley wheel diameter.....125 mm

2 Wheel load drawing



3 Wheel load data

Distance between trolley wheels **(L15)**.....2'-3 7/8"
Distance between trolley wheels **(L30)**.....2'-3 7/8"
Distance between trolley wheels **(L59)**.....0"
Girder flange width **(B__)**.....1'-5/16"
Trolley wheel contact point from flange edge **(B1_)** ..3/8"

Static Wheel load (load+trolley /trolley only) **(NR1)** ...4 872 lbs / 698 lbs
Static Wheel load (load+trolley /trolley only) **(NR2)** ...3 876 lbs / 550 lbs
Static Wheel load (load+trolley /trolley only) **(NR3)** ...4 258 lbs / 84 lbs
Static Wheel load (load+trolley /trolley only) **(NR4)** ...3 392 lbs / 66 lbs

Dynamic Wheel load (load and trolley wgt.) **(NR1)**....5.6 kips
Dynamic Wheel load (load and trolley wgt.) **(NR2)**....4.4 kips
Dynamic Wheel load (load and trolley wgt.) **(NR3)**....4.9 kips
Dynamic Wheel load (load and trolley wgt.) **(NR4)**....3.9 kips

The Component selection, wheel loading, motor data etc. are based on the proposed main girder weight, duty groups, cranes speeds and other technical details shown the Component Offer and other prints. Any changes to these values may change the crane components. All the technical information in this print is guiding and indicative only and therefore to be interpreted by experts only. This computer program is protected by copyright laws and international treaties.

Wheel loads according to ASCE 7 & AISC 7

Calculation number / work number	Revised 2 /
Rated capacity of crane	15 000 lbs
Span	35'-0"
Wheel base	8'-2 7/16"
Rail type / Wheel groove width	ASCE30 / 2 5/16"
Classification of crane use as a whole	C

Trolley position closest to Rail 1

ASCE7 4.9.2 Maximum static vertical wheel loads

	Rail 1	Rail 2
Wheel I,1, $F_{z,i,1}$	-9020 lbf	-2150 lbf
Wheel I,2, $F_{z,i,2}$	-8970 lbf	-2200 lbf

ASCE7 4.9.3 Maximum dynamic vertical wheel loads
(With impact factor 125 %)

	Rail 1	Rail 2
Wheel I,1, $F_{z,impi,1}$	-11300 lbf	-2680 lbf
Wheel I,2, $F_{z,impi,2}$	-11200 lbf	-2750 lbf

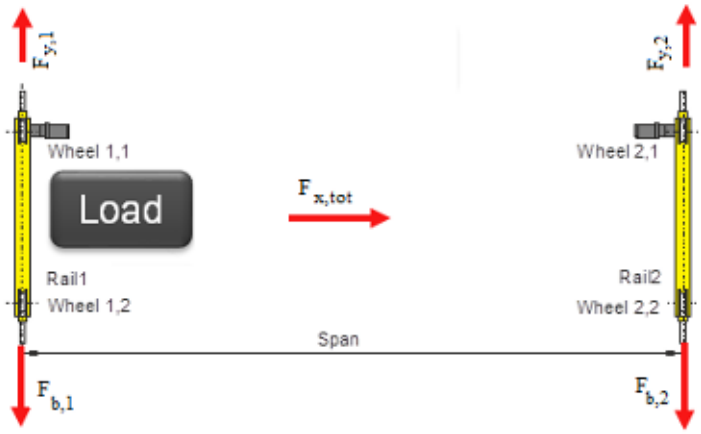
ASCE7 4.9.5 Longitudinal Force

	Rail 1	Rail 2
Side I, $F_{y,i}$	1800 lbf	430 lbf

AISC7 13.4 Bumper Force

	Rail 1	Rail 2
Bumper I, $F_{b,i}$	3540 lbf	2620 lbf

ASCE7 4.9.4 Lateral force, $F_{x,tot}$ = 3280 lbf



Trolley position closest to Rail 2

ASCE7 4.9.2 Maximum static vertical wheel loads

	Rail 1	Rail 2
Wheel I,1, $F_{z,i,1}$	-2090 lbf	-9070 lbf
Wheel I,2, $F_{z,i,2}$	-2150 lbf	-9020 lbf

ASCE7 4.9.3 Maximum dynamic vertical wheel loads
(With impact factor 125 %)

	Rail 1	Rail 2
Wheel I,1, $F_{z,impi,1}$	-2620 lbf	-11300 lbf
Wheel I,2, $F_{z,impi,2}$	-2690 lbf	-11300 lbf

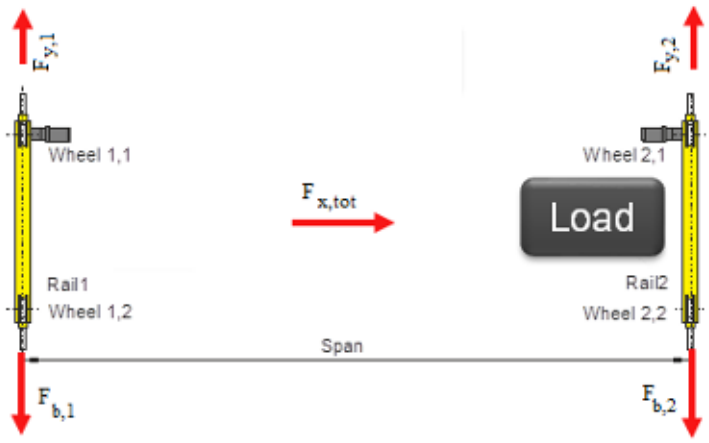
ASCE7 4.9.5 Longitudinal Force

	Rail 1	Rail 2
Side I, $F_{y,i}$	419 lbf	1810 lbf

AISC7 13.4 Bumper Force

	Rail 1	Rail 2
Bumper I, $F_{b,i}$	2610 lbf	3540 lbf

ASCE7 4.9.4 Lateral force, $F_{x,tot}$ = 3280 lbf



Note! The inertia forces are acting on the crane structure only during acceleration and deceleration of the crane movement. Inertia forces and guiding forces do not act simultaneously. Guiding force S can also locate in wheel NR4.

Safe-Lec 2 Overview & Design Features

Safe-Lec 2™ - The "next generation" in electrification for overhead cranes and other moving equipment. This modern system delivers safe, reliable power in a rugged, easy-to-install package. **UL Listed.**

Safe-Lec 2 is ideal for:

- Small to medium cranes
- Monorails
- Conveyor systems
- Material Handling Equipment
- Moderately curved systems
- Amusement rides

Ampacity range:

100A, 125A, 160A, 200A, 250A, 315A, & 400A capacities up to 600 volts maximum.

Maximum Speed:

1200 ft/min

Options:

Heater wire systems (Pg. 26), stainless steel hardware, green bonding (ground) conductor covers, black "UV resistant" outdoor covers, curved systems to a minimum of 60" radius (curved at our factory).

Safe-Lec 2 Features:

- Positive shoe tracking and superior conductivity. Long-wearing shoe is guided by the V-contact in the rail.
- Robust collector arm articulates to help maintain contact.
- IP2 "finger safe" operation; no live parts exposed.
- Secure, bolted splice joints pre-installed on conductors for superior electrical connection. Won't pull apart over time. Includes one-piece snap-on cover.
- Integrated collector cables; won't snag on moving equipment.
- Peaked insulating covers to shed dust and water. The same cover profile fits all bar styles; fewer parts to stock.

Safe-Lec 2 Installs Quickly:

- Less expense and shorter crane downtime.
- Requires fewer splice joints; 14' 9" (4.5m) rail lengths versus 10' for most other systems.
- Includes pre-installed splice joints on one end of bar.
- Uses multi-pole hanger; multiple bars snap into the same hanger and hanger mounts with a single bolt.
- Requires fewer expansion joints; up to 492' (150m) without an expansion section.
- Is easy to install and align with slotted hanger brackets.
- Is easy to wire; power wires connect to lug at base of collector. Requires no in-line splices or connectors.

Automate your quotations with our advanced "Quick Quote" software - See Pg. 5.

Safe-Lec 2 Overview & Design Features

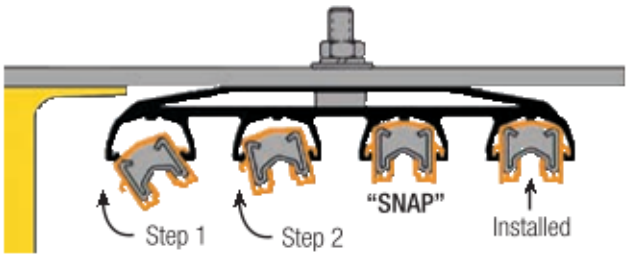
Here are several specific reasons why Safe-Lec 2 is superior to a traditional (and now outmoded) 8-Bar system. And we should know . . . we invented 8-Bar over 50 years ago!

Safe-Lec 2

8-Bar

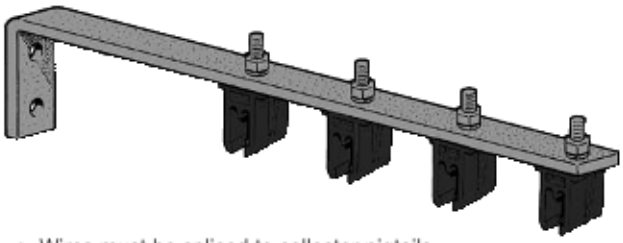
Quicker and less costly Installation

- 14.76 ft (4.50m) bar lengths; fewer joints
- Multiple pole hangers; a "snap" to install



- Wires connect into lug integrated in the collector arm

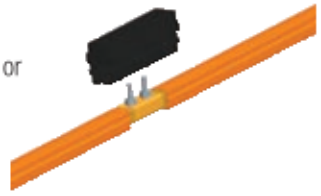
- 10 ft (3.05m) bar lengths; more splices required
- Hangers hold only one bar each



- Wires must be spliced to collector pigtails

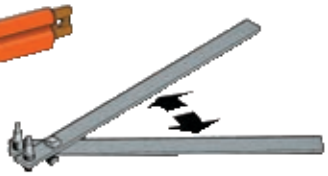
More secure splice joint

- Bolted joints
- No special tools required
- No need for "joint keepers" or "joint repair kits", etc



- Pinned joint can pull apart; requires special parts

- Special tool required



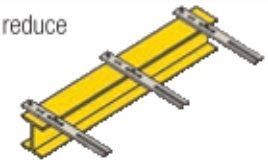
Fewer expansion sections required

- Safe-Lec 2 can go 492 ft (150m) before an expansion is required

- 8-Bar can only go 300 ft before an expansion section is required (or 200 ft for copper bar)

Easier system alignment

- Slotted brackets are available to reduce hole alignment problems
- System alignments are easy!



- Brackets have round holes, so alignment must be perfect
- Harder to make system alignment adjustments

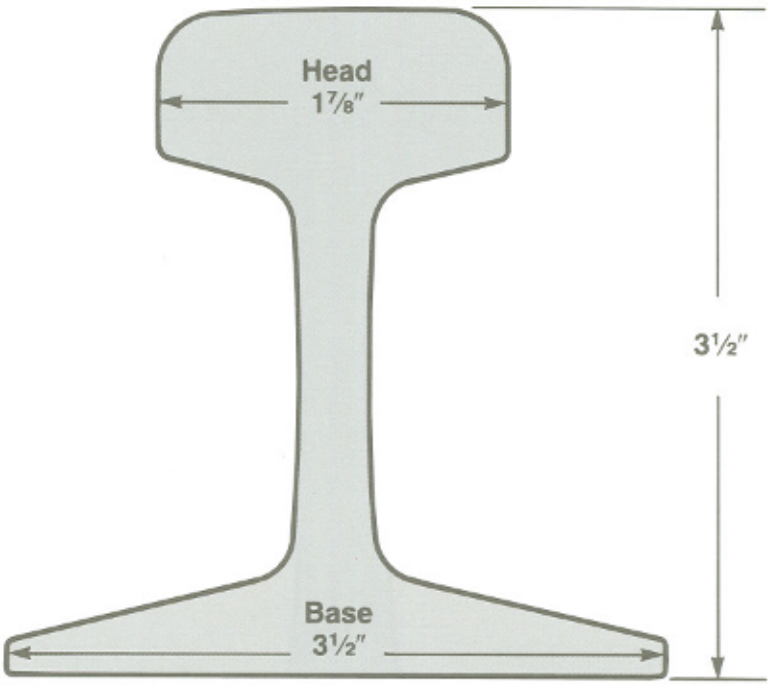
Superior Collector Shoe Tracking

- Shoe is guided by the V-contact in the metal bar
- Collector arm articulates to accommodate mild system misalignments

- Shoe is guided by the plastic cover
- Accurate system alignment is much more critical

40-lb A.S.C.E.

Shown Actual Size



Specifications

Nominal Weight	40 lbs/yd
Standard Lengths	40'0" • 30'0"
Standard Drilling	2½" x 5"
Joint Bar Length	20"
Joint Bar Weight With Hardware	15.2 lbs/pr 18.2 lb /pr
Bolt Diameter	¾"

See quick reference section for all other dimensions.

Hold-Down Devices

Standard	Single	Double
Hook Bolt	¾"	—
Clip Numbers	103 • 114 • 120	—
Clamp & Filler	F1	F2
Welded Stud	S1	S2
Heavy Duty	**Single**	**Double**
Welded Holder	—	—
Welded U-Bar	—	—
Rubber Nose	**Single**	**Double**
Welded Clip	91	—
Bolted Clip	31 • 71	—

Dearborn Crane and Engineering
1133 East 5th Street
Mishawaka, IN 46544
Phone: 574-259-2444
***.dearborncrane.com

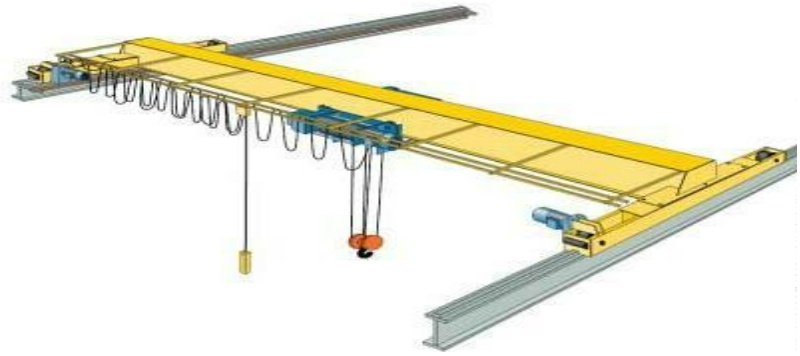
*** Cover Sheet ***

To: Manuel Hernandez
Company: City of San Luis AZ
Email:

From: Ray Lyvers

Quote#: 183500 R1

Date: 12/28/22
Pages (including this page): 6
Comments: Bridge Crane



Dearborn Overhead Crane
Since 1947

DESIGN SPECIFICATIONS

Material design and safety features, based on service classification, will conform to the following listed specifications and codes where applicable and appropriate:

Crane Manufacturers Association of America, Inc., CMAA 70-74,
American National Standard, B30.11-1980 “Underhung Cranes”
American National Standard, ANSI-B30.16 “Overhead Hoist”
Hoist Manufacturers Institute – Specification HMI 100-74
Manual of Steel Construction, Latest Edition
National Electrical Code – Latest Edition
Specification for Welding Industrial & Mill Cranes ANSI/AWS D 14.1 – 1997

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12/28/22 Proposal No. 183500 R1

ATTN: Manuel Hernandez **Email:**
City of San Luis AZ

SUBJECT: Bridge Crane

We first would like to thank you for the opportunity to provide a quote on this valued project. We are pleased to quote the following;

SCOPE

One 7.5 ton top running, single girder crane per attached specifications. Our quote includes all crane and hoist components, runways, freestanding columns, ASCE rail, 4 conductor runway electrification, engineering, fabrication, painting, installation, and shop testing.

PRICING

Item Description	Material	Installation	Project total:
7.5 ton top running, single girder crane	48200		
45ft freestanding Runway system with supports on 22'-5" centers. Crane rail & 4 bar runway electrification included	22000		
Freight to Site	10000		
Totals:	**80200**	23600	**$103,800.00**

- Remote Radio System included per crane
- Footing not included
- If quoted above, installation includes start-to-finish installation with equipment rentals, tools, and travel expenses. 125% or rated load weights provided by others unless agreed to in advance
- Instead of full installation, we can also provide (1) man to supervise your crew with the install and start-up process @ $900/day plus travel and expenses (List of customer required tools provided)
- FOB Mishawaka, IN. prepay and add
- Local Taxes & bonds are not always required by Sub-contractors or Crane suppliers. Please factor in the amounts before awarding bids. These are not included in bid unless noted.
- NO Equipment will be ordered until Dearborn Crane & Engineering Co. receives Signed quote ,Signed prints and Down Payment

TERMS: 35% down payment, 55% prior to delivery10% net 30 (pending credit approval)
Price valid for 30 days. 35% Down payment required within 30days to hold price
Due to the volatile steel market, all quotations must be confirmed prior to acceptance of order.
Delivery: 10-12 weeks after receipt of signed approval drawings and Purchase Order and Down Payment

Attached Bid Notes are an integral part of this proposal.
Quoted By: RLL

Respectfully submitted,

Ray Lyvers

Ray Lyvers, DEARBORN CRANE & ENGINEERING CO.

Dearborn Crane and Engineering
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Mishawaka, IN 46544
Phone: 574-259-2444
***.dearborncrane.com

Crane Specifications

Quote No: 183500 R1 **Date:** 12/28/22
Customer: City of San Luis AZ
Attention: Manuel Hernandez

Crane Data

Crane type	top running, single girder		**# of Cranes**	1
Capacity	7.5 Tons		**Operation**	Indoors 41-104 F
Span	40'- 0"		**Power**	208/3/60
Lift	16'-7" 29ft AVAILABLE		**Reeving**	4/1
Hoist	7.5 ton wire rope		**Control Encl.**	NEMA 12
Whl Load	9100 lbs.		**Crane Rating**	CMAA C
Br. Endtr.	8'- 2 3/8" WB		**Operation type**	Sliding P.B.
Configuration	single girder		**Control Voltage**	110V
Girder Type	standard wide-flange		**Cross Conductors**	Festooned
Walkway	N/A		**Paint**	Yellow
Standard items	2 speed hoist, two winding host motor, with inverter controlled trolley and bridge motions Bridge and trolley motor brakes, Trolley and bridge bumpers, Bridge Travel Slow Down Limit Switch, Warning horn, Wire Rope Certification, All cranes are Factory assembled, inspected and tested.		Overload weight load monitoring Hoist 4 step Geared Upper and lower switch 40:1 rope to drum ratio, Rope Guides Lifetime adjustment on hoist brake Thermal protection on hoisting motor Hoist Inspection Test Record, Hook Forging Certificate , CSA Certification	

Runway Data

Runway	W16		**Runway Conductors**	4 bar Conductor system
Crane Rail	1x2 crane rail		**Runway Collectors**	Tandum Spring Shoe type
Columns	Freestanding Columns		**Runway Length**	45'- 0"
Specials			**Runway Supports**	22'- 6"
Paint	Standard primer – gray			

If required, foundations are by others. Loading are provided at time of order.
Floor supported column pricing is based on a floor or foundation that can support the loadings

Electrical Data

Drive	Motor Type	Speed (FPM)	Brakes
Hoist	Crane Duty	20/3.3 two speed	DC Disc
Trolley	Crane Duty	65 variable	DC Disc
Bridge	Crane Duty	100 variable	DC Disc

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Bid Notes

The following bid notes are included as an integral part of the quote. Variances and/or exceptions may affect the final price of this equipment.

1 Dearborn installation is computed on a straight time basis. Installation requested to be done outside normal working hours may require overtime charges. Pricing also assumes all work is done in a continuous fashion with a single "Start up and Shut down". Additional charges may be incurred if Dearborn is required to pull off the job and restart later.
2 Dearborn cannot accept responsibility for any existing support or building structures.
3 Proper sizing, location, alignment to CMAA recommendations, and spacing of Runways, columns, support steel and/or ASCE rail is responsibility of others **where Dearborn does not supply these items.**
4 Design and supply of material for any concrete work is *not* included unless otherwise called out in quotation.
5 All material factory painted using manufacturers standard paint with field paint touch up, by Dearborn.
6 Temporary electric power for lighting and welders by others. **Dearborn uses Gas welders as a standard**
7 Removal of any obstruction in crane path, by others. **Exception only if agreed to in advance in writing with Dearborn**
8 Disposal of leaded paint chips, asbestos, or any other hazardous material which may need to be removed during the crane installation will be the responsibility of the owner.
9 Handling and storage of materials due to delays by customer may result in additional charges.
10 A complete Operating & Maintenance manual with appropriate spare parts list is included.
11 All installation prices assume a clear work area with concrete floors in place. Delays and/or extra time incurred by the field crews due to inaccessibility to work area will be billed at then current rates for workers and equipment .**Exception only if agreed to in advance in writing with Dearborn** .
12 Adequate headroom above the bridge crane must be available to allow the boom of the mobile crane to set the crane and hoist. **Exception only if agreed to in advance in writing with Dearborn** .
13 A fused disconnect and power from source to the disconnect and from disconnect to conductor bar is by others. Current taps and connection at the conductor bar is provided by Dearborn.
14 Any permits required, by others.
15 Basic operator orientation, including one session of approximately ½ hour at time of installation, is included. A more comprehensive operator and OSHA training is available on request for additional charge.
16 "Testing" in the scope section refers to 'No Load' Testing which tests all functions of equipment. Full Load Testing with test weights is available as described on the Load Testing Policy page.
17 Limitation of liability: seller shall have no liability to buyer with respect to the sale of products or provision of services hereunder for lost profits or for special, consequential, exemplary or incidental damages of any kind.
18 Warranty: Dearborn Overhead Crane provides a full 5 year warranty on all structural components of the crane (and runway system where supplied by Dearborn Overhead Crane). All mechanical and electrical components (such as hoists, end trucks, electrification, attachments, etc.) are supplied with a limited ONE year warranty on material only. Warranty period begins on the date of crane commissioning and signed acceptance by the customer.

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OPTIONAL EQUIPMENT AVAILABLE- PLEASE CONTACT YOUR SALEPERSON:

- **RADIO CONTROL**
- **ANTI-COLLISION FEATURE**
- **WARNING DEVICES**
- **CRANE LIGHTS**
- **ADJUSTABLE FREQUENCY DRIVES**
- **OUTDOOR APPLICATIONS**
- **WALKWAYS AND/OR SERVICE PLATFORMS**

  (Means to access the above option is not included, but available)
- **SPECIAL PAINT**
- **BELOW HOOK DEVICES (C-HOOKS, MAGNETS, SLINGS, ETC)**

DEARBORN will provide the right combination of PERFORMANCE, RELIABILITY and VALUE, all at the right price. We not only build and install the highest quality cranes; we also have a full time field service crew that repairs all brands of cranes. DEARBORN also provides annual service contracts for those customers who depend on their equipment for critical production needs or who want to be sure their equipment is always in top working order and OSHA inspections are being done in a timely fashion.

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Load Testing Advisory

1) Current specifications regarding the load tests of Overhead Crane Systems

ANSI B30.11 requires the following;
11-2.2.2 Rated Load Test
(a) Prior to initial use, all new, extensively repaired, and altered equipment shall be tested and inspected by, or under the direction of, an appointed or authorized person, and a written report should be furnished by such person, confirming the load rating of the system. The load rating should no be more than 80% of the maximum load sustained during the test.

OSHA 1910.179 Paragraph K2 states the following;
Rated load test.
Test loads shall not be more than 125% of the rated load unless otherwise recommended by the manufacturer. The test reports ***shall*** be placed on file where readily available to appointed personnel.

2) Definitions

Hoist
A machinery unit that is used for lifting and lowering a load.
Crane
A bridging structure that spans two or more runways and provides traversing motion.
Runway
The rails, beams, brackets and framework on which the crane operates.

3) Dearborn Overhead Crane Load Testing Offer (Maximum crane capacity of 10ton)

It therefore is our opinion, that it is the owner's responsibility to load test the overhead bridge crane ***system***. The "system" consists of the hoist, crane, runways, columns and footings. To test the "system", requires that the full system be in place and therefore must occur after the completion of the crane installation. Although it is hoist industry practice to load test every hoist prior to shipping, this practice does not preclude the requirement for the full load testing upon commissioning of the full hoist, crane and runway system.

As a service to our customers, DOC offers to provide this load test free of charge to the purchaser of a Dearborn Crane. To take advantage of this **free** offer, **ALL the following criteria is required**.

1. Dearborn MUST BE CONTRACTED to install the crane and will perform this load test during the normal installation time period. Extra time or delays in testing will be back charged to customer
2. The customer must provide a full capacity test load** to be used for testing purposes. This load must be 125% of the rated capacity of the crane.
3. The load must be of reliable weight, and be easily accessible and in the immediate area of the crane to be tested. The weight of the load should be certifiable. If certification of the load is not practical, DOC can provide a scale to weigh the load for a small fee.
4. All necessary rigging** must be provided by the customer.
5. The load and rigging must be provided while DOC is on site for the installation. (If the customer cannot provide the required materials during the normal installation period, but still would like to have a Certified Load Test performed, a crew can be provided on a time and material basis.)

Upon completion of the test, a temporary hand written certificate will be supplied to the owner, so that there is no possible exposure to the owner of not have proper documentation. The official Load Test Certificate to following within 2 weeks. Also, a copy will remain on file at Dearborn.
** Dearborn Overhead Crane is not responsible for any damage that may occur to either the test weights or the rigging used.

AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. D.**

Meeting Date: 01/25/2023

Department Head: Yolanda Duenas, Facilities Supervisor, Parks & Recreation Department, Facility Maintenance

Submitted By: Yolanda Duenas, Facilities Supervisor, Parks & Recreation Department, Facility Maintenance

Action Requested: Motion

ITEM:

Discussion and possible action on any and all matters regarding the authorization to reallocate the budgeted funds from the Fleet Shop Project to the Fernando Padilla Community Center Repair Project. **(Yolanda Dueñas, Facilities Supervisor)**

SUMMARY:

On October 6, 2022, water was pouring inside the Community Center. Due to a water leak, mold was identified, and we had to vacate the building. After visiting the Fernando Padilla Community Center, an initial assessment of rehab, repairs, and/or remodeling was identified, and due to the condition of the building, it was decided to completely remodel the building for possible staff use.

Remodeling of the building will include roofing, flooring, restrooms, patching, paint, ceiling tiles, etc. We have included staff from Development Services/Building Safety Department to ensure we meet requirements, have a record of city building changes, and obtain a building permit.
Some photographs are attached.

Financed identified a budget capacity of $100,000 within the Fleet Shop Project that is available for use for the Fernando Padilla Community Center Project. San Luis City Code § 3.05.110 and A.R.S. § 34-201(C) require bidding at more than $23,548 through this fiscal year as adjusted annually for inflation. Many of the bids have come in, which staff will be bringing back to City Council at a future date.

Staff would like to request authorization from Mayor and City Council to reallocate $100,000.00 of unexpended budgeted funds from the Fleet Shop Project to Fernando Padilla Community Project. This would allow staff to subcontract vendors needed to perform remodeling of the building.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE A BUDGET TRANSFER FOR $100,000 AS STATED IN FISCAL IMPACT STATEMENT.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM: Yes

CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	$100,000.00
BUDGETED AMOUNT:	No
AVAILABLE AMOUNT TO TRANSFER:	$100,000.00
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	Capital Outlay CIP 100-999-90015 $110,000

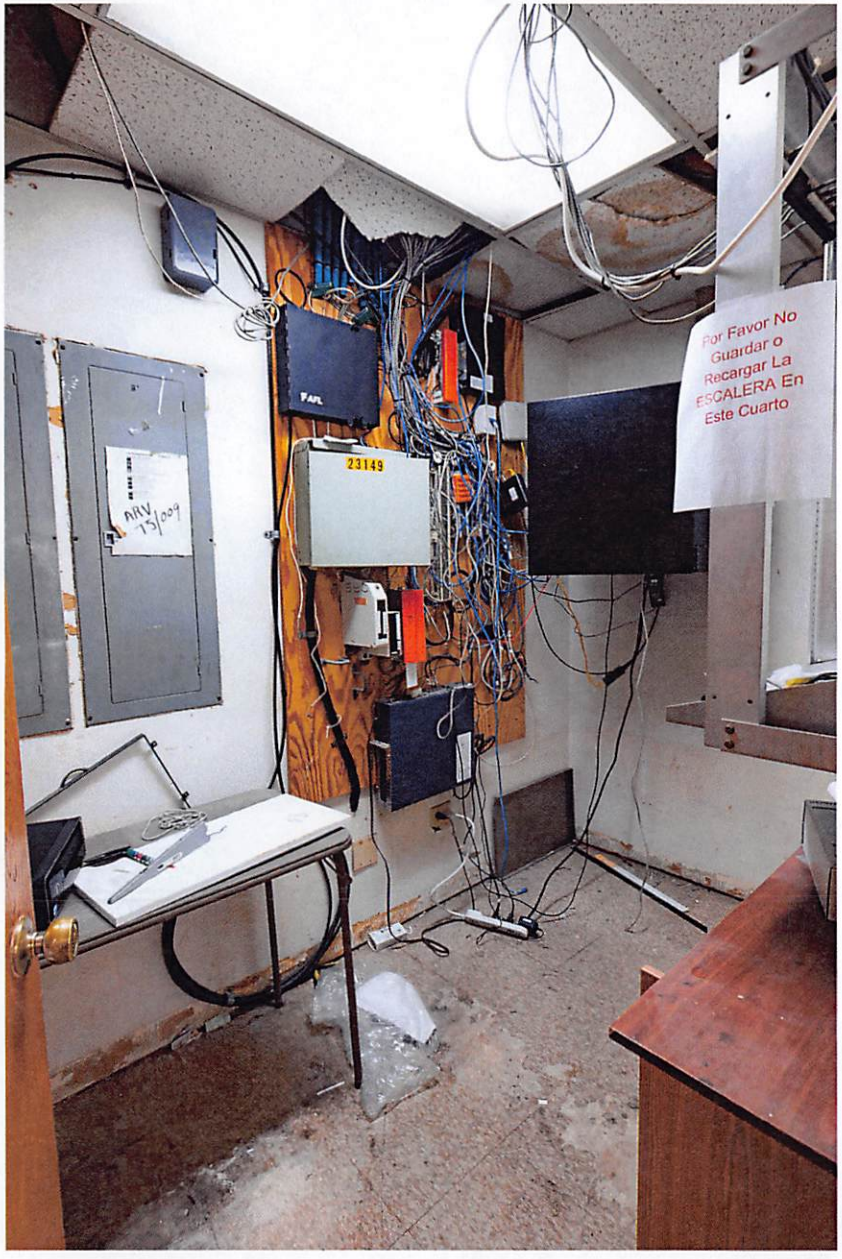
FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

We are requesting council approval to do a budget transfer in the amount of $100,000.00 from the Capital Outlay - CIP GL account 100-999-90015 to the Non-Capital Project account 100-999-89000 to fund the work on the Fernando Padilla Community Center Building.

Attachments

Photos Fernando Padilla Comm. Ctr

EXIT


Por Favor No
Guardar o
Recargar La
ESCALERA En
Este Cuarto
23149

AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. E.**

Meeting Date: 01/25/2023

Department Head: Jose A. Guzman, Director of Planning & Zoning, Planning & Zoning Department

Submitted By: Fernando Villegas, Principal Planner, Planning & Zoning Department, Development Services

Action Requested: Motion
Public Hearing

ITEM:

Continued public hearing followed by discussion and possible action on any and all matters regarding Conditional Use Permit Case No. 2022-0592. A request by Dahl, Robins & Associates on behalf of HMS Development, LLC for a Conditional Use Permit from Section 18.35.30(C) (1) of the City of San Luis Zoning Ordinance to allow a commercial building with a gross floor area greater than 50,000 square feet, Assessor's parcel number 776-34-260, located south of Cesar Chavez Boulevard between 7th Avenue and 8th Avenue in San Luis, Arizona. **(Fernando Villegas, Principal Planner)**

A. Continuance of Open Public Hearing
   1. Staff presentation
   2. Call to the Public on this item
B. Close Public Hearing
C. Action on Conditional Use Permit Case No. 2022-0592

SUMMARY:

This item was continued from the January 11, 2023, Council Meeting at the applicant's request.

The applicant is requesting the development of a 3-story, 133-room hotel in the subject property zoned Community Commercial (C-2) with 2.88 acres in size. Section 18.35.30 (C) (1) of the City of San Luis Zoning Ordinance requires Conditional Use Permits for commercial buildings with a gross floor area greater than 50,000 square feet. The proposed building's square footage is approximately 76,421 square feet. The existing condition of the subject property is undeveloped vacant land.

Existing Adjacent Zoning Districts:
To the north: R-2 (Bienestar Estates 5)
To the west: C-2 (Vacant land)
To the south: R1-6 (Bienestar Estates 2)
To the east: C-2 (Gas station)

According to the site plan submitted by the applicant, the proposed hotel with 133 rooms can generate a large number of traffic trips per day, and a traffic study should be required in accordance with the adopted Public Works Standards. The developer must provide all the necessary improvements required by a traffic study during the construction of the proposed hotel.

REVIEWS:

As part of the review process, all land use cases are reviewed by various City and outside agencies. As required by state statute, staff sent notification letters to property owners within 300 feet of the proposed

project (ninety-four (94) letters). The city has not received any other significant concerns or objections from the various review agencies or adjacent property owners.

The applicant has provided the information and materials necessary for the review of this Conditional Use Permit request.

CITIZEN REVIEW MEETING:
As required by state statute and City Code, a Citizen Review meeting was held at City Hall on November 1, 2022, at the City Hall Chambers at 6:00 p.m. The intent of this meeting was to allow the public to learn about the project, ask questions, and express any comments. Nobody from the public was present during the meeting.

PLANNING AND ZONING RECOMMENDATION:
The Planning and Zoning Commission recommends approval of Conditional Use Permit Case No. 2022-0592 subject to the following conditions:

1. Development shall comply with the City of San Luis Zoning Regulations, Building Code Requirements, Public Works Standards, and any applicable subdivision regulations for commercial development.

2. The applicant/owner shall submit a Trip Generation Memo for the hotel to determine if the proposed use generates 100 or more trips during the peak hour. If 100 or more trips are generated during the peak hour, the applicant/owner shall submit a traffic study during the building permit review, and all improvements recommended by the traffic study that is caused by the hotel development shall be constructed by the developer to the satisfaction of the Public Works Director.

3. To resend letters to property owners within 300 feet radius using their physical location.

Staff hand-delivered letters to property owners within 300 feet radius of the proposed project as requested by the Planning and Zoning Commission.

STAFF RECOMMENDATION:
Staff recommends approval of Conditional Use Permit Case No. 2022-0592 subject to the following conditions:

1. Development shall comply with the City of San Luis Zoning Regulations, Building Code Requirements, Public Works Standards, and any applicable subdivision regulations for commercial development.

2. The applicant/owner shall submit a Trip Generation Memo for the hotel to determine if the proposed use generates 100 or more trips during the peak hour. If 100 or more trips are generated during the peak hour, the applicant/owner shall submit a traffic study during the building permit, and all improvements recommended by the traffic study that is caused by the hotel development shall be constructed by the developer to the satisfaction of the Public Works Director.

RECOMMENDATION / SUGGESTED MOTION:

A. I MOVE TO OPEN THE CONTINUED PUBLIC HEARING
   1. **Applicant and Staff presentation**
   2. **Call to the public on this item**

B. I MOVE TO CLOSE THE PUBLIC HEARING

C. I MOVE TO APPROVE CONDITIONAL USE PERMIT CASE NO. 2022-0592 SUBJECT TO THE CONDITIONS OF APPROVAL PRESENTED BY STAFF.

Fiscal Impact

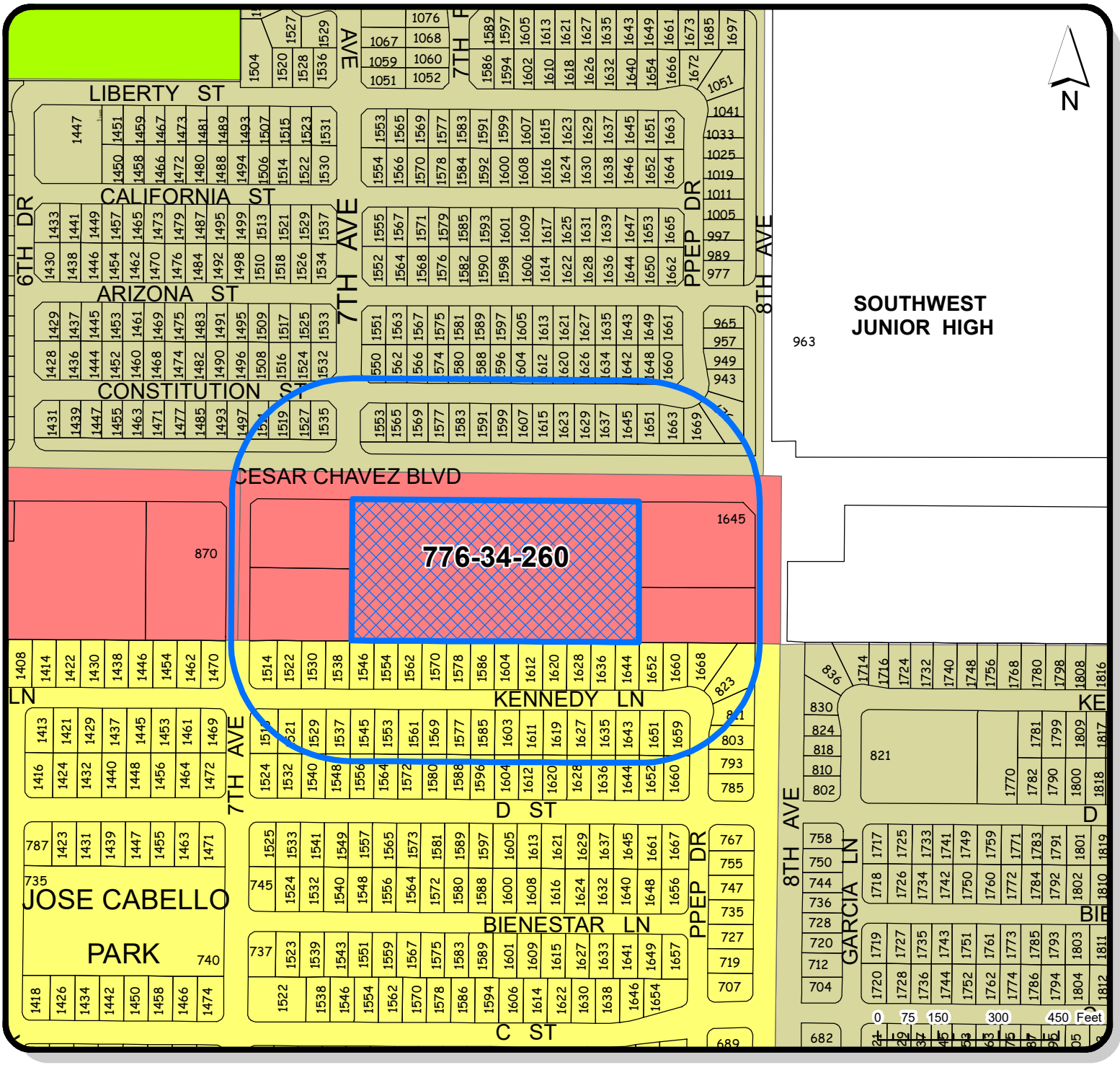
IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	N/A
CITY/STATE/FEDERAL FUNDS:	N/A
TOTAL:	N/A
BUDGETED AMOUNT:	N/A
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	N/A

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

N/A

Attachments

Location Map
Site Plan
Applicant's Narrative
Presentation



LOCATION MAP

CONDITIONAL USE

LOCATION OF SUBJECT PROPERTY

PID: 77634260

300ft Notification Area

Zoning

MULTIPLE RESIDENCE ZONING DISTRICTS
R-2
R-3
COMMERCIAL ZONING DISTRICTS
C-2
SINGLE RESIDENCE ZONING DISTRICTS
R1-8
RA-10

CASE #
2022-0592

DATE:
10/13/22

PLANNING & ZONING

GIS

CREATED BY:
ISAAC GUTIERREZ

CHECKED BY:
ROMAN PACHECO

APPROVED BY:
JOSE A. GUZMAN

Cesar Chavez Boulevard

PROPERTY LINE

300' - 0"

28'-0"

149' - 4"

28' - 0"

Parcel A

PROPERTY LINE

3

9' - 0"

22'-0"

63' - 9"

19' - 0"

6' - 0"

9' - 0"

spa

patio

pool

244' - 7"

6

19' - 0"

28' - 0"

19' - 0"

2

9' - 6"

19' - 6"

19' - 6"

28' - 0"

24' - 0"

6' - 0"

24' - 0"

porte cochere

6

5

10' - 0"

Hilton
Hampton Inn & Home 2
3 story

19

140' - 10"

3

22' - 0"

trash enclosure with metal roof

EV
ADA VAN

18

Parcel B

31

34

49' - 0"

28' - 0"

PROPERTY LINE

Vacant Land

Site Statistics

site area:	125,516 s.f. 2.88 acres
Hotel	3 stories 133 guest rooms
parking	9.5' X 19' with 28' drive 133 stalls

Guest Room Schedule		
Name	Brand	Count
H2 DQ ADA - Connecting	H2	3
H2 DQ Connecting	H2	6
H2 DQ Studio	H2	15
H2 King One Bedroom	H2	3
H2 King Studio	H2	27
H2 King Studio 2	H2	1
H2 King Studio 3	H2	3
H2 King Studio ADA - Connecting	H2	3
61		
HI DQ	HI	30
HI DQ 2	HI	3
HI DQ ADA	HI	3
HI DQ Connecting	HI	6
HI DQ Custom	HI	3
HI King	HI	24
HI King ADA Connecting - R.I.S.	HI	3
72		
Grand total: 133		

NORTH

1 A-1 Site schematic 1/16" = 1'-0"

DRAWINGS ISSUE RECORD:

DATE:

DAHL, ROBINS & ASSOCIATES, INC.
1560 S. 5th Avenue
Yuma, AZ 85364
Phone: (928) 819-0625
Fax: (928) 343-0625
www.dahlrobins.com

San Luis Hampton Inn and Home 2
Cesar Chavez Boulevard
San Luis, Arizona
Site Plan

THIS DRAWING AND THE DATA CONTAINED HEREON ARE THE PROPERTY OF DAHL, ROBINS & ASSOCIATES, INC. AND SHALL NOT BE USED, REPRODUCED OR TRANSFERRED, WITHOUT THE PRIOR EXPRESS CONSENT OF THE COMPANY. NOR SHALL ANY DATA, OR INFORMATION CONTAINED HEREIN BE USED IN A MANNER INCONSISTENT WITH THE PRIOR EXPRESS WRITTEN AUTHORIZATION OF THE COMPANY.

DATE:	OCT. 2022
DESIGNED BY:	CDR
DRAWN BY:	STAFF
CHECKED BY:	CDR
SURVEYED BY:	MAC
PROJECT NO.:	22094
SHEET	C1.1

10/6/2022 5:28 PM
Z:\Drc2022\22094\drawings\2022-08-25 San Luis HI + H2 Bldg F - Sheet - A-1 - Site Plan.dwg

CESAR CHAVEZ BOULEVARD HOTEL CONDITIONAL USE PERMIT
NARRATIVE STATEMENT

This project involves the development of a 3-story, 133-room Hampton Inn and Home 2 hotel with 133 parking spaces and storm water retention basins on a 2.88-acre parcel located on the southeast quadrant of Cesar Chavez Boulevard and 7th Avenue. The parcel is described as a portion of Assessor's Parcel No. 776-34-260 and is located within the Community Commercial (C-2) Zoning District. The site is currently vacant, undeveloped land with approximately 3 feet of elevation differential across the property. The Project anticipates breaking ground in the spring of 2023 and will take approximately 18 months to build, with an anticipated opening date, in the summer of 2025.

Amenities for hotel guests include an exercise room, guest laundry, a business center, an outdoor pool, outdoor patio, and fire pits. Each guestroom has a vanity area, work desk, a built-in refrigerator, microwave, and bathroom with a shower. Each room will also have a flat screen television, clothes closet, whereas different rooms will have a variety of beds, e.g., king or double queen beds, to enhance guest experience to cater to their specific needs. Construction will be a type V-A construction. The building will have a flat roof with parapet walls to screen the roof top equipment.

The anticipated occupancy for this type of product has seasonal variability but is estimated at approximately 78%. The total number of employees for daytime shifts will be approximately (11) eleven. During the day, the typical shift will consist of (7) seven maids, (2) two front desk clerks, (1) one part time maintenance person, and (1) one hotel manager from 9am to 4pm. After working hours, the number of employees reduces to 1 front desk clerk. From 7 pm to about 6 am, there is only one employee in the hotel. Exterior cameras are mounted at building entrances, the patio area, and the parking lot. Fire alarm will be as required by NFPA 13.

A hotel of this size does not require a designated loading and delivery area. The deliveries made primarily consist of small sundry items for the hotel market. These deliveries are typically made daily by a small van, no larger than 24' in length. Because the quantities are small, the time required to load and unload the delivery typically requires less than 10 to 15 minutes and are generally made during off-peak times. All laundry facilities are on site, therefore no deliveries are necessary to bring in fresh linens and take out soiled linen, as is sometimes the case.

The site has been designed to provide safe and convenient access to and from the public street system. Direct access to Cesar Chavez Boulevard will be provided at two new driveways. Vehicles entering the site will have sufficient space to enter the facility and adequate circulation has been provided throughout the site.

The building and parking setbacks are in accordance with code. Adequate lighting and landscaping will be provided in accordance with City of San Luis Zoning requirements. Domestic water, fire suppression water, irrigation water and sanitary sewer will be provided by City of San Luis by means of new and existing lines located adjacent to the property. Onsite storm water retention and disposal will be provided by means of a surface retention basin system.

On behalf of the Owner and Developer, we hereby request approval of this Conditional Use Permit to allow the construction of a hotel in the Community Commercial Zoning District (C-2) with a gross floor area greater than 50,000 square feet. This hotel will have a total gross floor area of approximately 76,421 square feet.

City Council Meeting

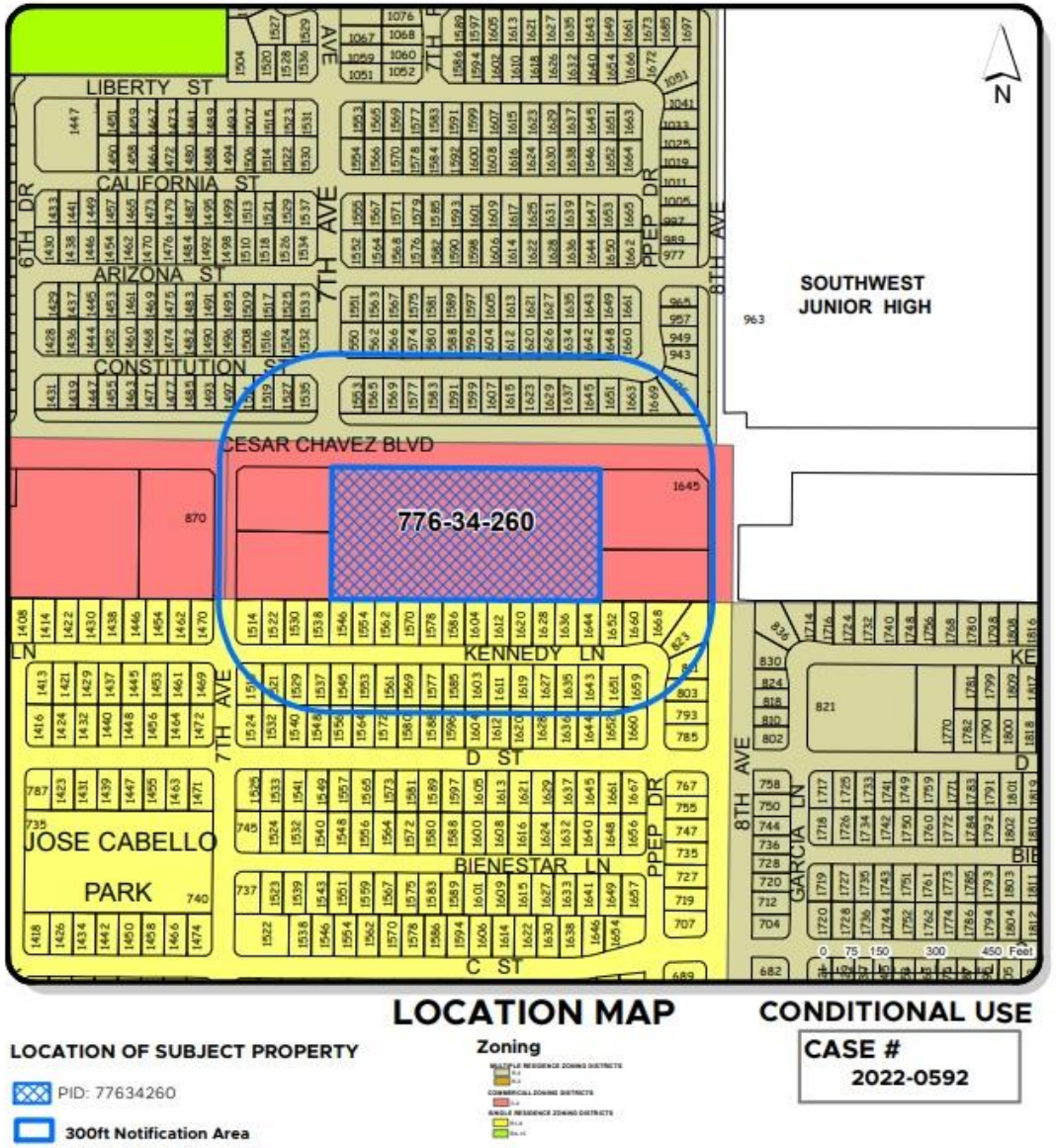
January 25, 2023

Conditional Use Permit Case No. 2022-0592

Request: A Conditional Use Permit from Section 18.35.30 (C)(1) of the City of San Luis Zoning Ordinance to allow a commercial building with a gross floor area greater than 50,000 Square Feet. Assessor's parcel number 776-34-260, located south of Cesar Chavez Boulevard between 7th Avenue and 8th Avenue in San Luis, Arizona.

- The applicant is requesting the approval of the CUP to allow the construction of a 133-room hotel. The proposed building square footage is approximately 76,421 SF.

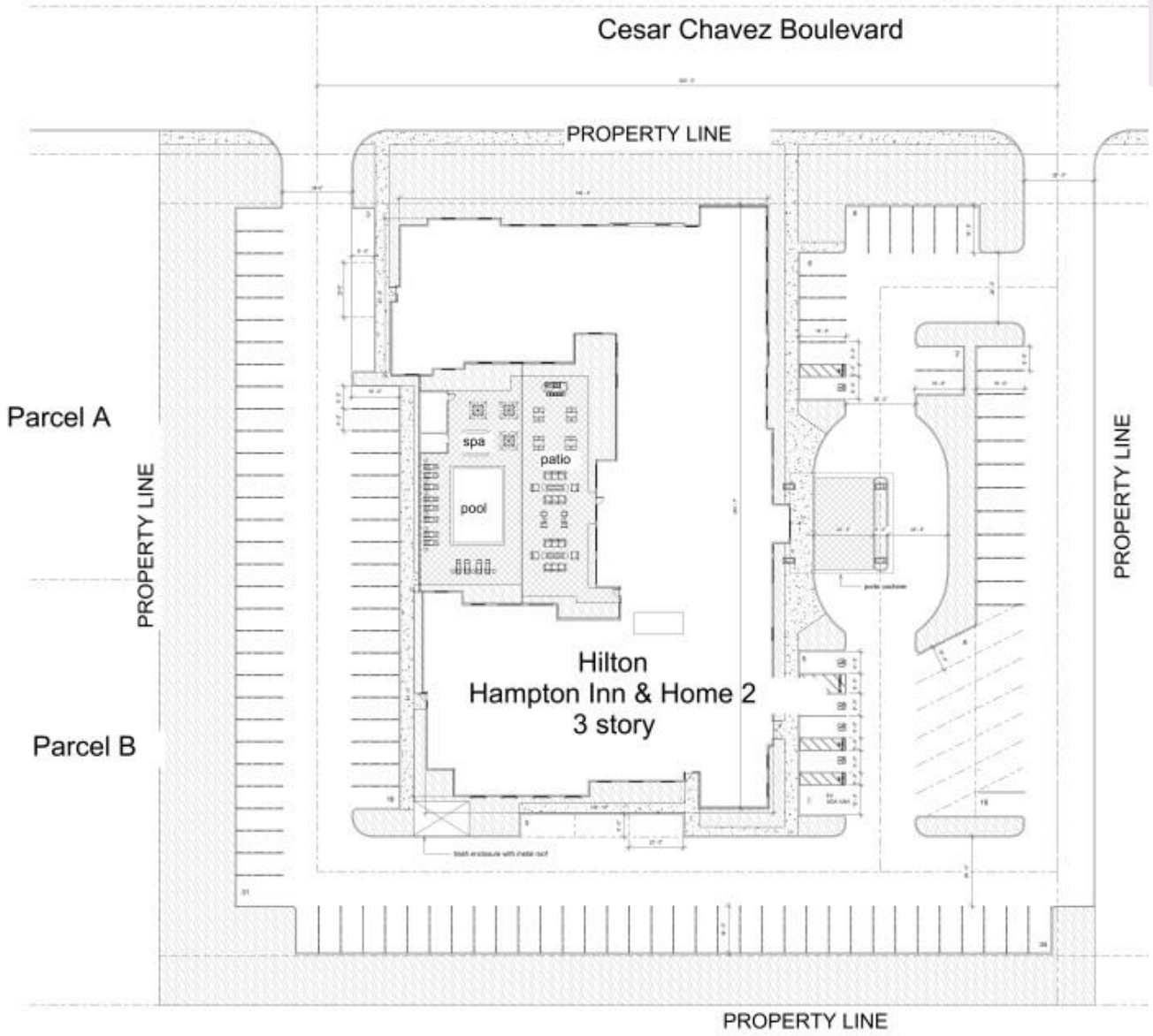
Conditional Use Permit Case No. 2022-0592



Zoning Map

Conditional Use Permit Case No. 2022-0592

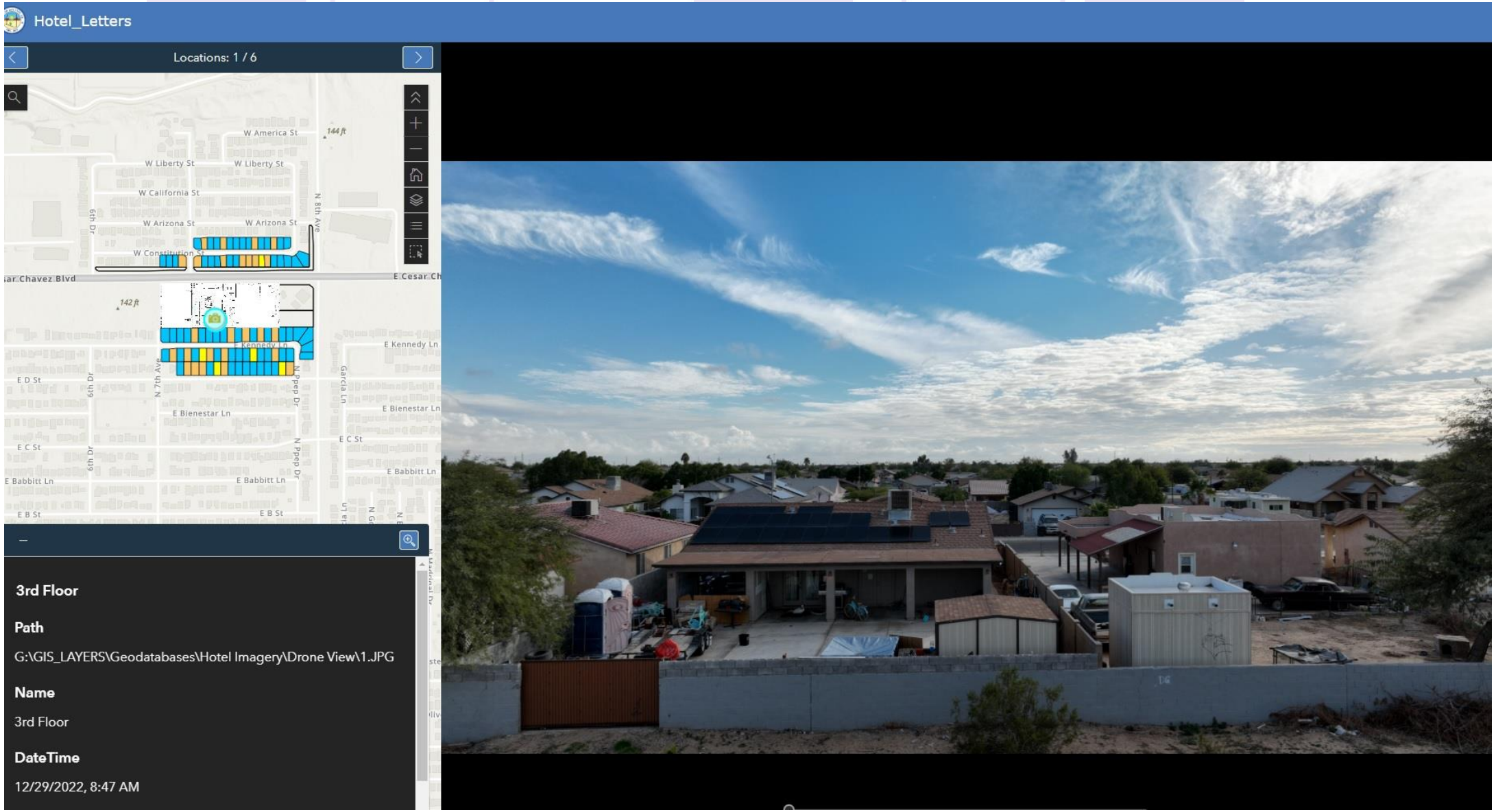
Conditional Use Permit Case No. 2022-0592



Site Plan

HOME 2
Hampton
Inn

Conditional Use Permit Case No. 2022-0592



Conditional Use Permit Case No. 2022-0592

Planning Commission Recommendation:

The Planning Commission recommends approval of Conditional Use Permit Case No. 2022-0592 subject to the following conditions:

1. The applicant/owner shall comply with the City of San Luis zoning regulations, building code requirements, public works standards, and any applicable subdivision regulations for commercial development.

2. The applicant/owner shall submit a Trip Generation Memo for the hotel to determine if the proposed use generates 100 or more trips during the peak hour. If 100 or more trips are generated during the peak hour the applicant/owner shall submit a traffic study, during the building permit review, and all improvements recommended by the traffic study, that are caused by the hotel development, shall be constructed by the developer, to the satisfaction of the Public Works Director.
3. To resend out letters to property owners within 300 feet radius using their physical locations

Conditional Use Permit Case No. 2022-0592

Staff Recommendation:

The Planning Commission recommends approval of Conditional Use Permit Case No. 2022-0592 subject to the following conditions:

1. The applicant/owner shall comply with the City of San Luis zoning regulations, building code requirements, public works standards, and any applicable subdivision regulations for commercial development.

2. The applicant/owner shall submit a Trip Generation Memo for the hotel to determine if the proposed use generates 100 or more trips during the peak hour. If 100 or more trips are generated during the peak hour the applicant/owner shall submit a traffic study, during the building permit review, and all improvements recommended by the traffic study, that are caused by the hotel development, shall be constructed by the developer, to the satisfaction of the Public Works Director.

AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. F.**

Meeting Date: 01/25/2023

Department Head: Kay Macuil, City Attorney, Attorney's Office

Submitted By: Kay Macuil, City Attorney, Attorney's Office

Action Requested: Motion
Order

ITEM:

Discussion and possible action on any and all matters regarding Order No. 2023-01.An order of the Mayor and City Council of the City of San Luis, Arizona, authorizing and directing the acquisition of all property necessary for the completion of the construction of a portion of 21st Avenue between County 23½ Street and County 24th Street, a portion of County 24th Street between 21st Avenue and Avenue E, and land necessary for a wastewater lift station on the Corner of County 24th Street and 21st Avenue within the City of San Luis by dedication, donation, purchase, exchange, or under the power of eminent domain as a matter of public necessity. **(Kay Marion Macuil, City Attorney)**

SUMMARY:

Negotiations were attempted for several months to obtain land for the land shown in the attached diagrams. Order No. 2023-01 allows staff to offer fair market value for the land and go through the court to condemn land to construct improvements.

Traffic studies for the area are attached, showing the public health safety and necessity for obtaining the roads.

Exhibit C is the area of an existing lift station. The city obtained this land previously, but just for good measure staff has included it.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE ORDER NO. 2023-01.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	Yes
CITY/STATE/FEDERAL FUNDS:	City
TOTAL:	See Fiscal Impact Statement
BUDGETED AMOUNT:	See Fiscal Impact Statement
AVAILABLE AMOUNT TO TRANSFER:	See Fiscal Impact Statement
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	See Fiscal Impact Statement
FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):	

Staff has budget for legal costs. The cost of the land is currently not known. The City has adopted an ordinance that will allow the city to be reimbursed from those who develop the three parcels. Staff will return to Council with the appraised value when it is determined.

Attachments

Order No. 2023-1

Diagrams

Traffic Report 1

Traffic Report 2

Traffic Report 3

Order

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

No. 2023-01

AN ORDER OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, AUTHORIZING AND DIRECTING THE ACQUISITION OF ALL PROPERTY NECESSARY FOR THE COMPLETION OF THE CONSTRUCTION OF A PORTION OF 21ST AVENUE BETWEEN COUNTY 23½ STREET AND COUNTY 24TH STREET, A PORTION OF COUNTY 24TH STREET BETWEEN 21ST AVENUE AND AVENUE E, AND LAND NECESSARY FOR A WASTEWATER LIFT STATION ON THE CORNER OF COUNTY 24TH STREET AND 21ST AVENUE WITHIN THE CITY OF SAN LUIS BY DEDICATION, DONATION, PURCHASE, EXCHANGE, OR UNDER THE POWER OF EMINENT DOMAIN AS A MATTER OF PUBLIC NECESSITY.

WHEREAS, the City of San Luis is experiencing rapid growth in the area of County 24th Street east of Avenue E½ (also known as 20th Avenue) and west of Avenue E; and

WHEREAS, a traffic study conducted by Nicklaus Engineering, Inc. has determined that improvements to County 24th Street to the intersection with Avenue E are necessary for public health and safety due to the eastbound and westbound traffic loads due to the growth on County 24th Street; and

WHEREAS, northbound and southbound traffic loads are increasing, making the development of 21st Avenue between County 24th Street and County 23½ Street necessary for public health and safety; and

WHEREAS, acquiring certain property for right of way purposes is necessary to the design, construction, expansion, widening, maintenance, improvements, and ongoing use of County 24th Street and 21st Avenue within the city limits of the City of San Luis; and

WHEREAS, acquiring certain property for site triangles and a wastewater lift station in the area are needed for the health and safety of the public; and

WHEREAS, the Mayor and City Council of the City of San Luis, Arizona, determine and find that the property to be taken is necessary for these public purposes;

NOW, THEREFORE, IT IS HEREBY ORDERED BY THE Mayor and City Council of the City of San Luis, Arizona:

Section 1: It is deemed necessary and essential as a matter of public use and necessity that the lands described in Exhibits A, B, and C be acquired, including by eminent domain, for design, construction, expansion, widening, maintenance, and improvements of:

- County 24th Street to the intersections of Avenue E and 21st Avenue,
- 21st Avenue between County 23½ Street and County 24th Street, and
- to serve, locate, maintain, and improve a wastewater lift station in the area of the northwest corner of 21st Avenue and County 24th Street,

all shown in Exhibits A, B, and C, and together referred to as the "Project."

Section 2: Exhibits A, B, and C (showing the Project) are attached and are incorporated into this order by this reference.

Section 3: City staff are directed to proceed with acquiring the Project land described in Exhibits A, B, and C, including by eminent domain, for construction, maintenance, and completion of the Project.

Section 4: The Mayor or, in the alternative, the City Manager are both authorized to execute any documents that may be necessary to carry out this order.

PASSED, ADOPTED, and **APPROVED** by the Mayor and City Council of the City of San Luis, Yuma County, Arizona, this _____ day of January 2023.

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney

Exhibit A

LEGAL DESCRIPTIONS

APN 227-10-002
The Northeast Quarter of the Southeast Quarter of
Section 10, Township 11 South, Range 24 West, Yuma County, Arizona

Corner Triangle at Avenue E and San Luis Lane

That part of the Northeast Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Gila and Salt River Meridian, Yuma County, Arizona, described as follows:

Beginning at the Northeast Corner of said Northeast Quarter of the Southeast Quarter;
Thence S0°25'37"W along the East line of said Northeast Quarter of the Southeast Quarter a distance of 40.00 feet;
Thence N89°30'24"W along a line parallel to and 40.00 feet south of the North line of said Northeast Quarter of the Southeast Quarter a distance of 89.95 feet to the to the True Point of Beginning;
Thence continuing N89°30'24"W a distance of 35.00 feet;
Thence S44°32'23"E a distance of 70.75 feet;
Thence N0°25'37"E a distance of 35.00 feet;
Thence N44°32'23"W a distance of 21.23 feet to the True Point of Beginning;

Area = 1,138 Square Feet (0.026 Acres)

21st Avenue

That part of the Northeast Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Gila and Salt River Meridian, Yuma County, Arizona, described as follows:

Beginning at the Northwest Corner of said Northeast Quarter of the Southeast Quarter;
Thence S0°26'09"W along the West line of said Northeast Quarter of the Southeast Quarter a distance of 40.00 feet to the to the True Point of Beginning;
Thence continuing S0°26'09"W a distance of 1280.43';
Thence S89°30'28"E along the South line of said Northeast Quarter of the Southeast Quarter a distance of 30.00 feet;
Thence N0°26'09E a distance of 1240.30 feet;
Thence N45°27'52"E a distance of 56.54 feet to a point on a line 40.00 feet south of and parallel to the North line of the Northeast Quarter of the Southeast Quarter;
Thence N89°30'24"W a distance of 70.00 feet to the True Point of Beginning;

Area = 39238 Square Feet (0.901 Acres)

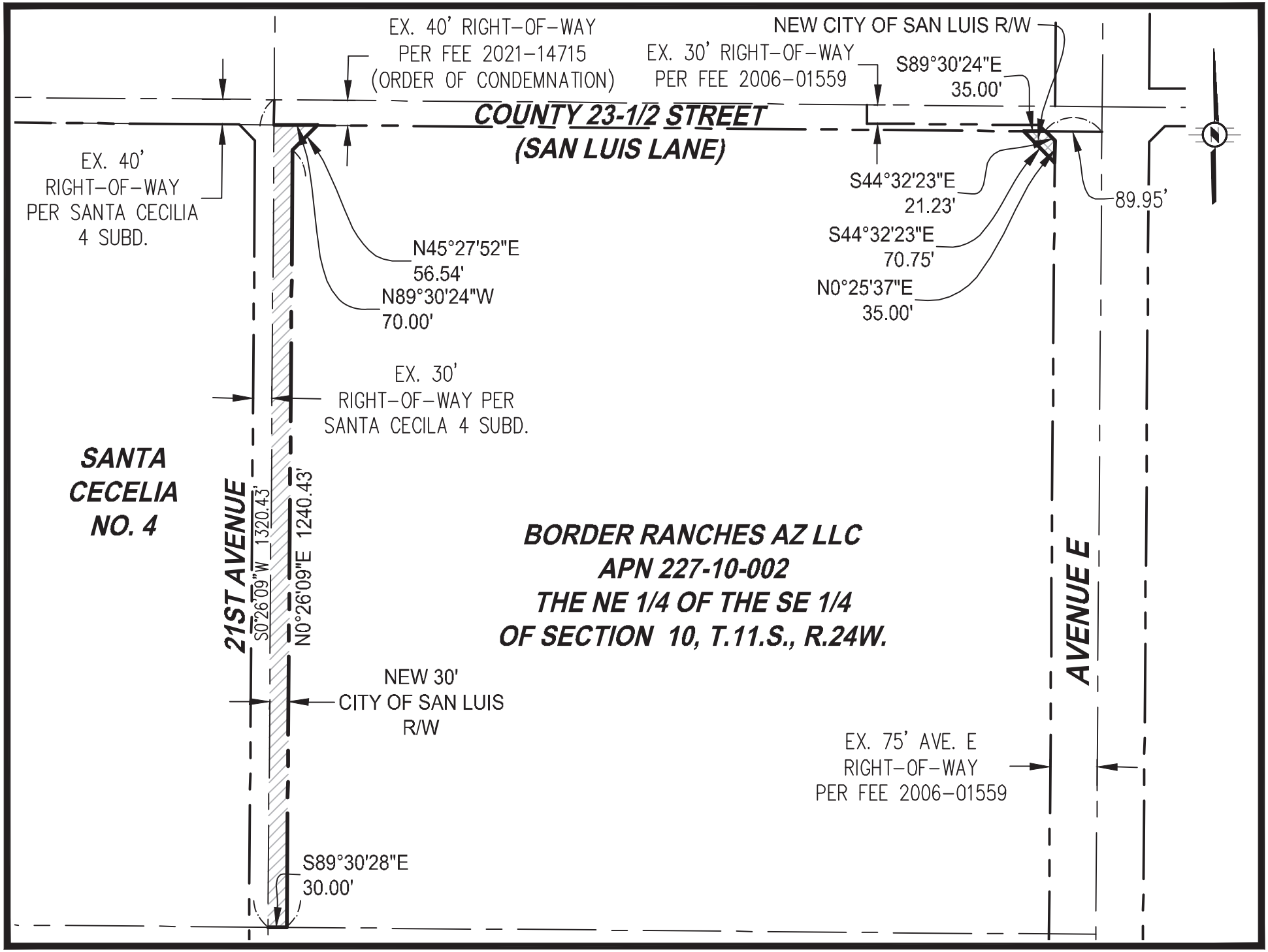

EX. 40' RIGHT-OF-WAY
PER FEE 2021-14715
(ORDER OF CONDEMNATION)
EX. 30' RIGHT-OF-WAY
PER FEE 2006-01559
NEW CITY OF SAN LUIS R/W
S89°30'24"E
35.00'
COUNTY 23-1/2 STREET
(SAN LUIS LANE)
EX. 40'
RIGHT-OF-WAY
PER SANTA CECILIA
4 SUBD.
N45°27'52"E
56.54'
N89°30'24"W
70.00'
S44°32'23"E
21.23'
S44°32'23"E
70.75'
N0°25'37"E
35.00'
89.95'
EX. 30'
RIGHT-OF-WAY PER
SANTA CECILA 4 SUBD.
SANTA
CECELIA
NO. 4
21ST AVENUE
S0°26'09"W 1320.43'
N0°26'09"E 1240.43'
BORDER RANCHES AZ LLC
APN 227-10-002
THE NE 1/4 OF THE SE 1/4
OF SECTION 10, T.11.S., R.24W.
AVENUE E
NEW 30'
CITY OF SAN LUIS
R/W
EX. 75' AVE. E
RIGHT-OF-WAY
PER FEE 2006-01559
S89°30'28"E
30.00'

Exhibit B

LEGAL DESCRIPTION

APN 227-10-003
The Southeast Quarter of the Southeast Quarter of
Section 10, Township 11 South, Range 24 West, Yuma County, Arizona

That part of the Southeast Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Gila and Salt River Meridian, Yuma County, Arizona, described as follows:

Beginning at the Southwest Quarter of said Southeast Quarter of the Southeast Quarter;
Thence N0°26'09"E along the West line of said Southeast Quarter of the Southeast Quarter a distance of 33.00 feet to the True Point of Beginning;
Thence continuing N0°26'09"E a distance of 1287.43 feet to the Northwest corner of said Southeast Quarter of the Southeast Quarter;
Thence S89°30'28"E along the North line of said Southeast Quarter of the Southeast Quarter a distance of 30.00 feet;
Thence S0°26'09"W a distance of 1225.42 feet;
Thence S44°32'11"E a distance of 56.60 feet;
Thence S89°30'32"E along a line 55 feet north and parallel to the South line of Section 10 a distance of 1100.90 feet;
Thence N45°27'33"E a distance of 106.01 feet to a point on the East Right-of-Way line of Avenue E;
Thence S0°25'37"W along the East Right-of-Way line of Avenue E a distance of 65.00 feet;
Thence S46°33'06"W a distance of 36.03 feet to a point on the existing North Right-of-Way line of County 24th Street;
Thence N89°30'32"W along a line 40 feet north and parallel to the South line of Section 10 a distance of 274.03 feet;
Thence S0°25'37"W a distance of 7.00 feet;
Thence N89°30'32"W along a line 33 feet north and parallel to the South line of Section 10 a distance of 945.91 feet to the True Point of Beginning;

Area = 66,562 Square Feet (1.529 Acres)

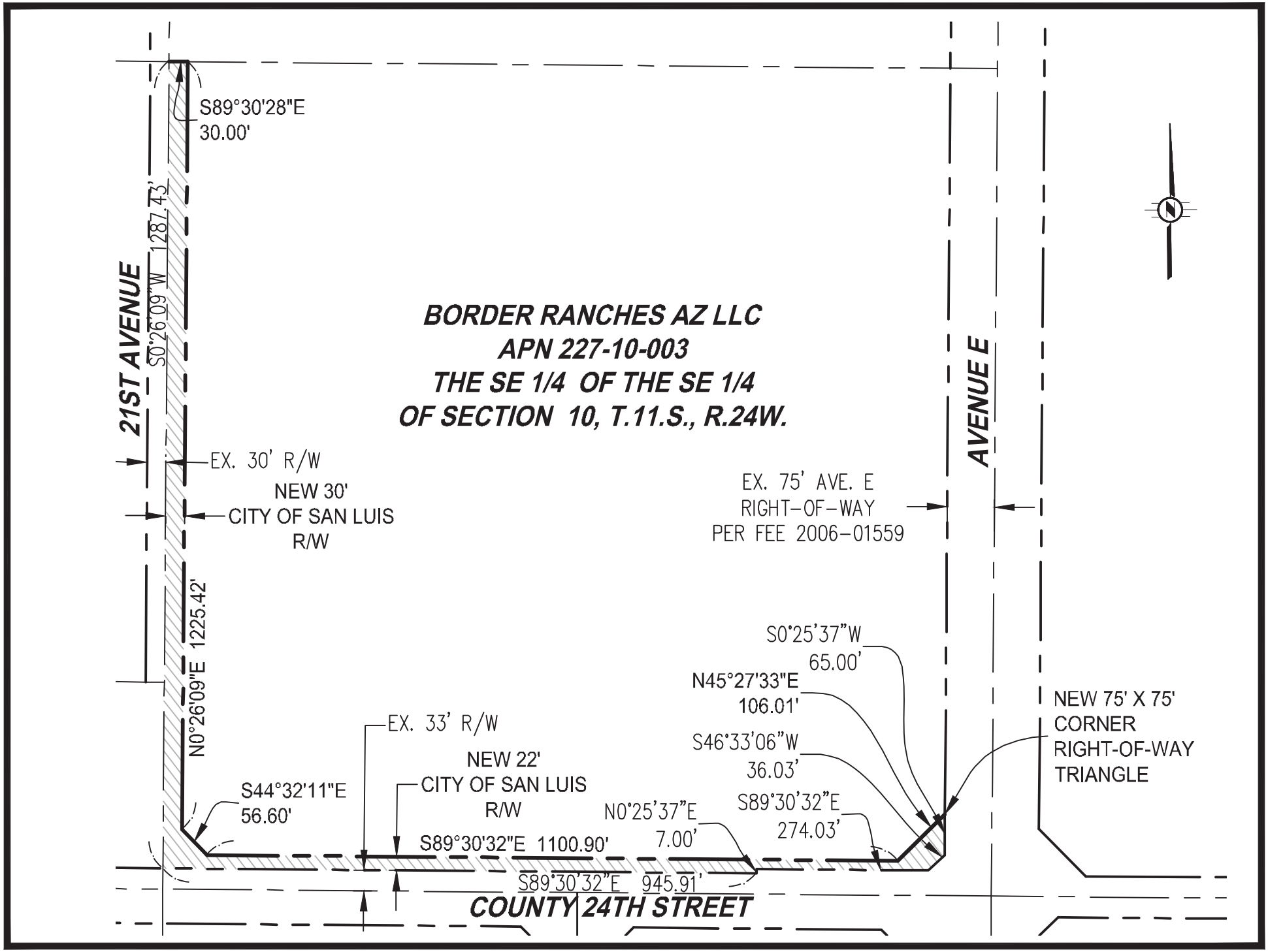

S89°30'28"E
30.00'
21ST AVENUE
S0°26'09"W 1287.43'
EX. 30' R/W
NEW 30'
CITY OF SAN LUIS
R/W
BORDER RANCHES AZ LLC
APN 227-10-003
THE SE 1/4 OF THE SE 1/4
OF SECTION 10, T.11.S., R.24W.
AVENUE E
EX. 75' AVE. E
RIGHT-OF-WAY
PER FEE 2006-01559
S0°25'37"W
65.00'
N45°27'33"E
106.01'
S46°33'06"W
36.03'
S89°30'32"E
274.03'
N0°25'37"E
7.00'
NEW 75' X 75'
CORNER
RIGHT-OF-WAY
TRIANGLE
N0°26'09"E 1225.42'
EX. 33' R/W
NEW 22'
CITY OF SAN LUIS
R/W
S44°32'11"E
56.60'
S89°30'32"E 1100.90'
S89°30'32"E 945.91'
COUNTY 24TH STREET

Exhibit C

LEGAL DESCRIPTIONS

APN 227-10-004
The Southeast Quarter of the Southwest Quarter of the Southwest Quarter of the Southeast Quarter and the South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Yuma County, Arizona

County 24th Street and 21st Avenue

That part of the Southeast Quarter of the Southwest Quarter of the Southwest Quarter of the Southeast Quarter and the South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Gila and Salt River Meridian, Yuma County, Arizona, described as follows:

Beginning at the Southeast Corner of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter;
Thence N0°26'09"E along the West line of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter a distance of 33.00 feet to the True Point of Beginning;
Thence continuing N0°26'09"E a distance of 297.14 feet to the Northeast corner of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter;
Thence N89°33'51"W along the North line of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter a distance of 30.00 feet;
Thence S0°26'09"W a distance of 280.11 feet;
Thence N89°30'32"W along a line parallel to and 50.00 feet north of the South line of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter a distance of 300.00 feet;
Thence S0°26'09"W a distance of 17.00 feet;
Thence S89°30'32"E a distance of 330.00 feet to the True Point of Beginning;

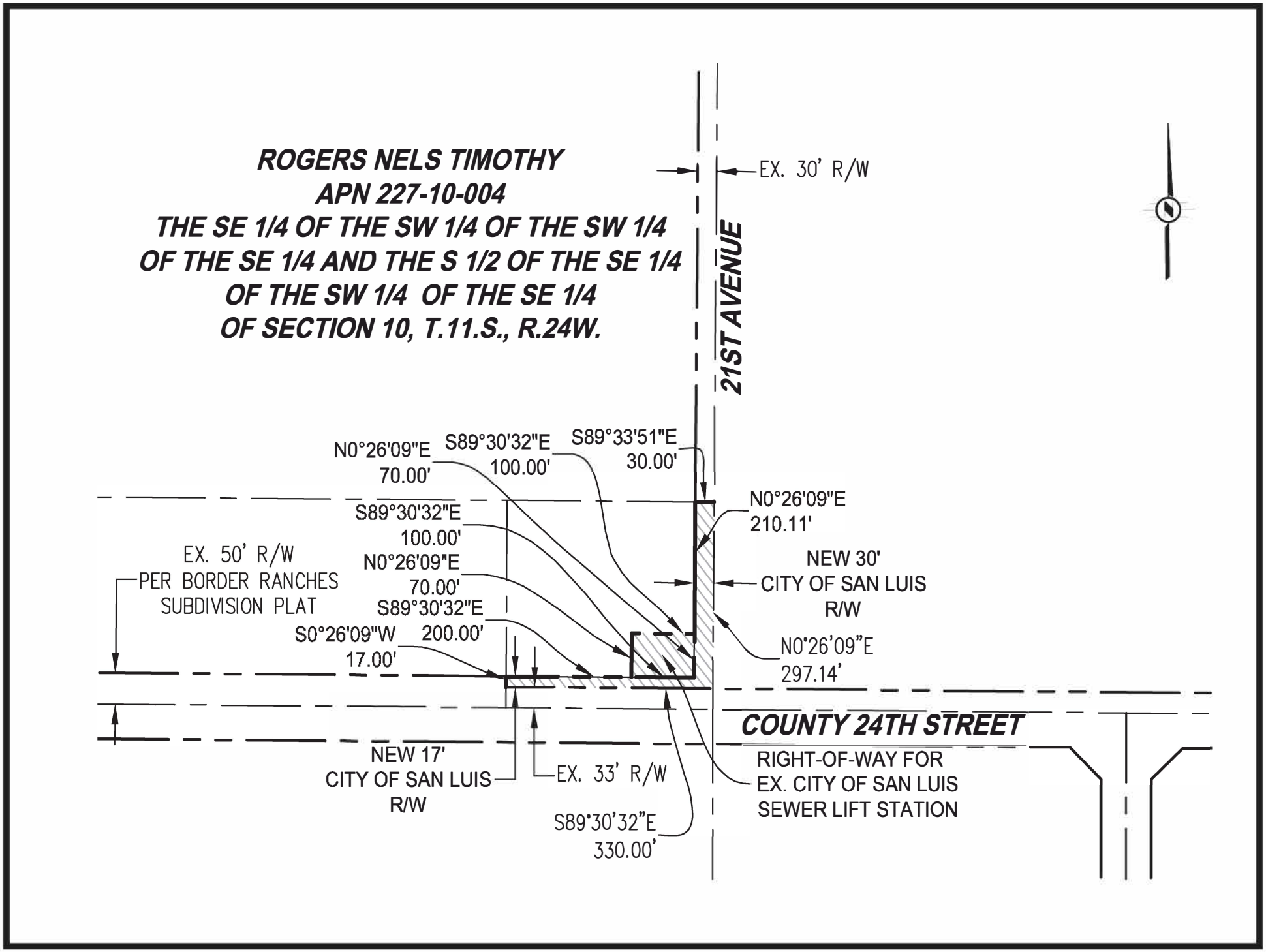
Existing City of San Luis Sewer Lift Station

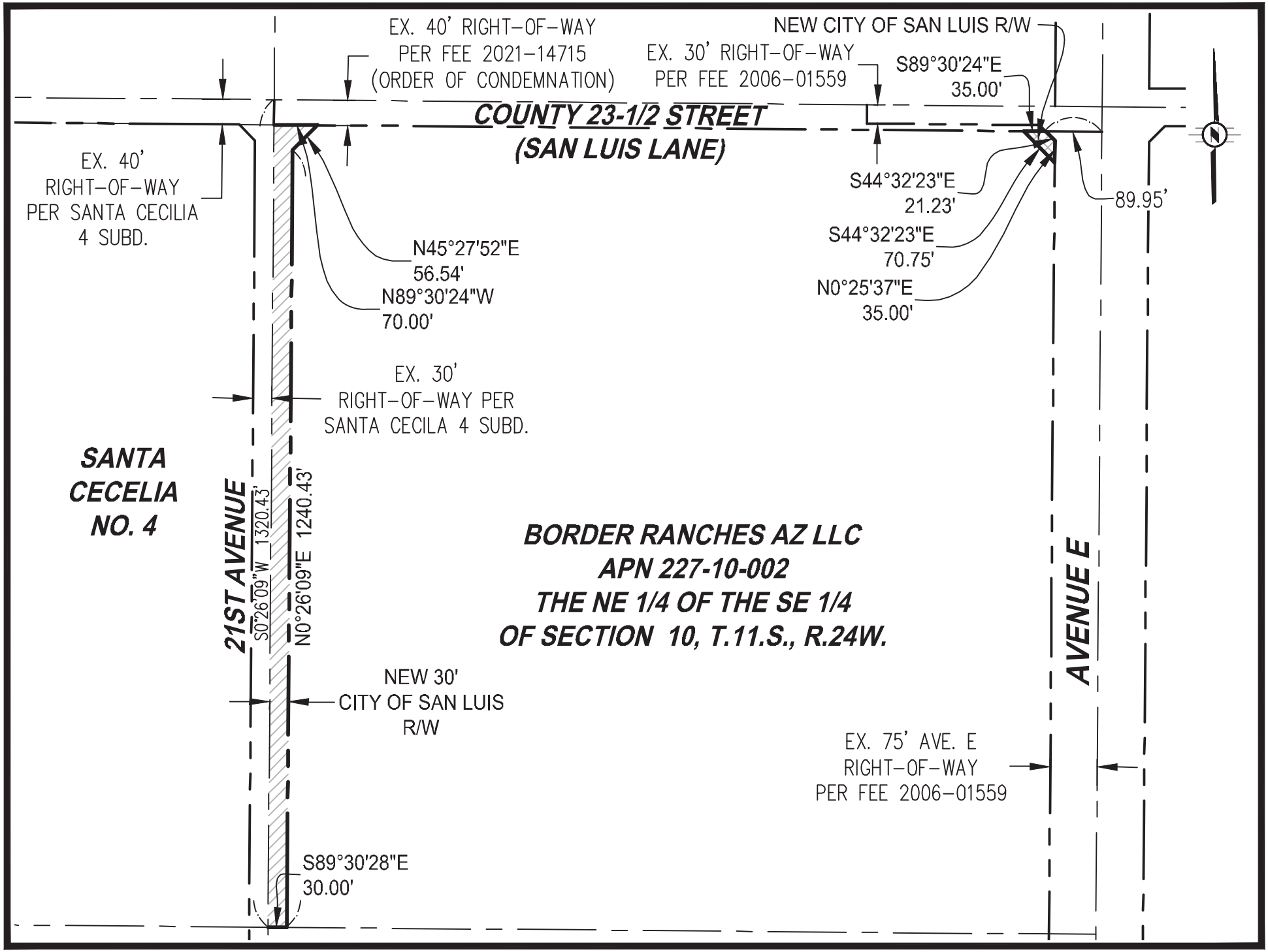
That part of the Southeast Quarter of the Southwest Quarter of the Southwest Quarter of the Southeast Quarter and the South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter of Section 10, Township 11 South, Range 24 West, Gila and Salt River Meridian, Yuma County, Arizona, described as follows:

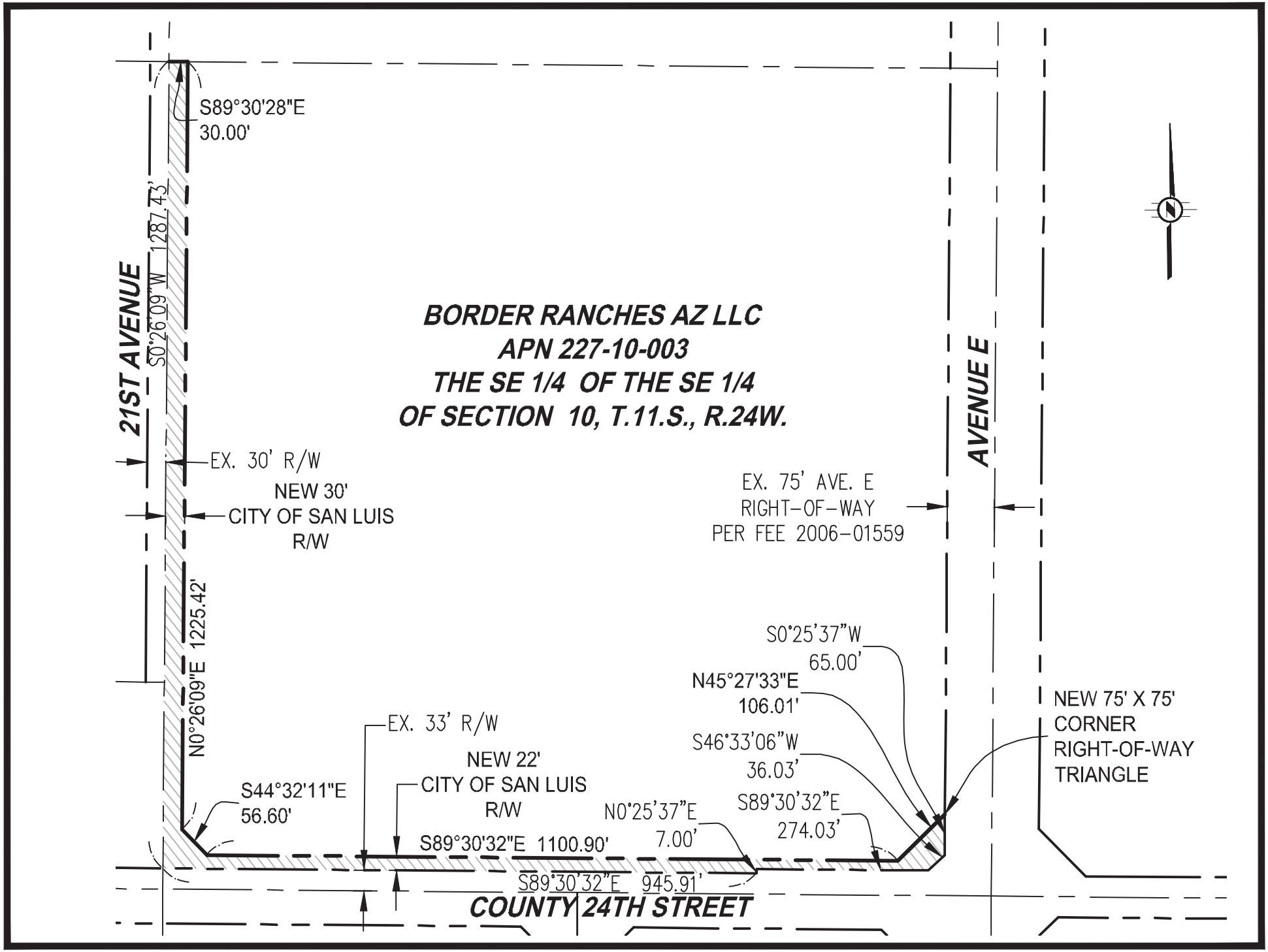
Beginning at the Southeast Corner of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter;
Thence N0°26'09"E along the West line of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter a distance of 50.00 feet;
Thence N89°30'32"W along a line parallel to and 50.00 feet north of the South line of said South Half of the Southeast Quarter of the Southwest Quarter of the Southeast Quarter a distance of 30.00 feet to the True Point of Beginning;
Thence continuing N89°30'32"W along the existing wall of the Sewer Lift Station a distance of 100.00 feet;

Thence N0°26’09”E along the existing wall of the Sewer Lift Station a distance of 70.00 feet;
Thence S89°30’32”E along the existing wall of the Sewer Lift Station a distance of 100.00 feet;
Thence S0°26’09”W along the existing wall of the Sewer Lift Station a distance of 70.00 feet to the True Point of Beginning;

Combined Area = 21,018 Square Feet (0.483 Acres)


ROGERS NELS TIMOTHY
APN 227-10-004
THE SE 1/4 OF THE SW 1/4 OF THE SW 1/4
OF THE SE 1/4 AND THE S 1/2 OF THE SE 1/4
OF THE SW 1/4 OF THE SE 1/4
OF SECTION 10, T.11.S., R.24W.
EX. 30' R/W
21ST AVENUE
N0°26'09"E 70.00'
S89°30'32"E 100.00'
S89°33'51"E 30.00'
N0°26'09"E 210.11'
S89°30'32"E 100.00'
N0°26'09"E 70.00'
S89°30'32"E 200.00'
S0°26'09"W 17.00'
EX. 50' R/W
PER BORDER RANCHES
SUBDIVISION PLAT
NEW 30'
CITY OF SAN LUIS
R/W
N0°26'09"E 297.14'
COUNTY 24TH STREET
NEW 17'
CITY OF SAN LUIS
R/W
EX. 33' R/W
S89°30'32"E 330.00'
RIGHT-OF-WAY FOR
EX. CITY OF SAN LUIS
SEWER LIFT STATION


EX. 40' RIGHT-OF-WAY
PER FEE 2021-14715
(ORDER OF CONDEMNATION)
EX. 30' RIGHT-OF-WAY
PER FEE 2006-01559
NEW CITY OF SAN LUIS R/W
S89°30'24"E
35.00'
COUNTY 23-1/2 STREET
(SAN LUIS LANE)
EX. 40'
RIGHT-OF-WAY
PER SANTA CECILIA
4 SUBD.
N45°27'52"E
56.54'
N89°30'24"W
70.00'
S44°32'23"E
21.23'
S44°32'23"E
70.75'
N0°25'37"E
35.00'
89.95'
EX. 30'
RIGHT-OF-WAY PER
SANTA CECILA 4 SUBD.
SANTA
CECELIA
NO. 4
21ST AVENUE
S0°26'09"W 1320.43'
N0°26'09"E 1240.43'
BORDER RANCHES AZ LLC
APN 227-10-002
THE NE 1/4 OF THE SE 1/4
OF SECTION 10, T.11.S., R.24W.
AVENUE E
NEW 30'
CITY OF SAN LUIS
R/W
EX. 75' AVE. E
RIGHT-OF-WAY
PER FEE 2006-01559
S89°30'28"E
30.00'


S89°30'28"E
30.00'
21ST AVENUE
S0°26'09"W 1287.43'
EX. 30' R/W
NEW 30'
CITY OF SAN LUIS
R/W
BORDER RANCHES AZ LLC
APN 227-10-003
THE SE 1/4 OF THE SE 1/4
OF SECTION 10, T.11.S., R.24W.
AVENUE E
EX. 75' AVE. E
RIGHT-OF-WAY
PER FEE 2006-01559
S0°25'37"W
65.00'
N45°27'33"E
106.01'
S46°33'06"W
36.03'
S89°30'32"E
274.03'
N0°25'37"E
7.00'
NEW 75' X 75'
CORNER
RIGHT-OF-WAY
TRIANGLE
N0°26'09"E 1225.42'
EX. 33' R/W
NEW 22'
CITY OF SAN LUIS
R/W
S44°32'11"E
56.60'
S89°30'32"E 1100.90'
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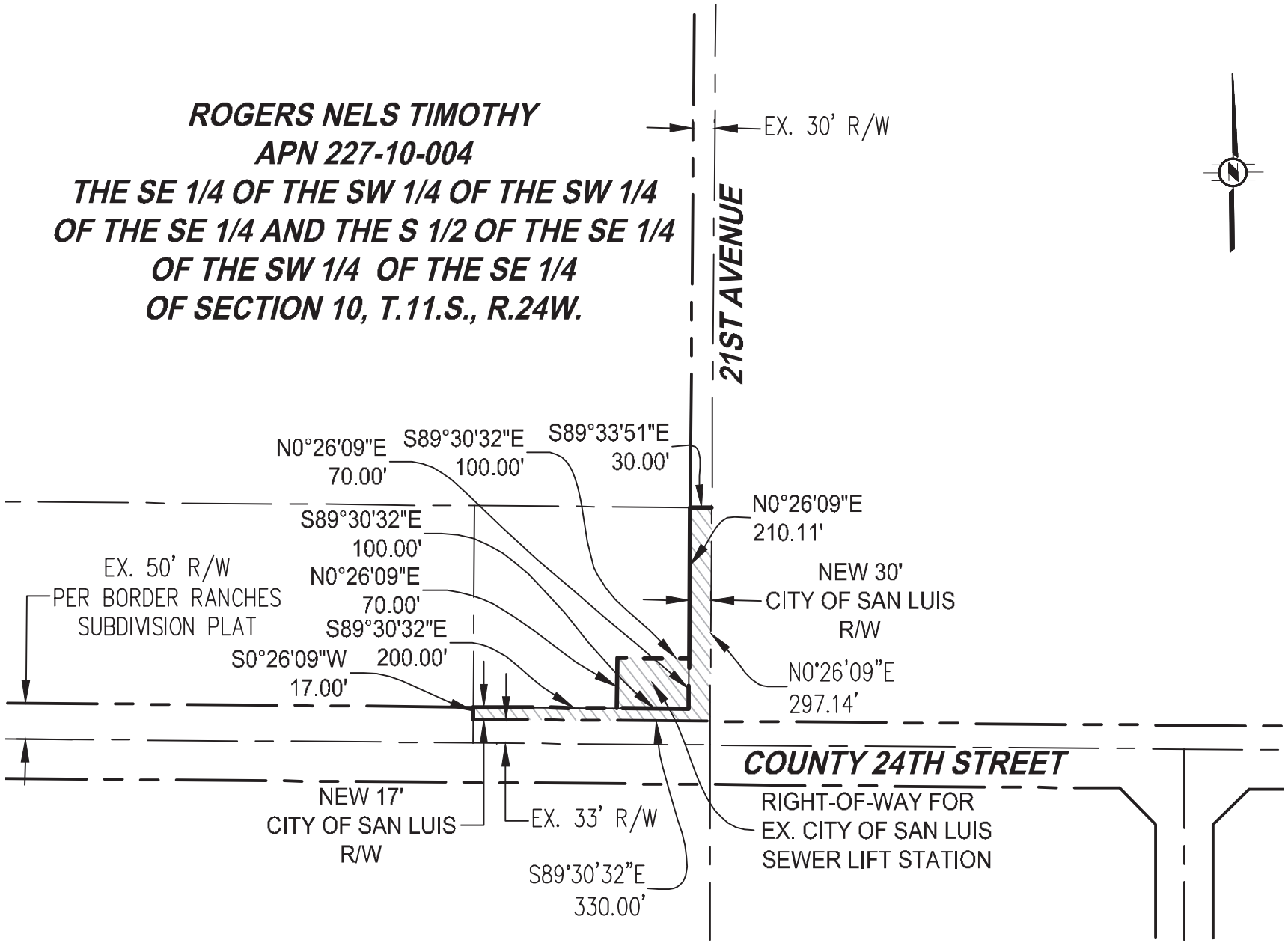
COUNTY 24TH STREET


ROGERS NELS TIMOTHY
APN 227-10-004
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N0°26'09"E 70.00'
S89°30'32"E 200.00'
S0°26'09"W 17.00'
EX. 50' R/W
PER BORDER RANCHES
SUBDIVISION PLAT
NEW 30'
CITY OF SAN LUIS
R/W
N0°26'09"E 297.14'
COUNTY 24TH STREET
RIGHT-OF-WAY FOR
EX. CITY OF SAN LUIS
SEWER LIFT STATION
NEW 17'
CITY OF SAN LUIS
R/W
EX. 33' R/W
S89°30'32"E 330.00'

Traffic Impact Study

Los Mezquites Subdivision and Von Verde Development LLC
San Luis, Arizona

Prepared for:

Edais Engineering Inc.
3075 S Avenue 4 E
Yuma, Arizona 85365

&

Von Verde Development LLC
10602 S Camino del Sol
Yuma, AZ 85367

Prepared by:

Nicklaus Engineering, Inc.
1851 W. 24th Street
Yuma, Arizona 85364

NEI Project No. 021-0226/021-0338
March 2022

Signatures of Professional Engineers

We declare that, to the best of our professional knowledge and belief, we meet the definition of Professional Engineer as defined in 650.305 of 23 CFR. We have the specific qualifications based on education, training, and experience to conduct a traffic impact analysis of the nature, magnitude, and setting of the subject proposed development. We have performed according to all applicable guidelines in conformance with the standards and practices set forth in *Arizona Department of Transportation Traffic Guidelines and Processes Section 240*.

Reviewed By:

_____ 3/18/2022

Eric Gardner, PE, PTOE **Date**
Vice President

Prepared By:

_____ 3/18/2022

Agustin Cruz, PE, **Date**
Project Engineer

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1 Introduction and Summary

A. Purpose of report and study objectives

Nicklaus Engineering Inc. (NEI) has been tasked by Edais Engineering Inc. and Von Verde Development LLC with conducting a traffic impact study to analyze potential traffic impacts associated with the construction of two proposed developments in San Luis, Arizona. The purpose of this study is to evaluate the projected traffic inside the influence area and identify, if applicable, a remedial strategy for traffic mitigation. The traffic study was completed in accordance with the criteria established by the Arizona Department of Transportation (ADOT) guidelines and is consistent with standard traffic engineering techniques. The study objectives for this report are:

1. Estimate projected traffic volumes inside the influence area associated with the proposed developments.
2. Analyze level of service for all major intersections inside the study area for various existing and future scenarios, with and without the construction of the proposed developments.
3. Determine the impact of the proposed developments on all major intersections within the influence area under existing and future traffic conditions.
4. Recommend, if necessary, solutions for roadway design and traffic control.
   Document findings and recommendations for the study.

B. Executive summary

Edais Engineering is proposing to build a residential subdivision, to be called Los Mezquites, composed of 857 single-family units that is planned to be located between Avenue E and Avenue D and between County 23 ½ Street and County 24th Street in San Luis, Arizona. The development also includes a 42-acre commercial neighborhood shopping center along Avenue E and County 24th Street frontages that will be part of this study. This shopping center will include a gas station, a supermarket, a hotel, as well as restaurants and other businesses.

Von Verde Development LLC is proposing to build a residential subdivision composed of approximately 1,459 single family and 1,000 multifamily residences and is planned to be located between Avenue E and Avenue D and between County 24th Street and County 25th Street in San Luis, Arizona. This development also includes 78 acres of commercial development as well as the construction of two elementary schools.

Both developments will be built in four phases. The study horizon for this study will be existing conditions, opening year for each phase (2023, 2024, 2025 and 2026), and 5 and 10 years after full buildout.

The study area for this analysis is Avenue E between Cesar Chavez Boulevard (SR 195) and County 25th Street, including the intersection of Avenue F / Cesar Chavez Boulevard. Access to the site will be provided via Avenue E and via County 24th Street, which is scheduled to open prior to the opening year of 2023.

The combination of Los Mezquites and the Von Verde developments will have a significant impact on the major intersections within the study area. The proposed Los Mezquites subdivision is expected to generate 551 AM trips and 857 PM daily peak hour trips when fully occupied. The commercial portion of the development is expected to generate approximately an additional 1600 and 1800 AM and PM peak hour trips, respectively.

The proposed Von Verde LLC development is expected to generate 1763 AM and 2239 PM daily peak hour trips when fully occupied. The commercial portion of the development is expected to generate approximately an additional 2068 and 2617 AM and PM peak hour trips, respectively.

In this study, it was assumed that interconnectivity among the different land uses is going to be provided. An estimated 25% of internal capture was used for all phases of both developments.

During Phase I, the intersection of Avenue E and County 24th Street will need to be widened and improved with a traffic signal. The eastbound and westbound approaches should contain at least one dedicated turn lane in each direction and at least one through lane.

At Phase II, the intersection of Avenue E and County 23 ½ will require a traffic signal to be installed according to City of San Luis Standards with the eastbound and westbound approaches containing one dedicated turn lane in each direction and a through lane.

The timing of these recommendations should also be evaluated based on the opening of the proposed schools and the availability of school bus transportation.

At the intersection of Avenue E and Cesar Chavez Boulevard, dual left turn lanes in the westbound direction will be required starting at Phase III as well as dual left turn lanes in the southbound and northbound directions at the intersection of Avenue E and County 24th Street.

Also at Phase III, the intersection of Avenue F and Cesar Chavez Boulevard reaches Level of Service E. The addition of an additional through lane in each direction is recommended.

For the proposed intersection at County 24th Street and Avenue D ¾ to provide access to and from the commercial area, it was determined that a traffic signal is required to handle the traffic volume expected at this location.

Since the amount of development to the east of Avenue D ½ is not known at this point, it is recommended that the intersection of County 24th Street and Avenue D ½ be reevaluated during Phase III, or sooner depending on the construction of the proposed elementary schools inside the Von Verde development, to determine if a traffic signal is warranted at this location.

2 Proposed Development

A. Site location

The City of San Luis current growth, and continued expected growth tendency, is to the eastern part of the city toward the commercial port of entry. It is in this area where the Los Mezquites and the Von Verde developments are planned for construction. These developments will be located east of Avenue E and between County 23 ½ Street and County 25th Street, in San Luis, Arizona. The main accesses to the site are via Cesar Chavez Boulevard (State Route 195), the planned County 24th Street extension and County 23 ½ Street.

The area consists primarily of residential developments on the west side, vacant land to the north, the San Luis Commercial Port of Entry and vacant commercial properties to the south, and a detention center and wastewater treatment plant bordered by vacant land to the east. Figure 1 is a vicinity map that shows the location of the projects.

B. Land use and intensity

The City of San Luis 2040 General Plan identifies two existing land use categories in the area north of County 24th Street between Avenue E and Avenue D. These are Commercial [C] and Employment [EMP].

The Commercial land use category is intended to provide for the primary commercial areas serving the community including neighborhood and regional-scale development. Commercial areas provide convenient community access to goods and services that may include retail, service commercial, professional offices, light industrial, and employment uses. The Employment land use category is intended to provide areas with a focus on creating jobs to serve the community including warehouses, distribution centers, business parks, corporate centers, research and development facilities, light industrial, and heavy industrial uses.

The City of San Luis has approved, by a General Plan Amendment, to change the land use designation for this area from Commercial [C] and Employment [EMP] to Medium Density Residential [MDR]. This major amendment will allow the applicants to rezone to the R1-6 zoning district for the construction of a residential subdivision.

The current land use in the area is single family residential to the west with primarily undeveloped land surrounding the sites.

C. Site plan

Figures 2 and 2A include the proposed site plans for these developments. These plans are preliminary and have been used for a general understanding of site layout.

The site can be accessed via Avenue E, which connects to the north to Cesar Chavez Boulevard, which turns into State Route 195 once outside the City of San Luis limits. The site will also be accessed via County 24th Street, which will be extended from Avenue F ½ to 10th Avenue prior to the completion of Phase I of either development.

The site can also be accessed by County 23 ½ Street via Avenue F. County 23 ½ Street provides access to the existing residential subdivisions located to the west of the proposed developments.

D. Development phasing and timing

Each development is planned to be built in four phases. Phase one will start 2023 and the final completion year will be 2026. Table 1 shows the assumed phasing and work included in each phase. Figure 2C shows the proposed layout of the commercial area for Los Mezquites. For the Von Verde development, the commercial businesses to be established are not yet known; a shopping/retail center was assumed for this study.

Phase	Opening Year	Los Mezquites	Von Verde
Phase I	2023	1. Los Mezquites Unit 1 (198 single family units) 2. Gas station with 5,000 SF convenience store 3. Lube shop, tire shop, car wash	1. 472 single family units 2. 144 multi-family units 3. Shopping center (38 acres) 4. Elementary school (500 students)
Phase II	2024	1. Los Mezquites Unit 2 (214 single family units) 2. 27,400 SF grocery store 3. 100 room hotel 4. 55,000 retail/office space (approximately)	1. 472 single family units 2. 302 multi-family units
Phase III	2025	1. Los Mezquites Unit 3 (220 single family units) 2. Restaurants (3) 3. Gymnasium 4. 30,000 SF of retail/office space	1. 245 single family units 2. 342 multi-family units 3. Shopping center
Phase IV	2026	1. Los Mezquites Unit 4 (225 single family units) 2. Remaining retail/office space	1. 270 single-family units 2. 378 multi-family units 3. Elementary school (500 students)

TABLE 1: Assumed development phasing and timing for each project

3 Study Area Conditions

A. Study area

The proposed developments will be located east of Avenue E between County 23 ½ Street and the County 25th Street alignment in San Luis, Arizona. The alignment of Avenue D ½ Street bisects the developments in the north-south direction. Avenue E, County 24th Street and County 25th are classified as principal arterial (future) roads whereas County 23 ½ and Avenue D ½ are local streets, according to the City of San Luis 2040 General Plan.

The study area includes major intersections within a one-mile radius of the proposed development. This includes all State highways, signalized intersections, and major unsignalized intersections. For this study, the following intersections meet this criterion:

(1) Avenue F / César Chavez Boulevard (SR 195),
(2) Avenue E / César Chavez Boulevard,
(3) Avenue E / County 23 ½ Street,
(4) Avenue E / County 24th Street,
(5) Avenue E / County 24 ½ Street, and
(6) Avenue E / County 25th Street.

The San Luis II Commercial Port of Entry is located to the south of the proposed developments. Avenue E connects the Port of Entry to State Route 195. For now, the Port of Entry is open only to commercial vehicles. Therefore, this facility is not expected to be influenced by the developments. Avenue E will see increased traffic and a combination of commercial and passenger vehicles due to the proposed developments.

It is the plan of the City of San Luis to expand the Port of Entry to include pedestrians and passenger vehicles, but no date has been set at the time of this study. In addition, it is planned to relocate the truck route from the port of entry from Avenue E to Avenue B at some unknown date in the future. As a result, these factors are not considered in this analysis. A growth rate of 5% has been used in this study, based on recent observations of area growth.

B. Land use

The site currently includes several different zoning designations. The majority is currently zoned Light Industrial (LI). Along Avenue E and County 24th Street frontages, the zoning is Commercial (C-2). The site also includes some small sections of residential zoning (R-2 and R-3). The City of San Luis recently approved a major general plan amendment for the area to change the current land use designation from Commercial/Industrial to Commercial/Residential.

C. Site accessibility

Upon buildout, access to the development will be through the six intersections analyzed in this study, previously listed in Section 3.A.

The City of San Luis 2040 General Plan identifies Avenue D and County 24th Street as future principal arterial streets that will eventually connect to Cesar Chavez Boulevard and Avenue B, respectively. However, the Arizona Department of Transportation has indicated in a recent General Plan Amendment for this area that no additional connections are allowed to State Route 195. For now, the City of San Luis has

plans to build County 24th Street from Avenue F ½ to 10th Avenue. This work is scheduled to begin this year and be finalized prior the opening of the new developments.

Table 2 contains a description of all proposed site accesses to the development. Their locations were assumed based on the phasing sequence and the preliminary site plans provided by Edais Engineering and Von Verde Development LLC.

OPENING YEAR	ACCESS	TYPE	STREET FRONTAGE	DEVELOPMENT
2023 (Phase I)	A	Residential	County 23 ½ St	Los Mezquites
	B	Residential	County 23 ½ St	Los Mezquites
	F	Commercial	Avenue E	Los Mezquites
	G	Commercial	County 24th St	Los Mezquites
	L	Residential	County 23 ½ St	Los Mezquites
	O (Northbound)	Residential/Commercial	County 24th St	Von Verde
	P	Residential	County 24th St	Von Verde
	S	Commercial/Residential	Avenue E	Von Verde
	S2	Commercial	County 24th St	Von Verde
	S3	Commercial	Avenue E	Von Verde
	R	Multi-family	Avenue E	Von Verde
2024 (Phase II)	C	Commercial	County 23 ½ St	Los Mezquites
	O (Southbound)	Commercial	County 24th St	Los Mezquites
	I	Commercial	County 24th St	Los Mezquites
	Q	Residential	County 25th St	Von Verde
2025 (Phase III)	D	Commercial	Avenue E	Los Mezquites
	E	Commercial	County 24th	Von Verde
2026 (Phase IV)	E	Residential	County 23 ½ St	Los Mezquites
	H	Residential	County 23 ½ St	Los Mezquites

TABLE 2: Description of assumed site accesses

4 Analysis of Existing Conditions

A. Physical characteristics

Avenue E is a north/south aligned road, built out with two through lanes in each direction and a raised center median. The road extends north from Cesar Chavez Boulevard (195) and ends south at the commercial port of entry to the south. The posted speed limit is 50 miles per hour. This facility is classified as a principal arterial road. Existing traffic along Avenue E primarily consists of ingress and egress from the residential developments to the west.

County 23rd ½ Street is an east/west aligned road with one lane in each direction, The posted speed limit is 25 miles per hour. County 23rd ½ Street currently extends from Avenue E to approximately 0.5 miles west of Avenue F. This street is classified as a local street.

County 24th Street is an east/west aligned principal arterial road with one lane in each direction. The posted speed limit is 25 miles per hour. The roadway currently extends from Avenue F ½ to Avenue D. The City of San Luis recently announced plans to extend County 24th Street to the west connecting to 10th Avenue. This work is anticipated to be completed prior to the completion of Phase I.

County 25 Street is an east/west aligned principal arterial road with one lane in each direction. The posted speed limit is 50 miles per hour. Currently, it is built only for a mile stretch from Avenue E to Avenue D. It provides access to existing and anticipated commercial developments operating near the Port of Entry.

Cesar Chavez Boulevard (SR195) is an east/west state highway road consisting of two through lanes in each direction. The posted speed limit is 65 miles per hour. The road extends from San Luis, AZ to the east and continues east and north where it meets Interstate 8 on the east side of Yuma, AZ.

The intersection of Avenue F and Cesar Chavez Boulevard is a signalized T-intersection and has the following geometry:

- Northbound – Left turn lane and right turn lane
- Eastbound – Left turn lane, single through lane
- Southbound – None
- Westbound – Left turn lane, single through lane

The intersection of Avenue E and Cesar Chavez Boulevard is a signalized T-intersection and has the following geometry:

- Northbound – Left turn lane and right turn lane
- Eastbound – Right turn lane and double through lanes
- Southbound – None
- Westbound – Left turn lane and double through lanes

The intersection of Avenue E and County 23 ½ Street is a two-way stop-controlled intersection and has the following geometry:

- Northbound – Left turn lane and double through lanes
- Eastbound – Single left/through/right turn lane
- Southbound – Left turn lane, one through lane, and through/right turn lane
- Westbound – Single left/through/right turn lane

The intersection of Avenue E and County 24th Street is a two-way stop-controlled intersection with the following geometry:

- Northbound – Left turn lane, double through lanes, and right turn lane
- Eastbound – Single left turn/through lane
- Southbound – Left turn lane, double through lanes, and right turn lane
- Westbound – Single left/through/right turn lane

The intersection of Avenue E and County 24 ½ Street is a two-way stop-controlled intersection and has the following geometry:

- Northbound – Left turn lane, through and through/right turn lane
- Eastbound – Single left turn/through lane
- Southbound – Left turn lane, double through lanes, and right turn lane
- Westbound – Single left/through/right turn lane

The intersection of Avenue E and County 25th Street is a two-way stop-controlled intersection and has the following geometry:

- Northbound – Left turn lane, through and through/right turn lane
- Eastbound – Single left/through/right turn lane
- Southbound – Left turn lane and single through/right turn lane
- Westbound – Left turn lane and through/right turn lane

The intersections of Avenue E with County 23 ½, County 24th and County 25 Streets are two-way stop intersections with the stop signs located at the minor classification streets.

The general area currently has limited facilities for pedestrians or bicyclists with no sidewalks away from the major intersections.

According to the Yuma County Intergovernmental Public Transportation Authority service map, there are no bus routes serving this area, nor any other mode of public transportation.

B. Traffic Volumes

Traffic counts were performed during the month of September in the three major intersections within a mile of the development to get the existing volumes and turning movements. These are presented in Table 3 (see also Appendix B). The City of San Luis experiences an increase in population and traffic during the winter season because of the agricultural harvesting season and the winter visitors from colder climates. Therefore, the traffic counts along Cesar Chavez Boulevard were adjusted by a factor of 1.25 to account for the increased traffic during the fall and winter months. Traffic counts on all other streets were adjusted by a factor of 1.05.

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue F and César Chavez Boulevard													
AM	0	0	0	444	0	53	13	208	2	2	548	300	1570
PM	0	0	0	364	0	14	88	803	12	0	335	430	2044

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue E and Cesar Chavez Blvd.													
AM	0	0	0	37	0	88	93	219	0	0	538	73	1045
PM	0	0	0	38	0	99	210	798	0	0	349	35	1528

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue E and County 23 1/2 Street													
AM	0	100	12	0	61	0	0	0	0	53	0	4	228
PM	0	78	93	0	98	0	0	0	0	32	0	3	302

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue E and County 24th Street													
AM	18	55	32	3	24	0	33	5	7	0	2	7	180
PM	0	19	59	2	26	9	0	19	9	42	2	3	185

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue E and County 24 ½ Street													
AM	0	66	0	0	31	0	0	0	2	0	0	2	151
PM	0	29	0	0	45	0	0	0	0	0	0	0	73

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR	Total
Avenue E and County 25th Street													
AM	26	35	10	0	13	2	2	5	13	0	0	0	101
PM	10	18	0	0	31	8	8	0	15	0	0	0	88

TABLE 3: Existing peak hour traffic volumes (2021)

C. Level of Service

Using the existing network configuration and the existing traffic volumes presented in Table 3, Synchro 11 traffic software was used to model and determine the current level of service for the studied intersections. Results are shown in Table 4. Currently, the intersection of Avenue F and Cesar Chavez Boulevard is operating at a Level of Service C during the PM peak hour. The Synchro report is attached in Appendix E.

Intersection	LEVEL OF SERVICE		DELAY (seconds)		CAPACITY UTILIZATION RATIO	
	AM	PM	AM	PM	AM	PM
Ave F / Cesar Chavez Blvd.	C	C	23.5	25.8	70.9%	80.3%
Ave E / Cesar Chavez Blvd.	B	A	10.2	8.5	38.6%	40.9%
Ave E / County 23 ½ St.	B	A	10.1	9.9	N/A	N/A
Ave E / County 24th St.	A	A	9.6	9.5	N/A	N/A
Ave E / County 24 ½ St.	A	A	0	0	N/A	N/A
Ave E / County 25th St.	A	A	9.3	8.8	N/A	N/A

TABLE 4: Existing intersection Level of Service

D. Safety

The City of San Luis provided the most recent crash data for the study area for years 2014 to 2021. This information has been included in Appendix C. Based on the low number of crashes or incidents that have occurred in Cesar Chavez Boulevard and Avenue E, it has been determined that no safety improvement measures are necessary.

E. Roadway Capacity

An analysis was performed to determine the current capacity of Cesar Chavez Boulevard and Avenue E. Official 2020 traffic counts were obtained from the Yuma Metropolitan Planning Organization (YMPO) website. A 5% growth rate was applied to determine 2021 volume. According to the *Highway Capacity Manual 6th Edition*, the level of service D/E thresholds for a 2-lane road with left turn lanes is 18,300 vehicles per day. The results are shown in Table 5.

	Volume	Volume adjusted to 2023 (5% growth)	Capacity
Cesar Chavez Blvd. (west of Avenue F)	17,509	18,385	100%
Avenue E	4,281	4,495	25%
County 24th Street	400	420	2%

TABLE 5: Existing roadway capacity

For County 24th Street, the volume was determined from the traffic counts done for this study using a peak hour multiplier of 10.

Currently, Avenue E and County 24th Street are operating within capacity. Cesar Chavez Boulevard is currently operating at capacity in vicinity of Avenue F where it is currently a two-lane roadway.

F. Data Sources

- City of San Luis Public Works Department
- City of San Luis Police Department
- City of San Luis 2040 General Plan
- Yuma Metropolitan Planning Organization (YMPO)

5 Projected Traffic

A. Background Traffic

In addition to existing conditions, each major intersection was analyzed for level of service assuming no improvements are done to the area. A yearly growth factor of 5% was used. City of San Luis officials estimate that this is the rate at which growth is occurring in the eastern part of the city.

The purpose of this study of future no-build conditions is to determine the length of time that the intersections will be performing at an acceptable level. This will give an indication of the impact to these intersections as a result of the proposed development.

The analysis included determining level of service of the intersections presented in Section 3-A for the following years: 2021, 2023, 2024, 2025, 2026, 2031, and 2036. Years 2023 thru 2026 represent the opening years of the different phases of the proposed Los Mezquites and Von Verde developments. This analysis was performed without considering the opening of County 24th Street.

A traffic signal cycle length of 100 seconds was used for analysis conditions within five years and 120 seconds for analysis beyond five years, per *City of Yuma Engineering Department Traffic Impact Study Guidelines*. The results for this analysis are presented in Table 6. Without any development in this area, the intersections will continue to operate at acceptable levels, except for Avenue F and Cesar Chavez Boulevard. In year 2024, this intersection falls to Level of Service D in the AM peak hour and F in the PM peak hour. Cesar Chavez Boulevard is operating beyond capacity throughout this analysis and likely warrants additional through lanes in each direction.

However, the proposed opening of County 24th Street within the next year will alleviate the congestion on and at the intersection of Cesar Chavez Boulevard and Avenue F, prolonging the satisfactory operation of this intersection.

	Avenue F & Cesar Chavez Blvd		Avenue E & Cesar Chavez Blvd		Avenue E & County 23 ½ St		Avenue E & County 24th St		Avenue E & County 24 ½ St		Avenue E & County 25th St	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2023	C	C	B	A	B	B	A	A	A	A	A	A
2024	D	F	B	A	B	B	A	A	A	A	A	A
2025	D	F	B	A	B	B	B	A	A	A	A	A
2026	E	F	B	A	B	B	B	A	A	A	A	A
2031	F	F	A	B	B	B	B	B	A	A	A	A
2036	F	F	B	D	B	B	B	B	A	A	A	A

TABLE 6: Intersection Level of Service (existing conditions without development)

B. Trip Generation and Distribution (Each horizon year)

Trip Generation. Data published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual – 10th Edition*, was used to identify the number of daily and peak hour trips that are anticipated to be generated by each development, Los Mezquites and Von Verde. In this study, it was assumed that interconnectivity among the different land uses is going to be provided to reduce the amount of traffic using the roadway network. An estimated 25% of internal capture was used for all phases of both developments. For the proposed school to be built at Von Verde during Phase IV, a 50% internal capture was assumed.

B1.1 Phase I (year 2023)

Phase I of Los Mezquites is planned to be built by the year 2023. It will include 198 single family units along with a gas station with a 5000 ft^2 convenience store, a tire shop, a lube shop, and a car wash. Von Verde Development Phase I will include 472 single family units, 144 multi-family housing units, an elementary school for 500 students, and a 38-acre commercial area. The number of trips generated in Phase I are summarized in the Table 7. Table 8 shows the trips generated by, and allocated to, each development for Phase I.

Los Mezquites Phase I													
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	198	Homes	9.44	0.76	1	1869	150	198	1402	112	149
DISTRIBUTION				50/50	51/49	50/50		30/111	127/71		23/83	95/53
Gas Station	945	5	1000 ft^2 GLA	1440	84.1	97.7	7200	420	488	5400	315	366
DISTRIBUTION				50/50	51/49	50/50		214/206	244/244		160/155	183/183
Tire Shop	848	3.15	1000 ft^2 GLA	28.5	3.73	3.87	90	12	12	68	9	9
DISTRIBUTION				50/50	52/48	45/55		6/6	5/7		5/5	4/5
Lube Shop	941	3.15	1000 ft^2 GLA	69.6	10.1	9.42	219	32	30	164	24	22
DISTRIBUTION				50/50	50/50	46/54		16/16	14/16		12/12	11/12
Car Wash	947	4	Wash stalls	108	8	8	432	32	32	324	24	24
DISTRIBUTION				50/50	50/50	50/50		16/16	16/16		12	12

Von Verde Phase I												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	472	Homes	9.44	0.76	1	4456	359	472	3342	269	354
DISTRIBUTION				50/50	24/74	64/36		93/265	302/170		70/199	226/128
Multi-Family	220	144	Dwelling unit	7.32	0.56	0.67	1054	81	96	3041	61	72
DISTRIBUTION				50/50	28/72	59/41		23/58	57/40		17/44	43/30
Shopping Center	820	331	1000 ft^2 GLA	37.75	3	4.21	12495	993	1394	9371	745	1046
DISTRIBUTION				50/50	54/46	50/50		536/457	697/697		402/343	523/523
Elementary School	520	500	Students	1.89	0.65	0.34	945	325	170	709	244	128
DISTRIBUTION				50/50	54/46	45/55		176/150	77/94		132/113	58/71

TABLE 7: Trip generation for Phase I for each development

Von Verde	Total Daily Trips	AM	PM
Single Family	4456	359	472
Multi-family	1054	81	96
Shopping center	12495	993	1394
Elementary School	945	325	170
Von Verde	18950	1758	2132

Los Mezquites	Total Daily Trips	AM	PM
Single Family	1869	150	198
Gas station	7200	420	488
Tire shop	90	12	12
Lube shop	219	32	30
Car wash	432	32	32
Los Mezquites	9810	646	760

TABLE 8: Trip allocation for Phase I

B1.2 Phase II (year 2024)

Phase II of Los Mezquites and Phase II of the Von Verde development are planned to be built by the year 2024. Los Mezquites will include 214 single family residences along with the opening of a 27,000 ft^2 grocery store, a 100-room hotel, and approximately 55,000 square feet of retail and office space in a neighborhood shopping center. Phase II of Von Verde Development will consist of 472 single family residences and 302 multi family dwelling units. Table 11 shows the peak hour trips generated by Phase II

Table 9 below shows the number of trips generated in Phase II. Table 10 shows the trips generated by, and allocated to, each development for Phase II.

Los Mezquites Phase II												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	214	Homes	9.44	0.76	1	2020	163	214	1515	122	161
DISTRIBUTION				50/50	26/74	64/36		42/120	137/77		32/90	103/58
Grocery Store	850	27	1000 ft^2 GLA	106.78	6.67	7.6	2883	180	205	2162	135	154
DISTRIBUTION				50/50	52/48	52/48		94/86	107/98		71/65	80/74
Hotel	310	100	Rooms	8.36	0.47	0.6	836	47	60	627	35	45
DISTRIBUTION				50/50	59/41	51/49		28/19	31/29		21/14	23/22
Retail/Office	712	55	1000 ft^2 GLA	16.19	3.26	3.73	890	179	205	668	134	154
DISTRIBUTION				50/50	60/40	46/54		108/72	94/111		81/54	71/83

Von Verde Phase II												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	472	Homes	9.44	0.76	1	4456	359	472	3342	269	354
DISTRIBUTION				50/50	26/74	64/36		93/265	302/170		70/199	227/128
Multi-Family	220	302	Dwelling unit	7.32	0.56	0.67	2211	169	202	1658	127	152
DISTRIBUTION				50/50	28/72	59/41		47/122	119/83		35/92	89/62

TABLE 9: Trip generation for Phase II

Von Verde	Total Daily Trips	AM	PM
Single Family	4456	359	472
Multi-family	2211	169	202
Von Verde	6667	528	674

Los Mezquites	Total Daily Trips	AM	PM
Single Family	2020	163	214
Grocery store	2883	180	205
Hotel	836	47	60
Retail/Office	890	179	205
Los Mezquites	6629	569	684

TABLE 10: Trip allocation for Phase II

B1.3 Phase III (year 2025)

Phase III is planned to be built by the year 2025. Los Mezquites will include 220 residential lots along with the opening of an additional 30,000 ft^2 of retail/office space, a gymnasium, and three fast-food restaurants.

Von Verde phase II includes 245 single family homes, 342 multi-family dwelling units and an estimated 400,000 square feet commercial space. Table 11 shows the trip generation for this phase. Table 12 shows the trip generated by each developer for Phase III.

Los Mezquites Phase III												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	220	Homes	9.44	0.76	1	2077	167	220	1558	125	165
DISTRIBUTION				50/50	26/74	64/36		43/124	141/79		32/93	106/59
Restaurant	934	9	1000 ft^2 GLA	470.95	50.97	51.36	4239	459	462	3179	344	347
DISTRIBUTION				50/50	52/48	51/49		239/220	236/226		179/165	177/170
Gymnasium	492	12	1000 ft^2 GLA		1.4	3.92		17	47		13	45
DISTRIBUTION				50/50	46/54	52/48		8/9	24/23		6/7	18/17
Retail/Office	712	30	1000 ft^2 GLA	16.19	3.26	3.73	486	98	112	365	74	84
DISTRIBUTION				50/50	60/40	46/54		59/39	51/60		44/29	38/45

Von Verde Phase III												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	245	Homes	9.44	0.76	1	2313	186	245	1735	140	187
DISTRIBUTION				50/50	26/74	64/36		48/138	157/88		36/104	118/66
Multi-Family	220	342	Dwelling unit	7.32	0.56	0.67	2503	192	135	1877	144	101
DISTRIBUTION				50/50	28/72	59/41		54/138	135/94		41/104	101/71
Shopping Center	820	250	1000 ft^2 GLA	37.75	3	4.21	9438	750	1053	7079	563	790
DISTRIBUTION				50/50	54/46	50/50		405/345	526/526		304/259	395/395

TABLE 11: Trip generation for Phase III

Von Verde	Total Daily Trips	AM	PM
Single Family	2313	186	245
Multi-family	2503	192	229
Commercial area	9438	750	1053
Von Verde	14254	1128	1527

Los Mezquites	Total Daily Trips	AM	PM
Single Family	2077	167	220
Restaurant	4239	459	462
Gymansium	300	17	47
Retail/Office	486	98	112
Los Mezquites	7102	741	841

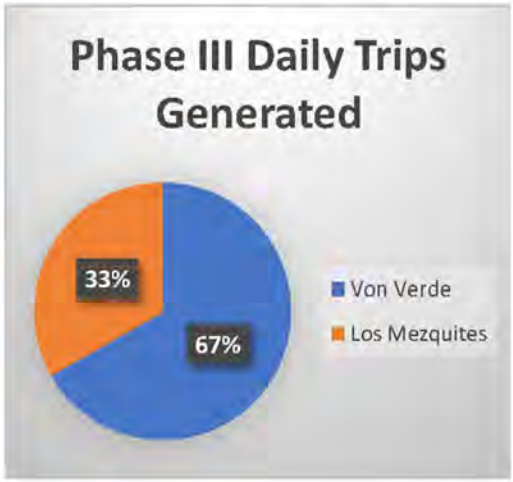

TABLE 12: Trip allocation for Phase III

B1.4 Phase IV (year 2026)

Phase IV of Los Mezquites is planned to be built by the year 2026. It will include 225 single family residences along with the opening of an additional 40,000 ft^2 of retail/office space. Von Verde will add 270 single family residences, 378 multi-family dwelling units, and a 500-student elementary school. See Tables 13 and 14 for peak hour trips generated in Phase IV.

Los Mezquites Phase IV												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	225	Homes	9.44	0.76	1	2124	171	225	1593	128	169
DISTRIBUTION				50/50	26/74	64/36		44/127	144/81		33/95	108/61
Retail/Office	712	40	1000 ft^2 GLA	16.19	3.26	3.73	648	130	149	486	98	112
DISTRIBUTION				50/50	60/40	46/54		78/52	69/81		59/39	52/61

Von Verde Phase IV												
Land Use	ITE Code	Size	Unit	Multiplier			Trips			With 25% internal capture		
				Daily	AM	PM	Daily	AM	PM	Daily	AM	PM
Single Family	210	270	Homes	9.44	0.76	1	2549	205	270	1912	154	203
DISTRIBUTION				50/50	26/74	64/36		53/152	173/97		40/114	130/73
Multi-Family	220	378	Dwelling unit	7.32	0.56	0.67	2767	212	253	2075	159	190
DISTRIBUTION				50/50	28/72	59/41		59/152	149/104		44/114	112/78
Elementary School	520	500	Students	1.89	0.65	0.34	945	325	170	709	244	128
DISTRIBUTION				50/50	54/46	45/55		176/150	77/94		132/113	58/71

TABLE 13: Trip generation for Phase IV

Von Verde	Total Daily Trips	AM	PM
Single Family	2549	205	270
Multi-family	2767	212	253
Elementary School	945	325	170
Von Verde	6261	742	693

Los Mezquites	Total Daily Trips	AM	PM
Single Family	2124	171	225
Retail/Office	648	130	149
Los Mezquites	2772	301	374

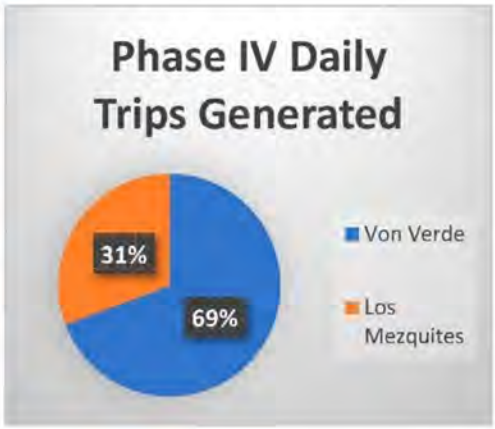

TABLE 14: Trip allocation for Phase IV

C. Traffic Volumes (Each horizon year)

The traffic generated by each phase of development was distributed and assigned among the existing road networks. Total traffic volumes were calculated for each phase. Figures 6, 12, 17, and 23 in Appendix A show the total traffic volumes for each phase.

Following Arizona Department of Transportation guidelines, the total build-out traffic volumes were projected 5 and 10 years after the opening of the final phase. The yearly growth factor used was 5%. Figures 29 and 30 show the projected peak hour volumes at year 2031 (5 years after build-out) and year 2036 (10 years after build-out).

6 Traffic and Improvement Analysis

A. Site access

Upon build-out, access will be provided via Avenue E, County 24th Street and County 23 ½ Street.

Avenue F is located one mile to the west of the proposed developments and is a major road that connects to Cesar Chavez Boulevard. Drivers can access the site from Avenue F via County 23 ½ Street and County 24th Street but this includes passing through several residential neighborhoods. Therefore, most of the traffic will use either Avenue E or County 24th Street to ingress and egress the site.

Representatives from the Arizona Department of Transportation commented on the recent General Plan Amendment application in the City of San Luis that an additional access to SR-195 (Cesar Chavez Boulevard) will not be allowed. In addition, there are no immediate plans by the City of San Luis to do any improvements to accommodate site traffic in this area.

B. Level of service analysis

An analysis was performed using Synchro 11 software to determine intersection level of service for the opening year of each phase. The following assumptions were used in this analysis:

1. Following the City of Yuma's *Traffic Impact Study Guidelines*, a saturation flow rate of 1700 passenger cars per hour of effective green time (pcphg) was used for through and right-turn movements and 1500 pcphg for left turns.
2. Also following City of Yuma guidelines, a 100-second traffic signal length was used for analysis conditions within five years of the present and 120 seconds for analysis years beyond five years.
3. There will be interconnectivity between the different land uses in each development reducing by 25% the generated traffic using the roadway network.
4. County 24th Street will be built and opened from 10th Avenue to Avenue F ½. This route will be available beginning with Phase I.
5. County 24th Street will be built per Table 5-3 of the City of San Luis 2040 General Plan, as a principal arterial roadway with a raised median and limited access.

The following tables present the results of this analysis for each study horizon.

INTERSECTION	TYPE	LOS (AM)	LOS (PM)	Remedial Action	LOS (AM)	LOS (PM)
Ave F/Cesar Chavez	Signalized	C	C			
Ave E/Cesar Chavez	Signalized	B	B			
Ave E/County 23 ½	Two-Way Stop	C	E			
Ave E/County 24	Two-way Stop	F	F	Install traffic signal with EB and WB improved to one lane in each direction	B	B
Ave E/County 24 ½	Two-way Stop	A	A			
Ave E/County 25th	Two-way Stop	A	A			
Access A	T-intersection	A	A			
Access B	T-intersection	A	A			
Access F	Right in/right out	A	B			
Access G	Right in/right out	A	B			
Access O	T-intersection	B	A			
Access P	T-intersection	A	A			
Access L	T-intersection	A	A			
Access S	T-intersection	B	B			
Access S2	Right in/right out	A	A			
Access R	Right in/right out	A	A			
Access S3	Right in/right out	A	B			

TABLE 15: Level of Service analysis for Phase I (2023)

INTERSECTION	TYPE	LOS (AM)	LOS (PM)	Remedial Action	LOS (AM)	LOS (PM)
Ave F/Cesar Chavez	Signalized	D	D			
Ave E/Cesar Chavez	Signalized	B	C			
Ave E/County 23 ½	Signalized	D	F	Install traffic signal with EB and WB improved to one lane in each direction	B	B
Ave E/County 24	Signalized	B	C			
Ave E/County 24 ½	Two-way Stop	B	A			
Ave E/County 25th	Two-way Stop	A	A			
Access A	T-intersection	A	A			
Access B	T-intersection	A	B			
Access F	Right in/right out	B	B			
Access G	Right in/right out	B	B			
Access O	Two-way stop	C	B			
Access P	Two-way stop	B	B			
Access L	T-intersection	A	A			
Access S	T-intersection	C	C			
Access S2	Right in/right out	A	A			
Access R	Right in/right out	A	A			
Access S3	Right in/right out	B	B			
Access C	Right in/right out	A	A			
Access I	Right in/right out	A	A			
Access Q	T-intersection	A	A			

TABLE 16: Level of Service analysis for year 2024 (Phase II)

INTERSECTION	TYPE	LOS (AM)	LOS (PM)	Remedial Action	LOS (AM)	LOS (PM)
Ave F/Cesar Chavez	Signalized	D	E	Dual through lanes in the eastbound and westbound directions	C	C
Ave E/Cesar Chavez	Signalized	D	E	Dual left turn lanes in the westbound direction	C	B
Ave E/County 23 ½	Signalized	C	C			
Ave E/County 24	Signallized	D	E	Additional left turn lane in the SB and NB directions	C	C
Ave E/County 24 ½	Two-way Stop	B	A			
Ave E/County 25th	Two-way Stop	A	B			
Access A	T-intersection	B	A			
Access B	T-intersection	B	B			
Access F	Right-in/right-out	B	B			
Access G	Right-in/right-out	B	C			
Access O	Two-way stop	F (NB)	C	Install all-way stop sign	C	C
Access P	Two-way stop	E	F (SB)	Install all-way stop sign	B	C
Access L	T-intersection	A	A			
Access S	T-intersection	B	E	Eliminate/Prohibit left turn lanes into Avenue E		
Access S2	Right-in/right-out	B	B			
Access R	Right-in/right-out	A	A			
Access S3	Right-in/right-out	B	B			
Access C	Right-in/right-out	B	B			
Access I	Right-in/right-out	B	B			
Access Q	T-intersection	A	A			
Access D	T-intersection	C	E	Eliminate/Prohibit left turn lanes into Avenue E		
Access E	Two-way stop	A	B			

TABLE 17: Level of Service analysis for year 2025 (Phase III)

INTERSECTION	TYPE	LOS (AM)	LOS (PM)	Remedial Action	LOS (AM)	LOS (PM)
Ave F/Cesar Chavez	Signalized	C	C			
Ave E/Cesar Chavez	Signalized	D	C			
Ave E/County 23 ½	Signalized	C	D			
Ave E/County 24	Signalized	C	E			
Ave E/County 24 ½	Two-way Stop	B	B			
Ave E/County 25th	Two-way Stop	B	B			
Access A	T-intersection	B	C			
Access B	T-intersection	C	C			
Access F	Right-in/right-out	B	B			
Access G	Right-in/right-out	B	C			
Access O	All-way stop	C	F	Install a traffic signal	C	C
Access P	All-way stop	B	C			
Access L	Two-way stop	B	B			
Access S	T-intersection	B	B			
Access S2	Right-in/right-out	B	B			
Access R	Right-in/right-out	A	A			
Access S3	Right-in/right-out	B	B			
Access C	Right-in/right-out	B	B			
Access I	Right-in/right-out	B	B			
Access Q	T-intersection	A	A			
Access D	T-intersection	B	B			
Access E	Two-way stop	A	B			
Access H	T-intersection	A	A			
Access K	T-intersection	A	A			
Access J	T-intersection	B	B			

TABLE 18: Level of Service analysis for year 2026 (Phase IV)

An analysis was performed for the five- and ten-year projections after buildout. The results are summarized in the table below.

					With another access open to Cesar Chavez Blvd. or Ave B			
INTERSECTION	2031 LOS		2036 LOS		2031 LOS		2036 LOS	
	AM	PM	AM	PM	AM	PM	AM	PM
Ave F/Cesar Chavez	F	F	F	F				
Ave E/Cesar Chavez	F	F	F	F	B	B	C	D
Ave E/County 23 ½	C	D	C	F	C	C	C	C
Ave E/County 24	F	F	F	F	D	D	F	F
Ave E/County 24 ½	B	B	C	B				
Ave E/County 25th	B	B	B	B				

TABLE 19: Level of Service at years 2031 and 2036

Results show that five years after buildout, four of the major intersections will be operating at Level of Service F. This highlights the need for an additional access route to connect to the major arterial streets, for example, connecting Avenue D to Cesar Chavez Boulevard or extending County 24th Street to Avenue B.

Using the projected traffic volumes at buildout (year 2026), the storage and taper lengths of turn lanes at the major intersections were determined.

The storage length is found by applying the following formula:

Storage Length = [1.5 x (veh/hr)/(cycles/hr)] x 25 ft (for signalized intersections)

The taper length is determined by the formula $L=W*S/2$ for symmetrical widening, where S= posted speed limit and W=offset in feet.

For the intersection of Avenue E and Cesar Chavez Boulevard, the turn lanes were designed using *Arizona Department of Transportation Traffic Guidelines and Processes (TGP) 430*.

County 23 ½ St								
	WB right	WB left	EB right	EB left	NB right	NB left	SB right	SB left
Traffic (veh/hr)	173	212	114	58	242	136	101	213
Storage Length (ft)	200	225	150	100	250	150	125	225
Taper Length (ft)	60	225	60	225	60	225	60	225

County 24th St								
	WB right	WB left	EB right	EB left	NB right	NB left	SB right	SB left
Traffic (veh/hr)	184	94	345	259	100	347	150	253
Storage Length (ft)	200	150	350	275	150	350	200	300
Taper Length (ft)	60	225	60	225	60	225	60	225

County 24 ½ St		
	WB right	SB left
Traffic (veh/hr)	338	357
Storage Length (ft)	375	375
Taper Length (ft)	60	225

Avenue E @ Cesar Chavez Blvd.		
	WB left	EB right
Taper (ft)	330	140
Gap (ft)	140	140
Storage Length (ft)	700	450

TABLE 20: Recommended minimum turn lane storage lengths

C. Roadway improvements

The City of San Luis has recently announced plans to pave County 24th Street to the east, between 10th Avenue and Avenue F ½, to give residents new access to the developments of the east of town. This measure will greatly help alleviate the amount of traffic on the major intersections of this study.

Traffic accessing the commercial areas is assumed to come primarily from the new residential subdivisions along with the neighboring existing residential areas to the west of Avenue E.

The Avenue E and County 24th Street intersection will have to be improved and fully built with a traffic signal and a turn lane in each direction during Phase I. By Phase III, this intersection will require dual left turn lanes in the southbound and northbound directions.

The intersection of Avenue E and County 23 ½ Street will require a traffic signal at Phase II.

Analysis indicates that left turns cause the intersection of Avenue E and Cesar Chavez Boulevard to fall to Level of Service E by year 2025. Dual left turn lanes should be added in the westbound direction.

The intersection of Avenue F and Cesar Chavez Boulevard is currently a busy intersection that will reach Level of Service E at year 2025. Widening Cesar Chavez Boulevard to dual through lanes in the eastbound and westbound directions is recommended.

D. Accesses and Driveways

The accesses studied in this analysis were determined by the preliminary site plans provided by Edais Engineering and Von Verde Development LLC. Some of the access locations were assumed. It is likely that some locations will change and that additional driveways will be approved and built at time of development once the design in finalized and the plans are reviewed by the City of San Luis.

Access P is the alignment of Avenue D ½ and County 24th St. This analysis shows that a two-way stop-controlled intersection will not be adequate at this location by Phase III. It is recommended that this intersection be reevaluated at that point, since its capacity depends on additional development to the east.

All driveways along Avenue E and County 24th Street were assumed to be right-in/right-out, except for Access O (see location on Figure 4). This was assumed to be a full-access intersection to allow for left turn movements into and out of the commercial area. These left turn movements cause the intersection to reach Level of Service F. Therefore, a traffic signal is recommended at this location at buildout year 2026.

Accesses D and S were assumed to allow full access to Avenue E. However, left turns out of the commercial area cause these intersections to reach a Level of Service F by Phase III. This analysis confirms that all driveways along Avenue E should be right-in/right-out.

It is recommended that all accesses and driveways be built per City of San Luis Standards with acceleration and deceleration lanes and the appropriate storage and taper lengths.

E. Traffic safety

Since the studied area is mostly vacant, no significant crash data is available. The City of San Luis provided collision data for Avenue E, County 23 ½ Street, and County 24th Street and the number of incidents is very low.

It is not anticipated that safety will be a major concern for these developments. The existing terrain is flat and level. Therefore, no sight distance problems are expected if all intersections are built to current design

standards. Since Avenue E is classified as a major arterial road, all driveways into the commercial areas along Avenue E are proposed to be right-in/right-out. It is recommended that all intersections with Avenue E be built per City of Yuma Construction Standard Detail Number 2-050, with the appropriate turn/acceleration/deceleration lanes and adequate storage lengths.

F. Pedestrian and bicyclist considerations

Consideration for both pedestrian and bicyclist traffic will not be included in this report as the existing roadway network does not feature routes or areas reserved exclusively for this method of transportation.

This study included the assumption that both Los Mezquites and the Von Verde developments will include interconnectivity between the different land uses. Providing such connectivity will reduce the traffic volume on the road network as well as encourage the community to use other forms of transportation, such as walking or cycling.

The proposed Von Verde development includes the construction of a new elementary school in Phase I and another in Phase II. If the children will not be transported by bus to school, then the traffic signals recommended in this report should coincide with the opening years of those schools.

For example, for the intersection of County 24th and Avenue D ½, this report states that a re-evaluation should be performed at Phase IV to determine if a traffic signal is warranted. However, if the school is built before that year, then the traffic signal should be reevaluated prior to the opening of the school.

Similarly, a new elementary school is planned to be completed and in operation within the next year from the preparation of this report in the southwest corner of County 23 ½ Street and Avenue F. If the children are not going to be transported by bus to the school from the Los Mezquites and Von Verde developments, then signalization of County 23 ½ Street and Avenue E should be evaluated at the opening year of the school.

7 Conclusions

The proposed Los Mezquites subdivision will encompass a total of 857 single family residences. The residential subdivision is expected to generate 551 AM trips and 857 PM daily peak hour trips when fully occupied. The commercial portion of the development is expected to generate approximately an additional 1600 and 1800 AM and PM peak hour trips, respectively.

The proposed Von Verde LLC development will include approximately 1459 single family residences, 1000 multi-family units, 78 acres of commercial area, and the construction of two elementary schools.

The City of San Luis has recently announced plans to build County 24th Street from 10th Avenue to Avenue F ½ within the next year to provide access to the developments in the east part of town. It is assumed that this work will be completed prior to Phase I of the Los Mezquites and Von Verde developments.

The intersection of Avenue E with County24th Street will reach capacity during Phase I of the development, at which time a signal is recommended. The intersection of Avenue E and County 23 ½ will reach capacity at Phase II of the development, at which time a signal is recommended. The timing of these recommendations should also be evaluated based on the opening of the proposed schools and the availability of school bus transportation.

The intersection of Avenue F and Cesar Chavez is currently operating at a Level of Service C. During Phase III, this intersection falls to Level of Service E. and will require dual through lanes in each direction.

The intersection of Avenue E and Cesar Chavez operating at an acceptable level, and it is expected to do so until Phase III at which time, dual westbound left turn lanes are recommended.

8 Recommendations

A. Roadway improvements

The proposed Los Mezquites subdivision will be constructed through 4 phases that will be a combination of residential lots and commercial properties. The opening year will be 2023 and the entire section is slated for completion in 2026. To accommodate for the yearly increase in traffic flow the following improvements are recommended based on how each successive phase affects the adjacent areas:

- To reduce traffic at the major intersections, interconnectivity from the residential to the commercial areas should be provided.
- During Phase I, improve the intersection of Avenue E and County 24th Street with a traffic signal and build according to City of San Luis standards. The eastbound and westbound approaches should contain at least one dedicated turn lane in each direction and at least one through lane.
- During Phase II, improve the intersection of Avenue E and County 23 1/2 Street with a traffic signal and build according to City of San Luis standards. The eastbound and westbound approaches should contain at least one dedicated turn lane in each direction and at least one through lane.
- At Phase III, improve the intersection of Avenue E and Cesar Chavez Boulevard to include dual left turn lanes in the westbound direction.
- At Phase III, dual left turn lanes in the southbound and northbound directions should be provided at the intersection of Avenue E and County 24th Street.
- At Phase III, the intersection of Avenue F and Cesar Chavez Boulevard reaches Level of Service E. The addition of an additional through lane in each direction is recommended.
- At Phase III, at the intersection of County 24th Street and the Avenue D ¾ alignment, a traffic signal is required to provide adequate ingress and egress to the commercial areas.
- At Phase IV, the capacity at the intersection of County 24th Street and Avenue D ½ should be reevaluated to determine if a two-way stop-controlled intersection is still adequate at this location. The performance of this intersections is dependent on additional development to the east.

The timing of these recommendations should also be evaluated based on the opening of the proposed schools and the availability of school bus transportation.

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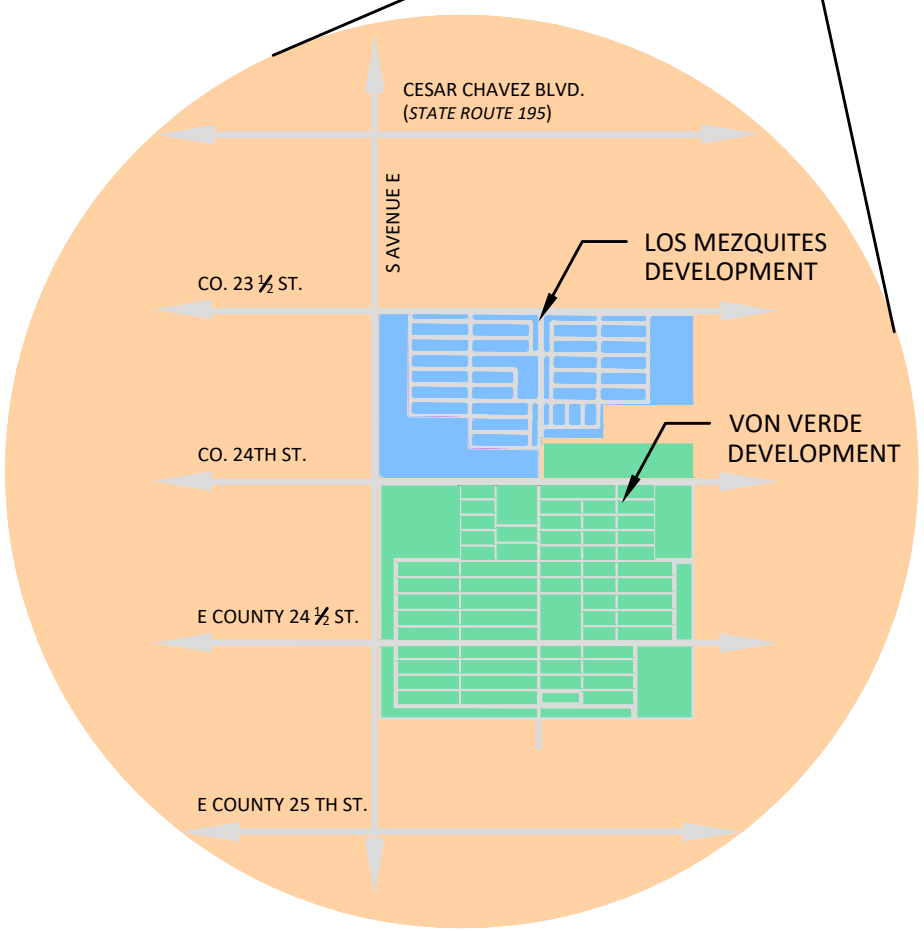


LEGEND

- LOS MEZQUITES AREA
- VON VERDE AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

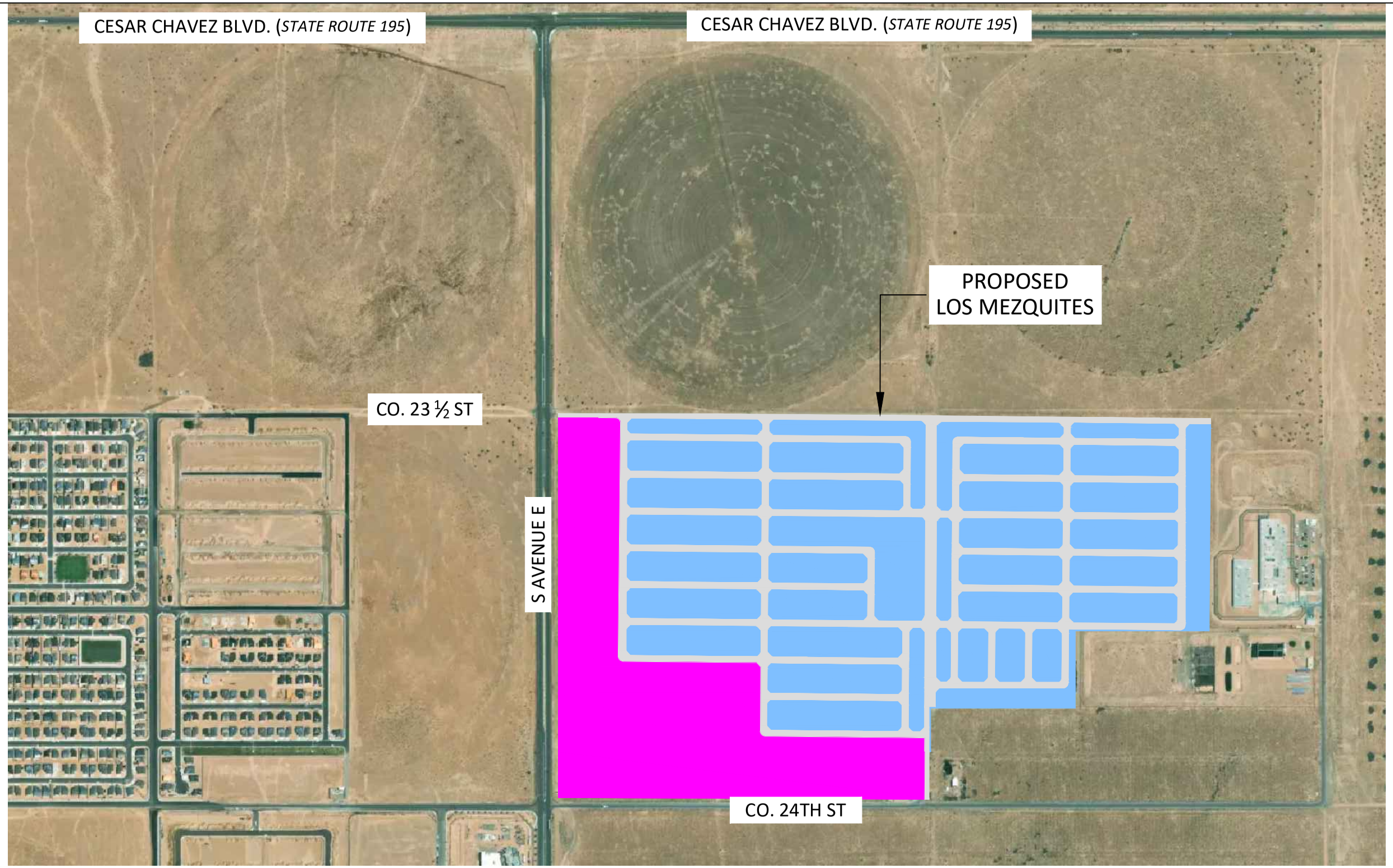
LOS MEZQUITES & VON VERDE DEVELOPMENT

VICINITY PLAN

SCALE:	NA
DATE:	OCTOBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 1



LEGEND

- RESIDENTIAL AREA
- COMMERCIAL AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

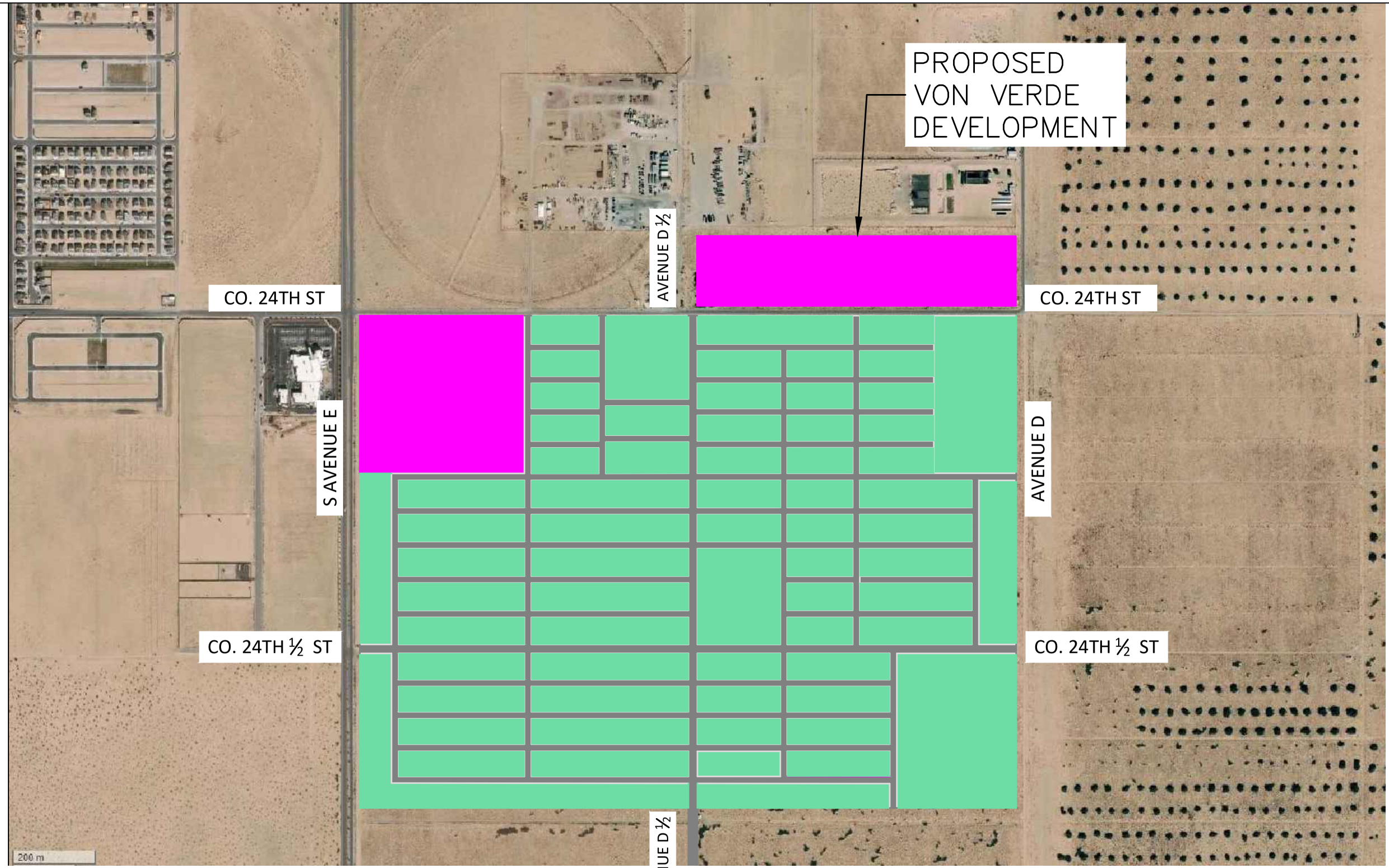
LOS MEZQUITES DEVELOPMENT

SITE PLAN

SCALE:	NA
DATE:	OCTOBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 2



LEGEND

- RESIDENTIAL AREA
- COMMERCIAL AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

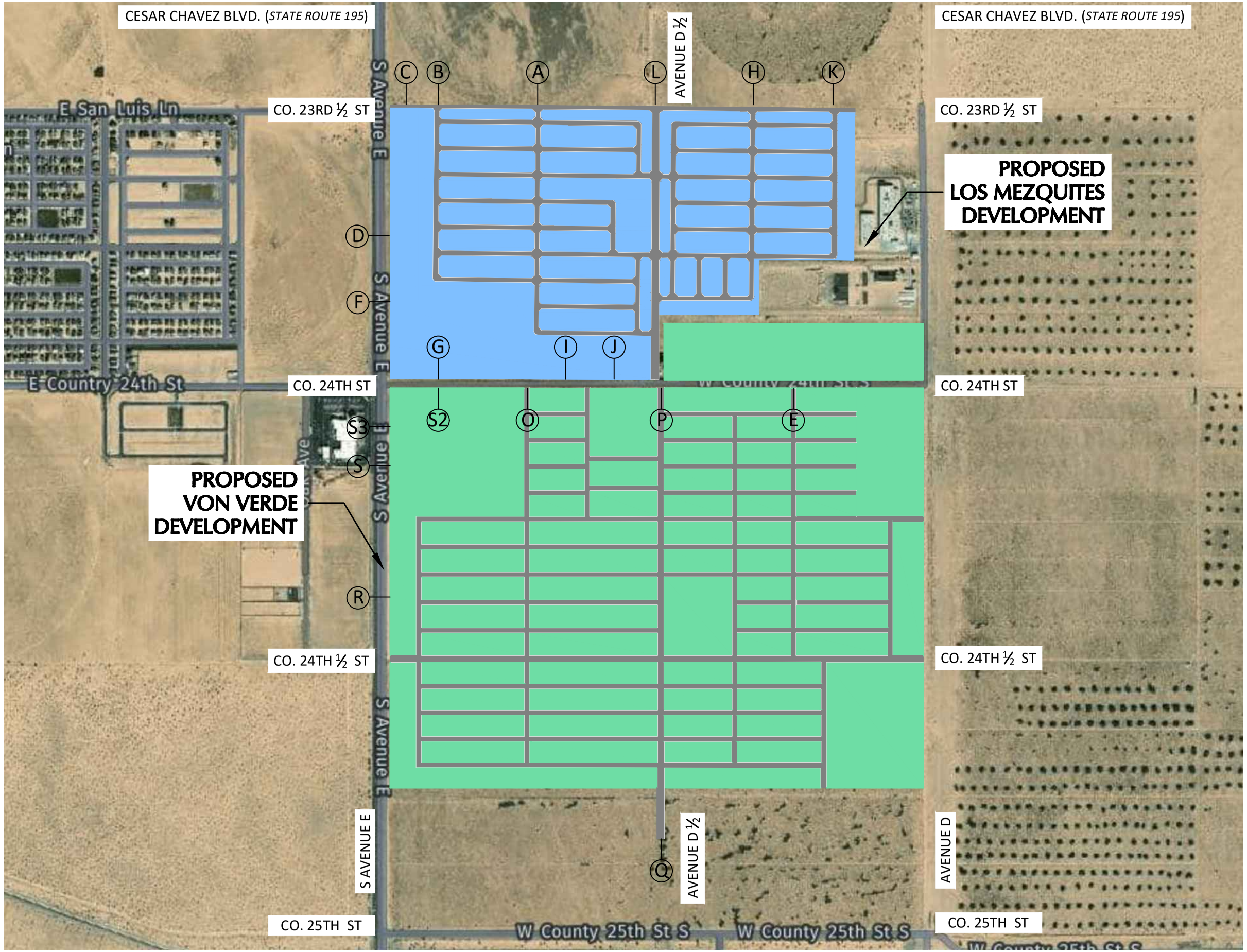
VON VERDE DEVELOPMENT

SITE PLAN

SCALE:	NA
DATE:	DECEMBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 3



LEGEND

- LOS MEZQUITES AREA
- VON VERDE AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

LOS MEZQUITES & VON VERDE DEVELOPMENTS

SITE PLAN

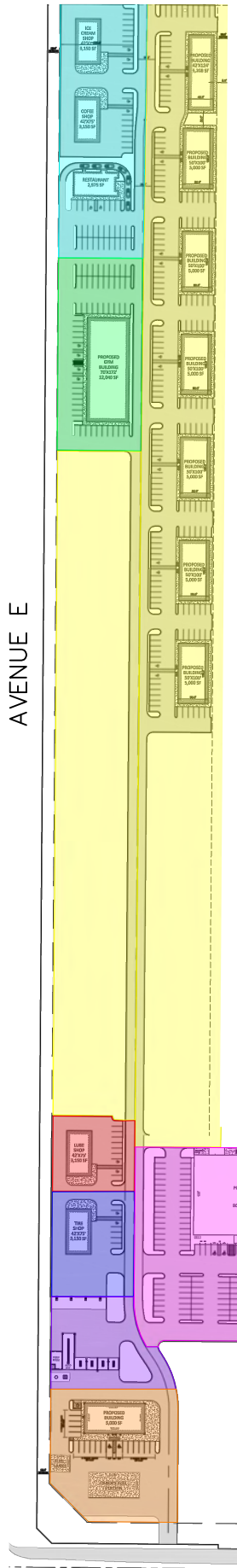
SCALE:	NA
DATE:	DECEMBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 4

COUNTY 23½ STREET (SAN LUIS LANE)

AVENUE E



COUNTY 24TH STREET

LEGEND

- RESTAURANT AREA
- GYMNASIUM AREA
- RETAIL AREA
- LUBE SHOP AREA
- TIRE SHOP AREA
- GROCERY AREA
- CAR WASH AREA
- GAS STATION AREA
- HOTEL AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

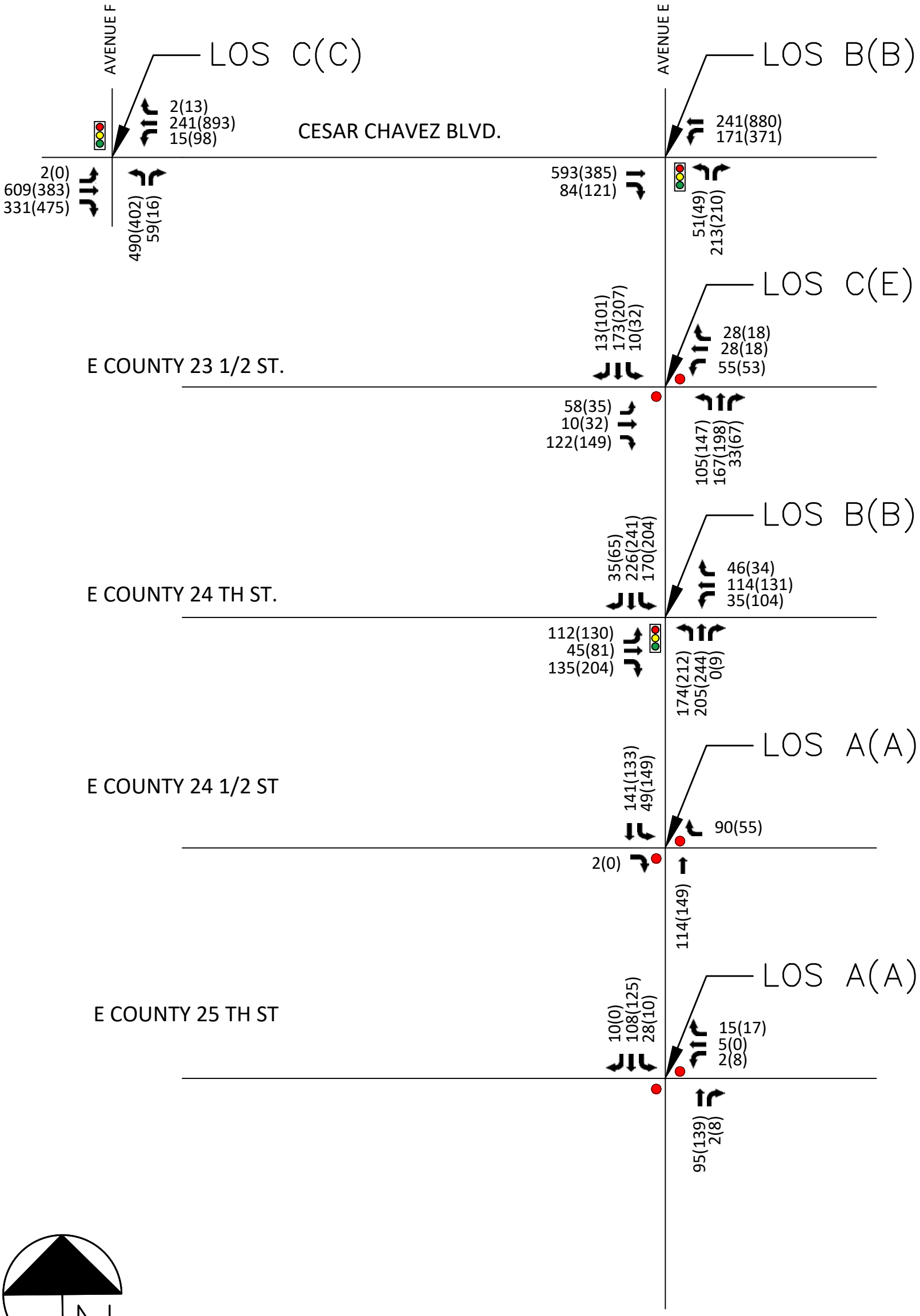
LOS MEZQUITES DEVELOPMENT

COMMERCIAL PLAN

SCALE:	NA
DATE:	DECEMBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 5

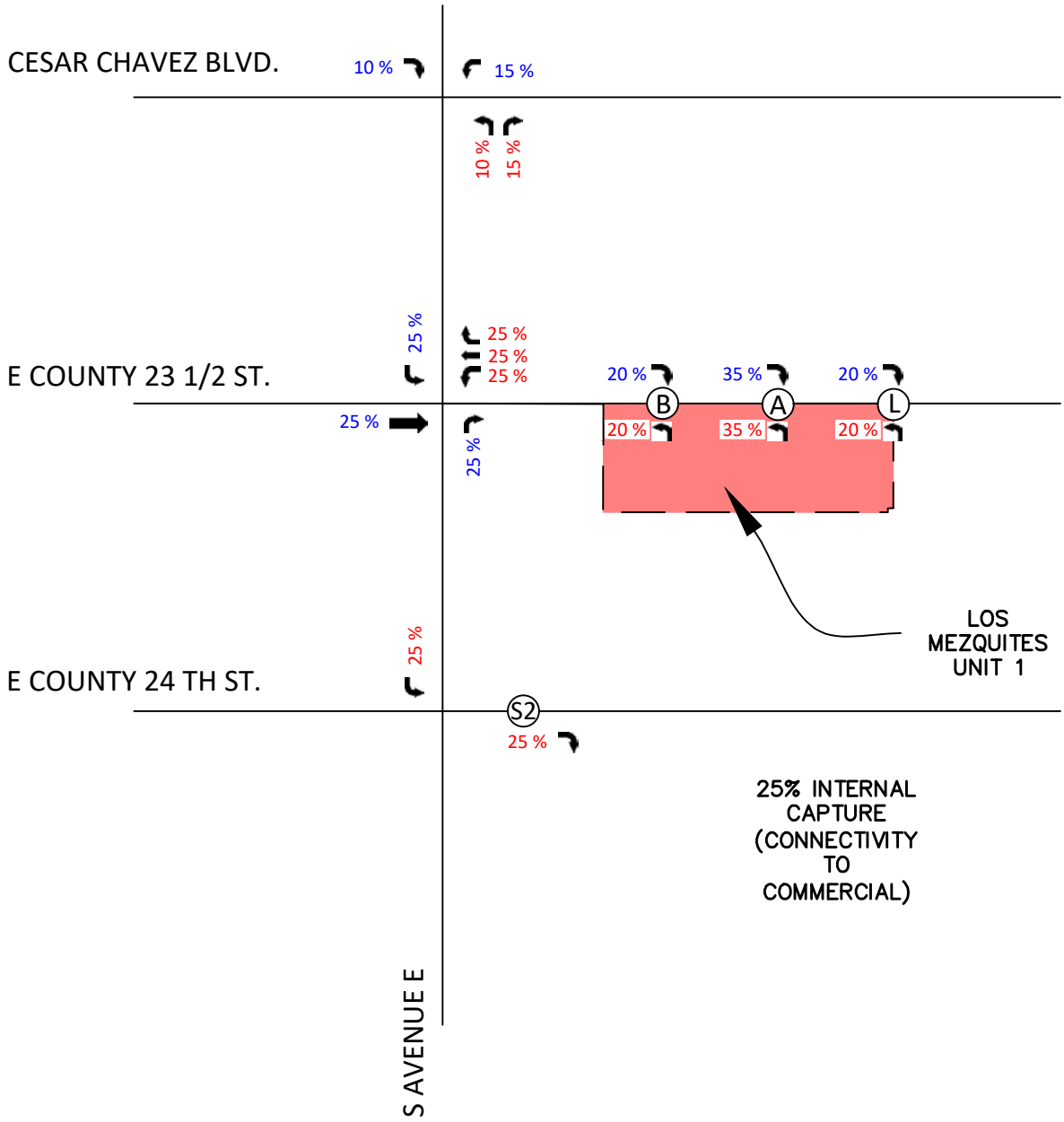


LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 6
Total Traffic Volumes

YEAR 2023 NOT TO SCALE



LEGEND

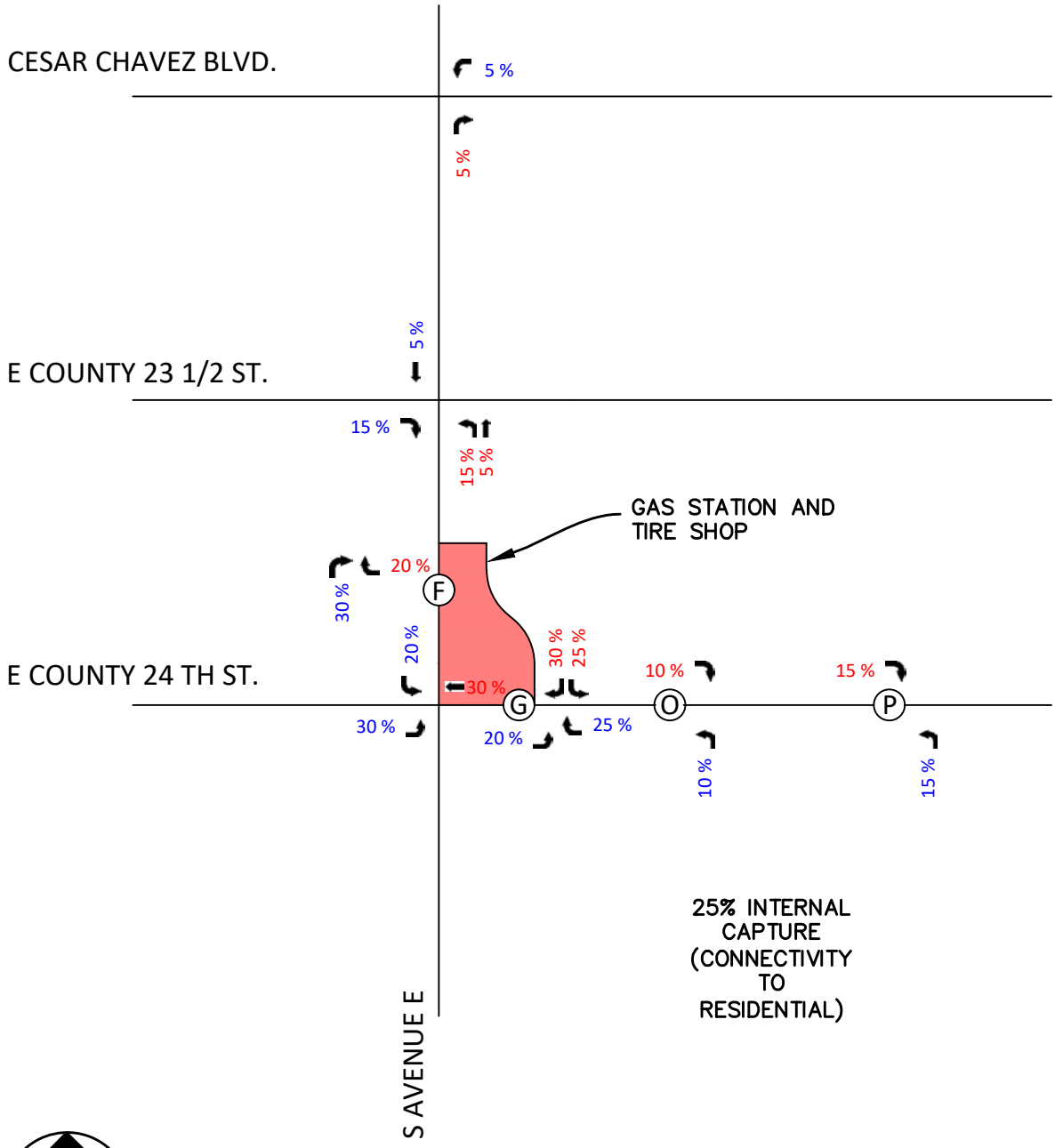
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 7

PHASE I TRIP DISTRIBUTION, RESIDENTIAL

LOS MEZQUITES, YEAR 2023

NOT TO SCALE



LEGEND

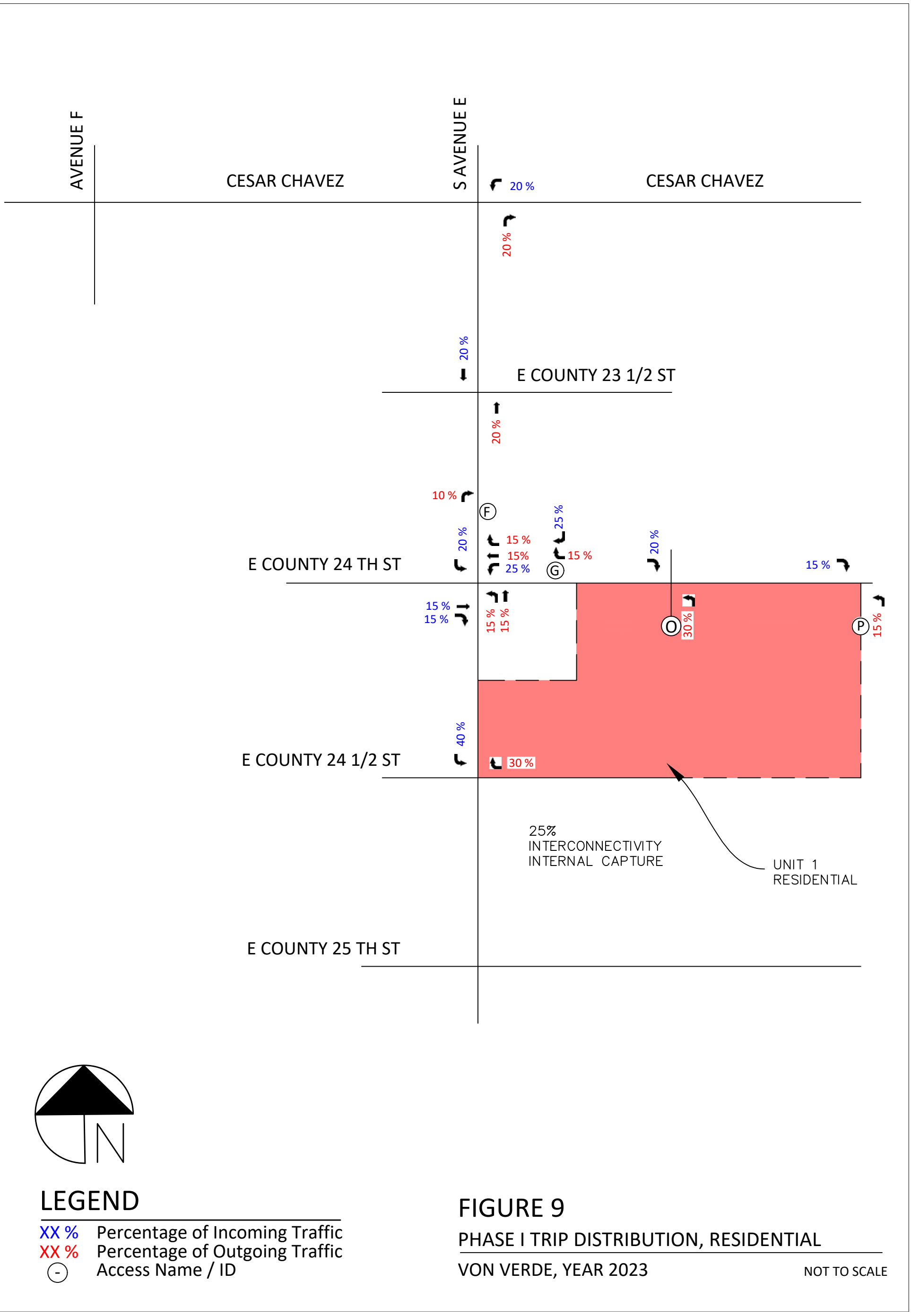
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 8

PHASE I TRIP DISTRIBUTION, COMMERCIAL

LOS MEZQUITES, YEAR 2023

NOT TO SCALE



LEGEND

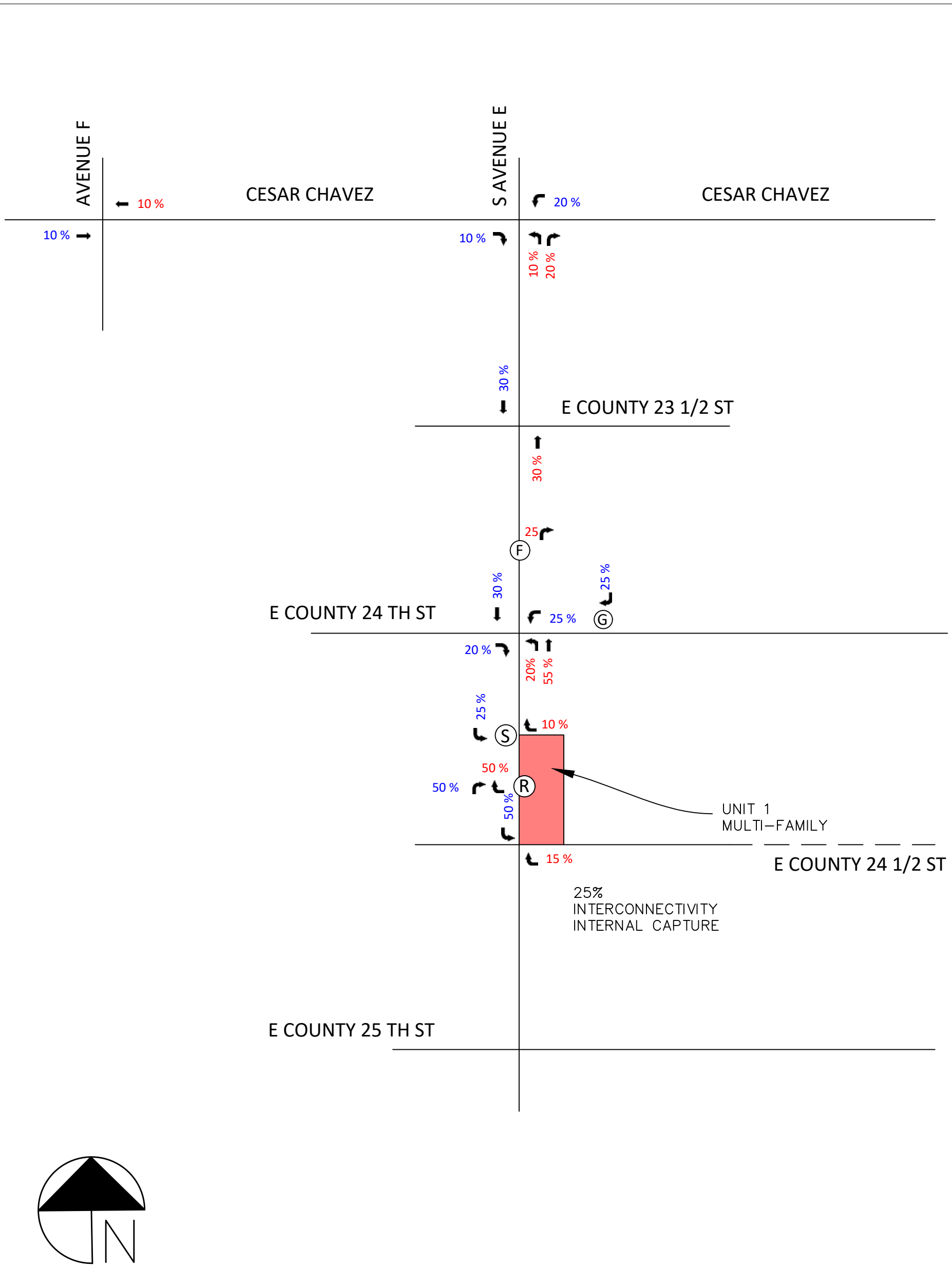
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 9

PHASE I TRIP DISTRIBUTION, RESIDENTIAL

VON VERDE, YEAR 2023

NOT TO SCALE



LEGEND

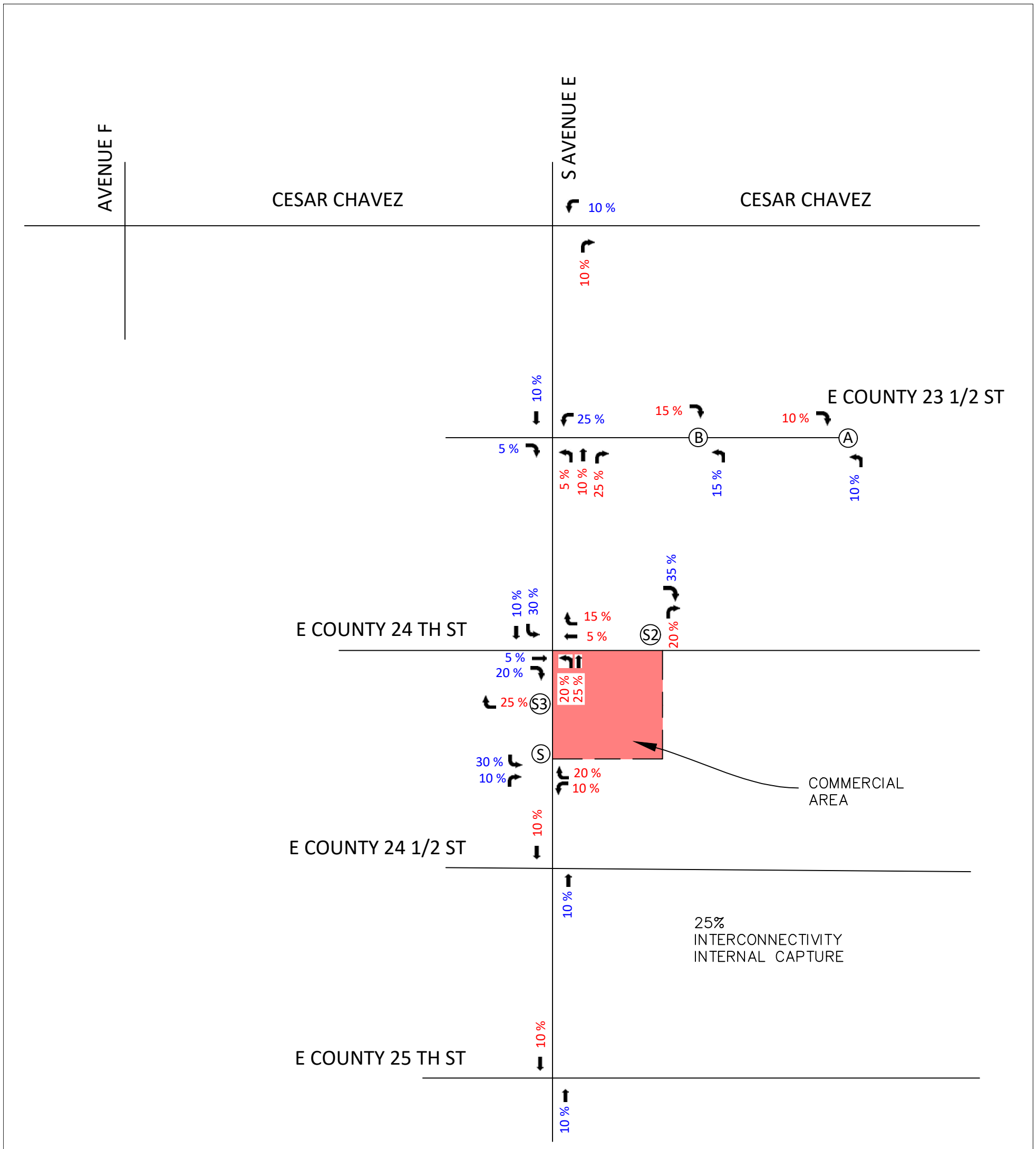
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 10

PHASE I TRIP DISTRIBUTION, MULTI-FAMILY

VON VERDE, YEAR 2023

NOT TO SCALE



LEGEND

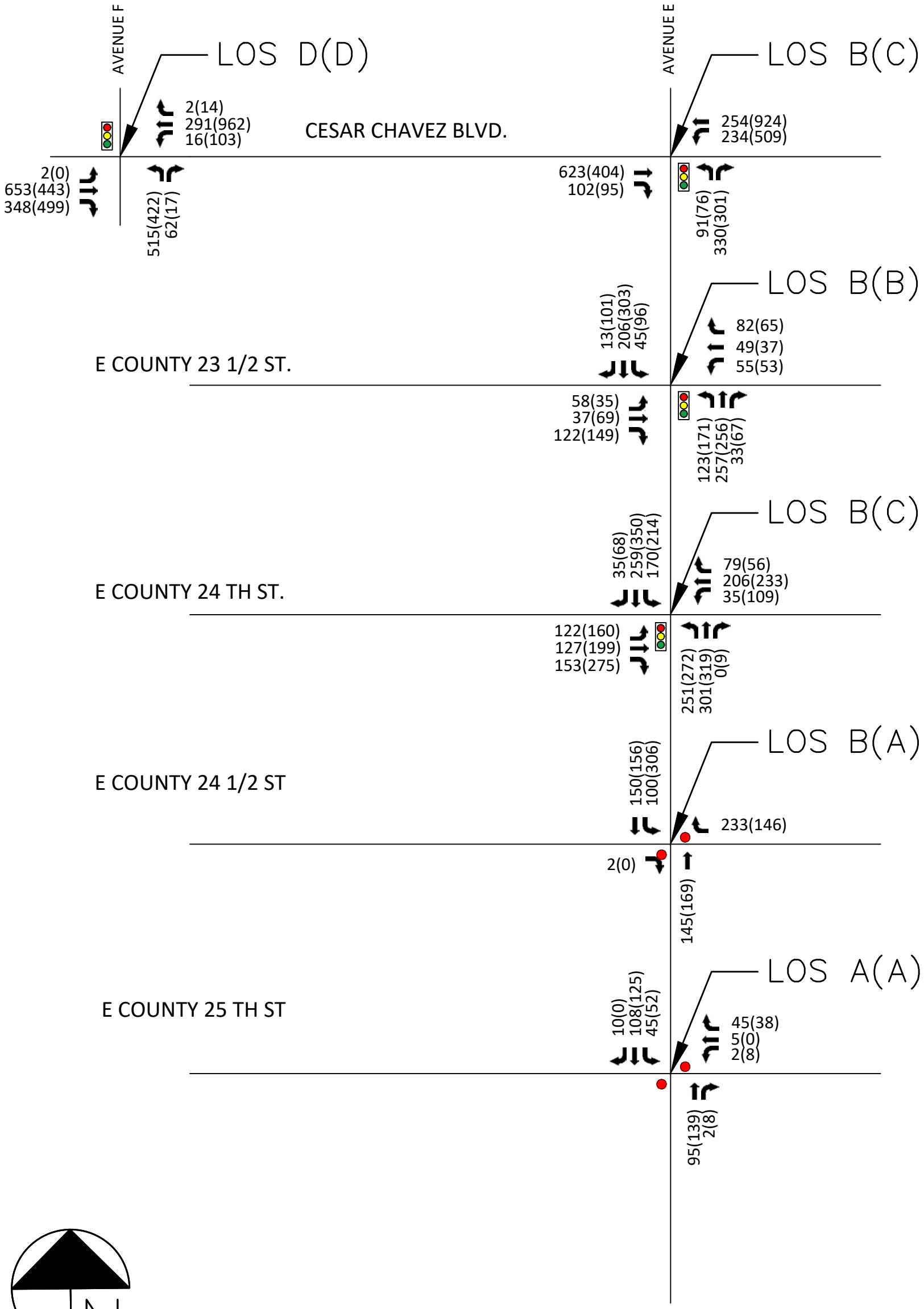
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 11

PHASE I TRIP DISTRIBUTION, COMMERCIAL

VON VERDE, YEAR 2023

NOT TO SCALE



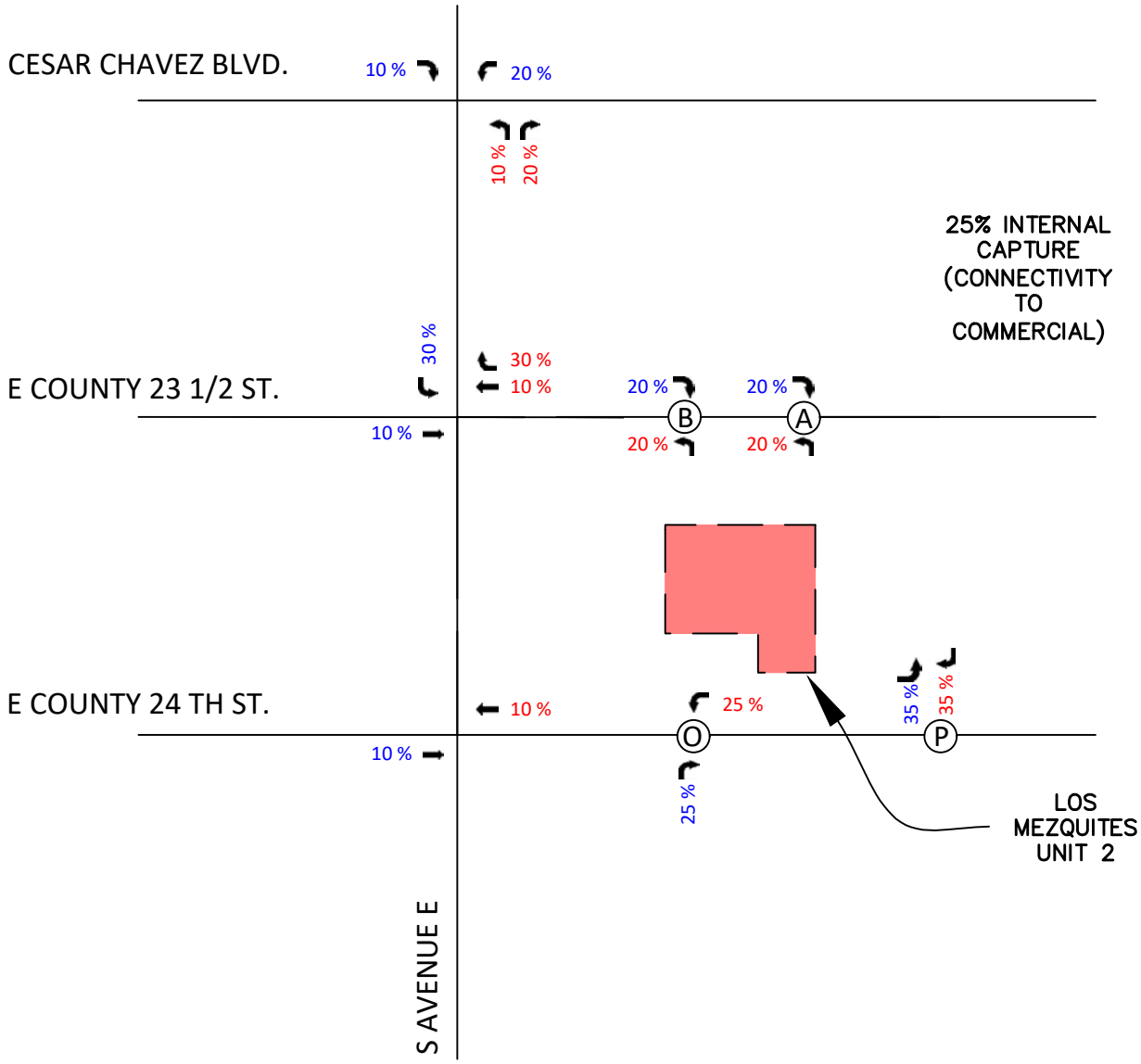
LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 12
Total Traffic Volumes

YEAR 2024

NOT TO SCALE



N

LEGEND

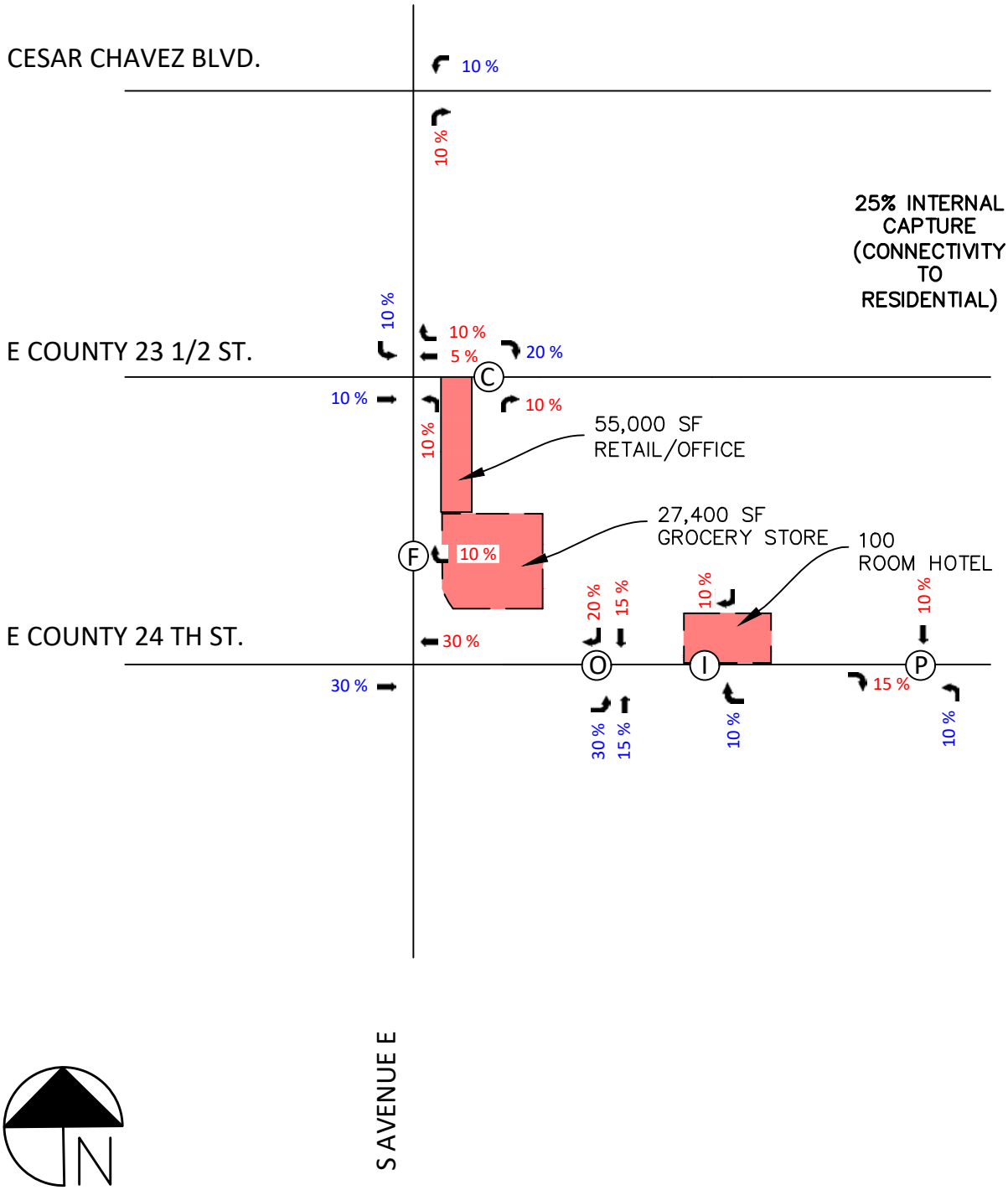
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 13

PHASE II TRIP DISTRIBUTION, RESIDENTIAL

LOS MEZQUITES, YEAR 2024

NOT TO SCALE



N

LEGEND

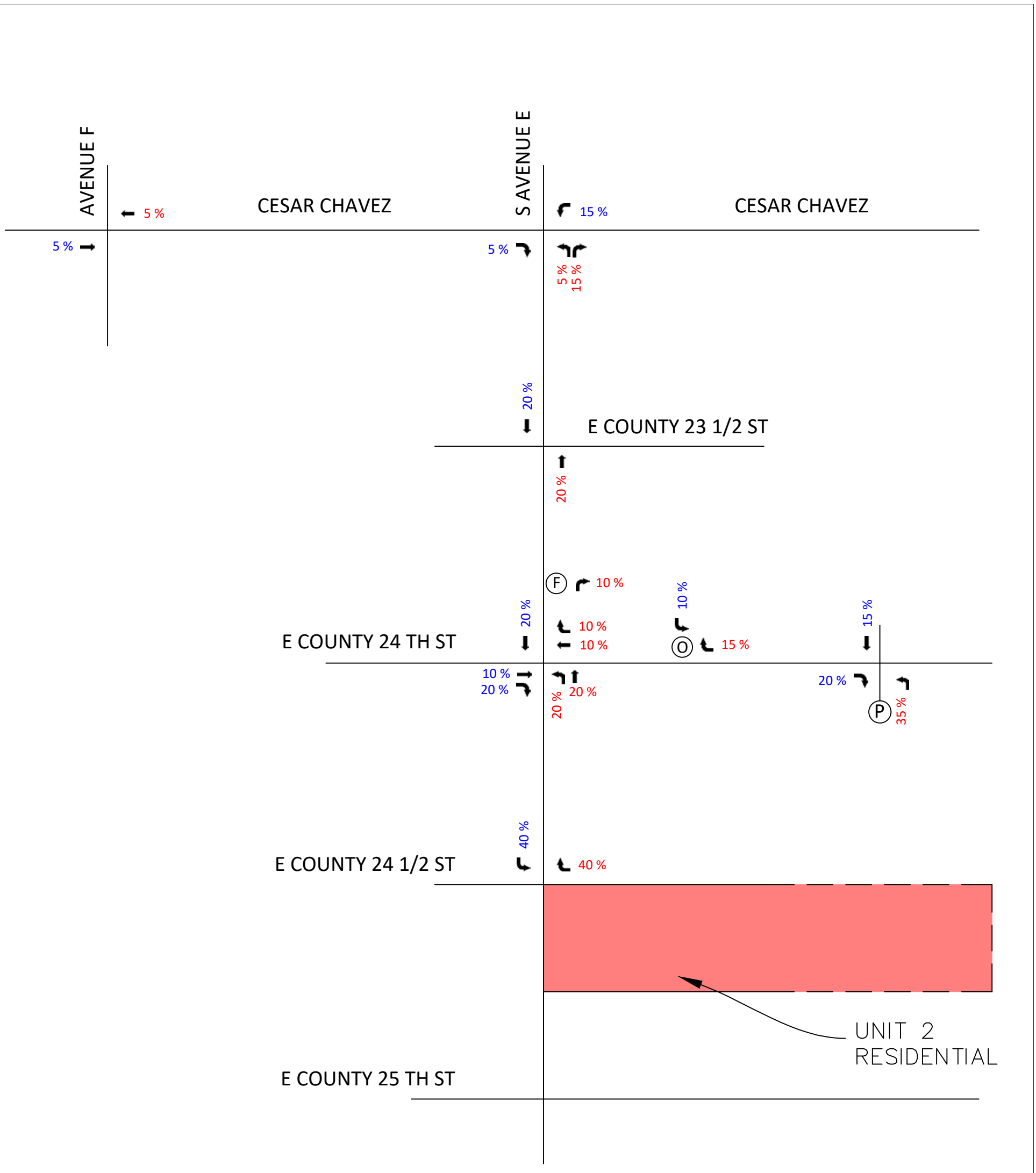
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 14

PHASE II TRIP DISTRIBUTION, COMMERCIAL

LOS MEZQUITES, YEAR 2024

NOT TO SCALE



LEGEND

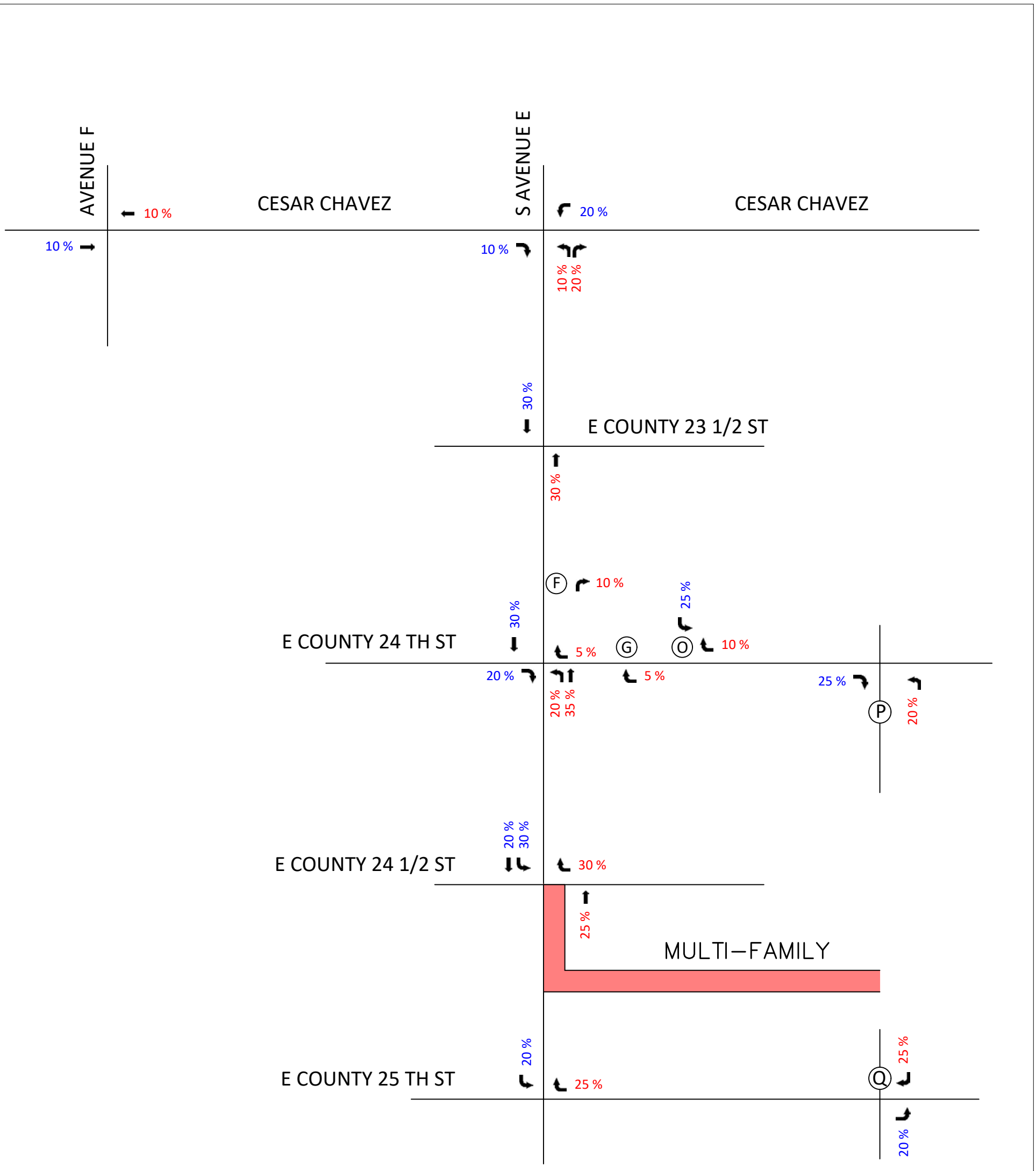
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 15

PHASE II TRIP DISTRIBUTION, RESIDENTIAL

VON VERDE, YEAR 2024

NOT TO SCALE



LEGEND

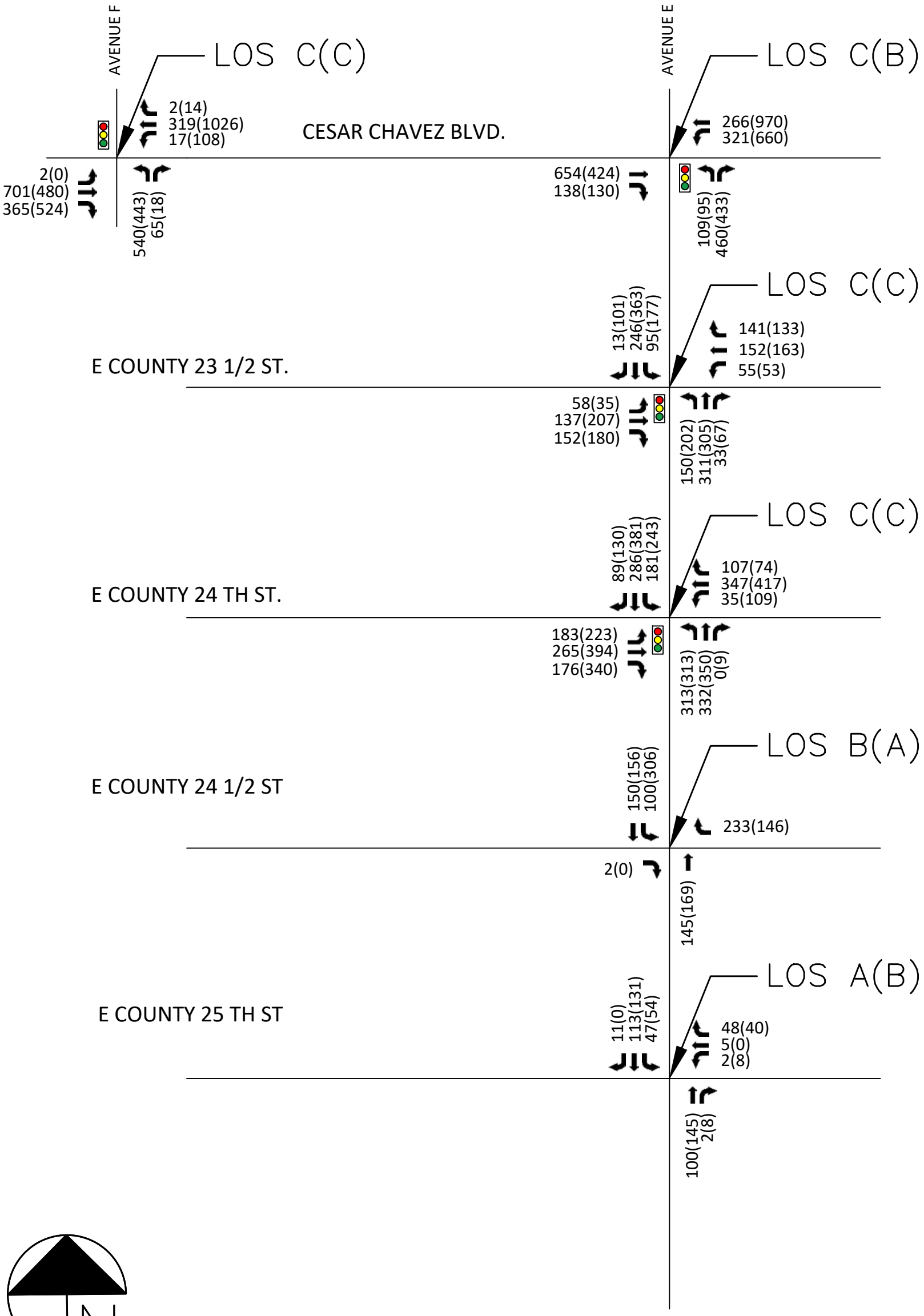
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 16

PHASE II TRIP DISTRIBUTION, MULTI-FAMILY

VON VERDE, YEAR 2024

NOT TO SCALE

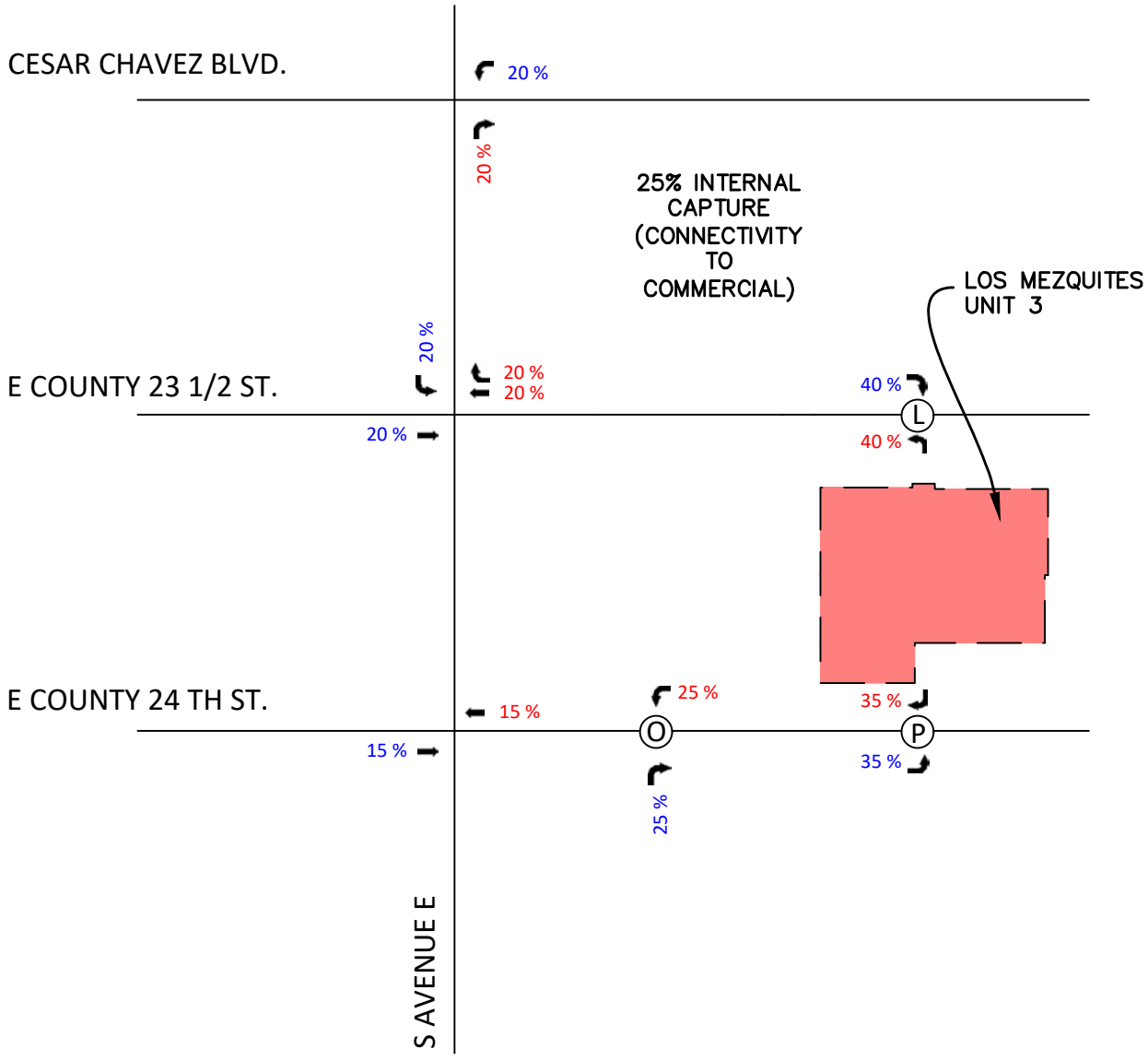


LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 17
Total Traffic Volumes

YEAR 2025 NOT TO SCALE



N

LEGEND

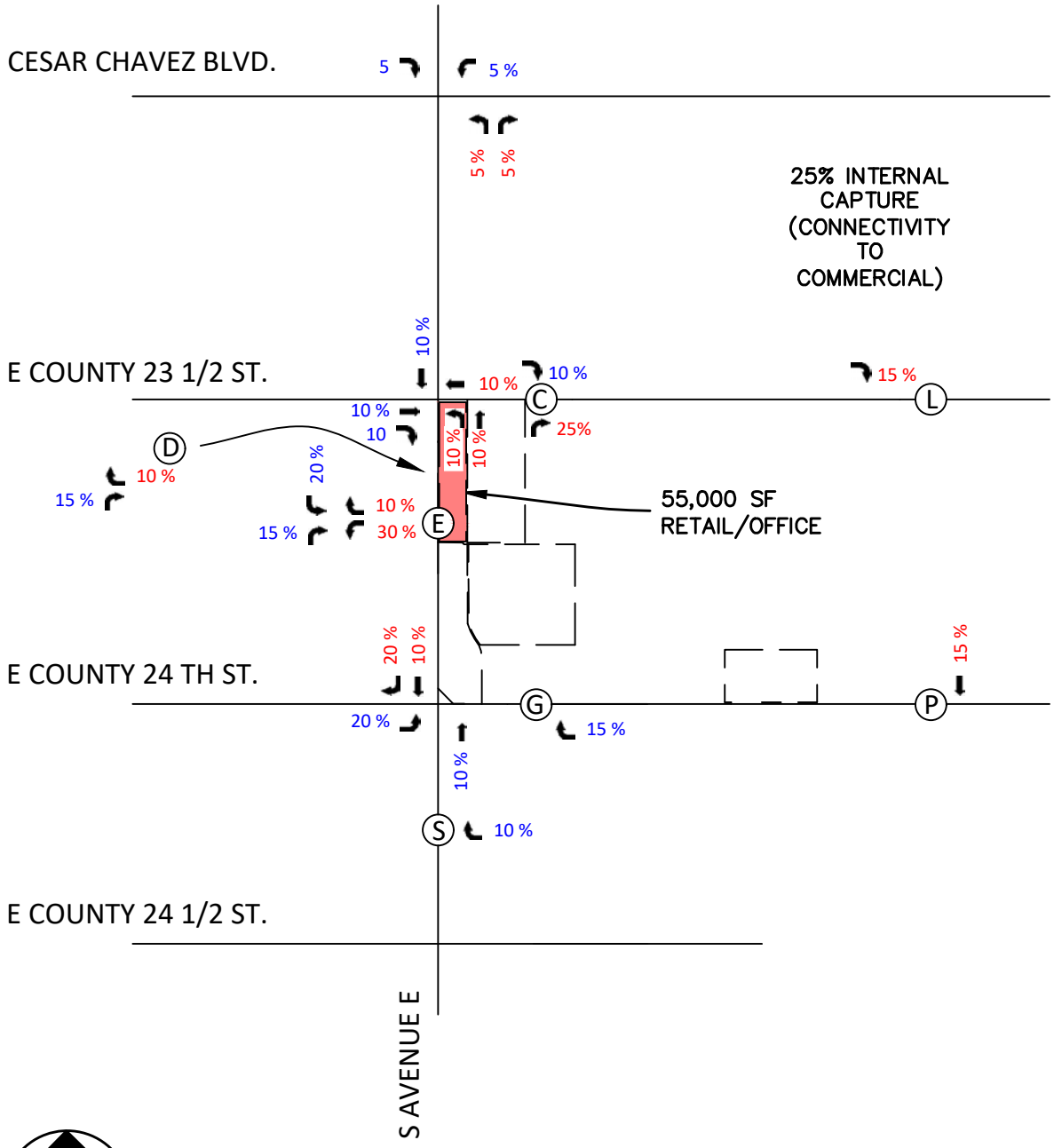
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 18

PHASE III TRIP DISTRIBUTION, RESIDENTIAL

LOS MEZQUITES, YEAR 2025

NOT TO SCALE



LEGEND

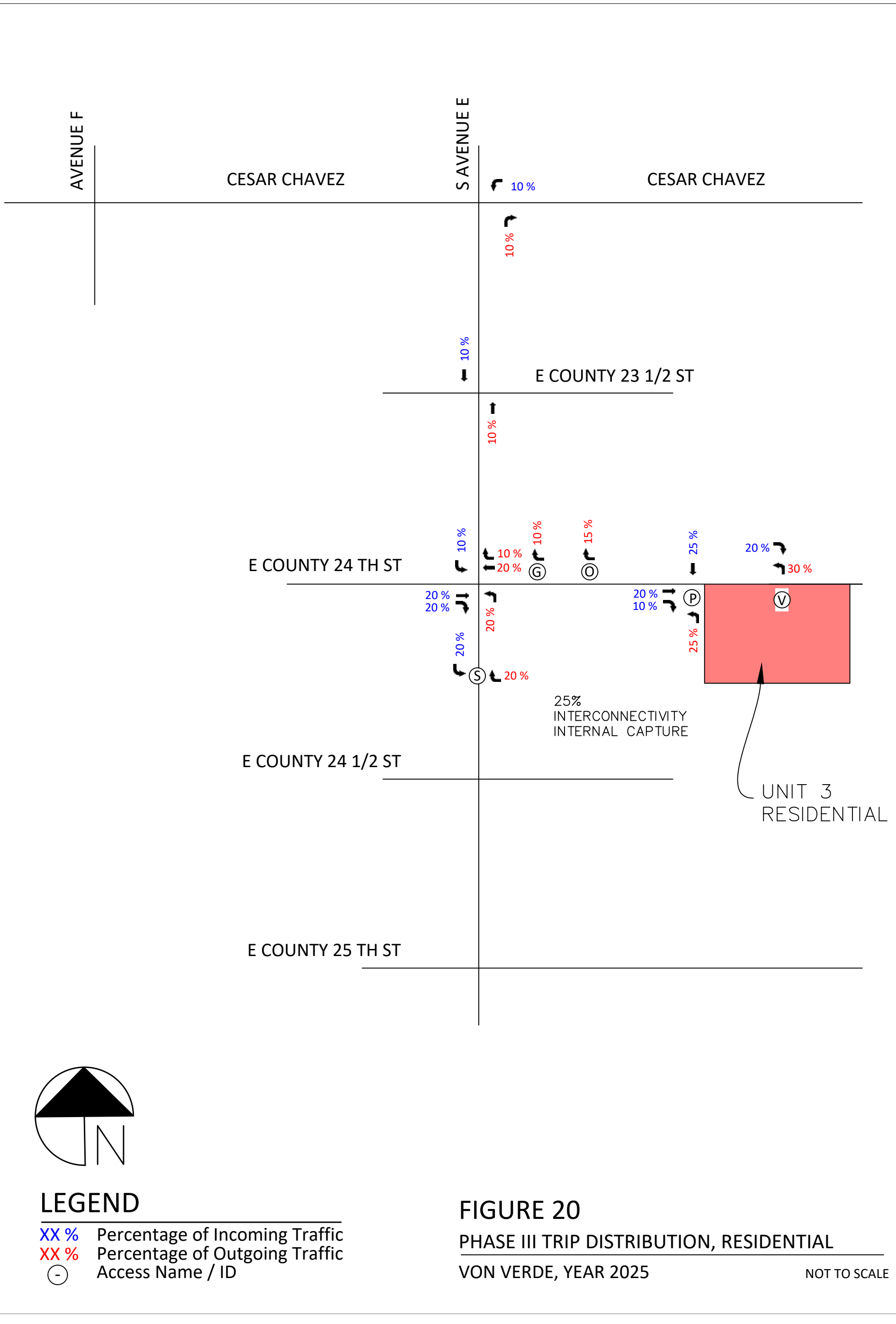
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 19

PHASE III TRIP DISTRIBUTION, COMMERCIAL

LOS MEZQUITES, YEAR 2025

NOT TO SCALE



LEGEND

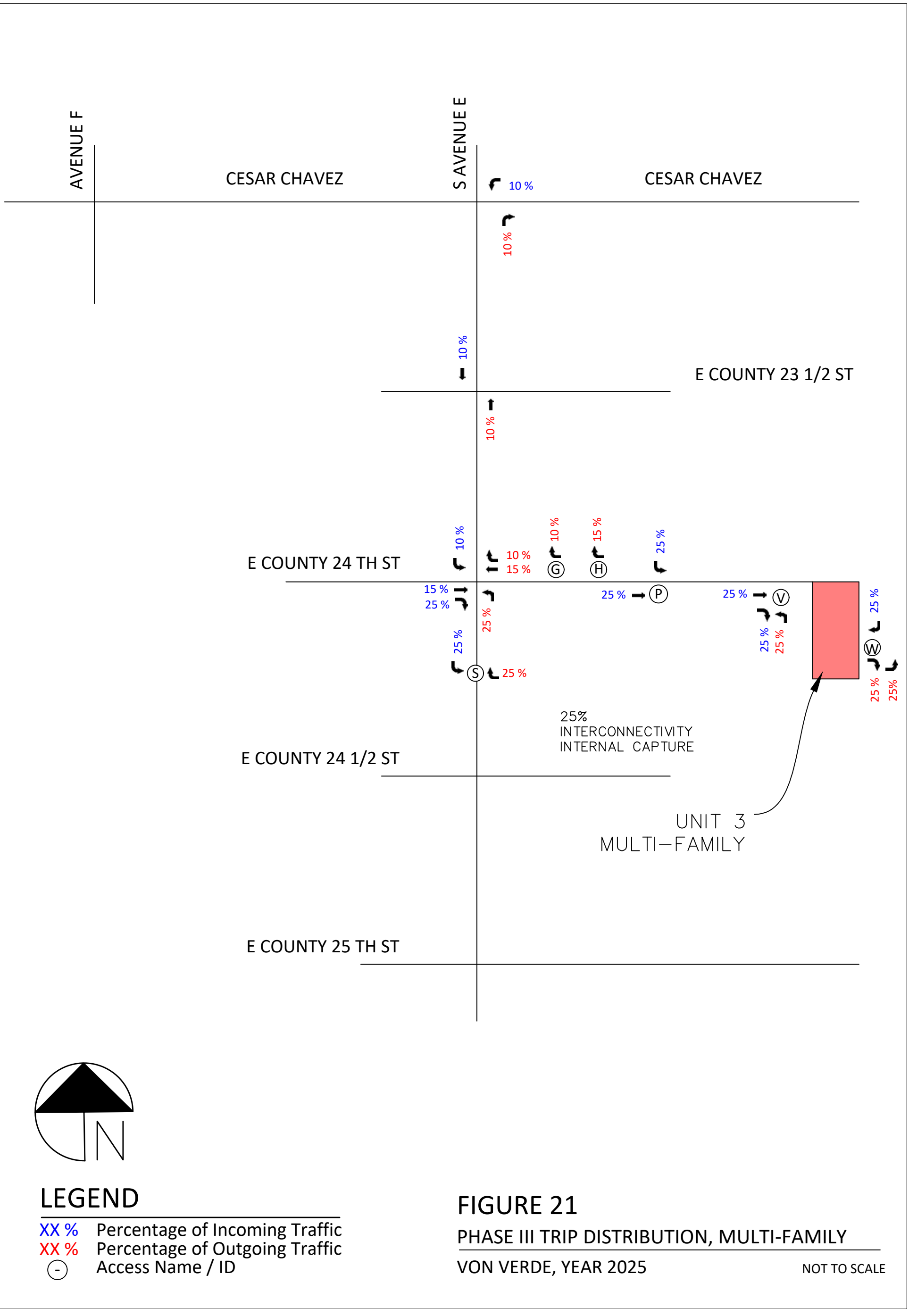
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 20

PHASE III TRIP DISTRIBUTION, RESIDENTIAL

VON VERDE, YEAR 2025

NOT TO SCALE



LEGEND

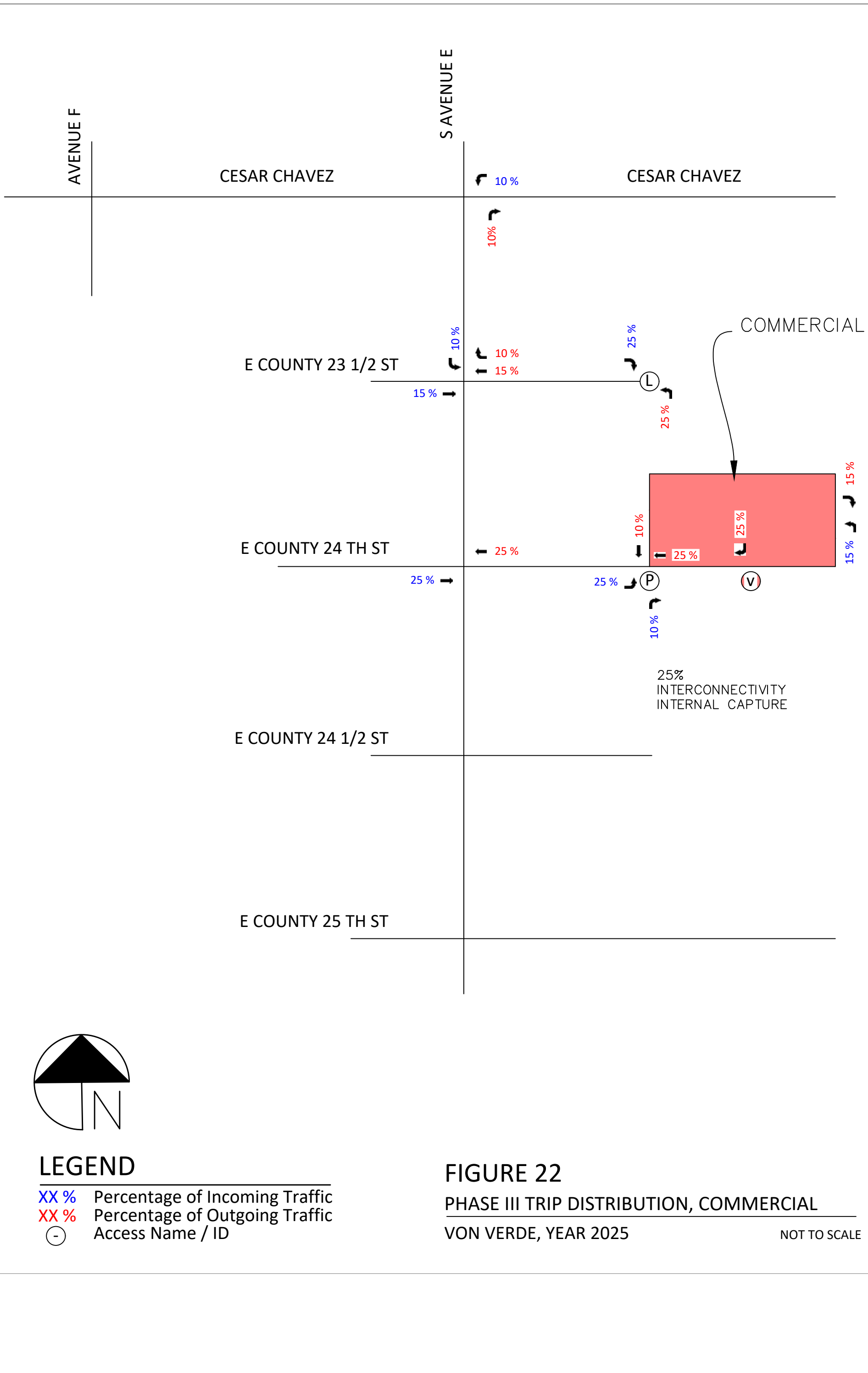
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 21

PHASE III TRIP DISTRIBUTION, MULTI-FAMILY

VON VERDE, YEAR 2025

NOT TO SCALE



LEGEND

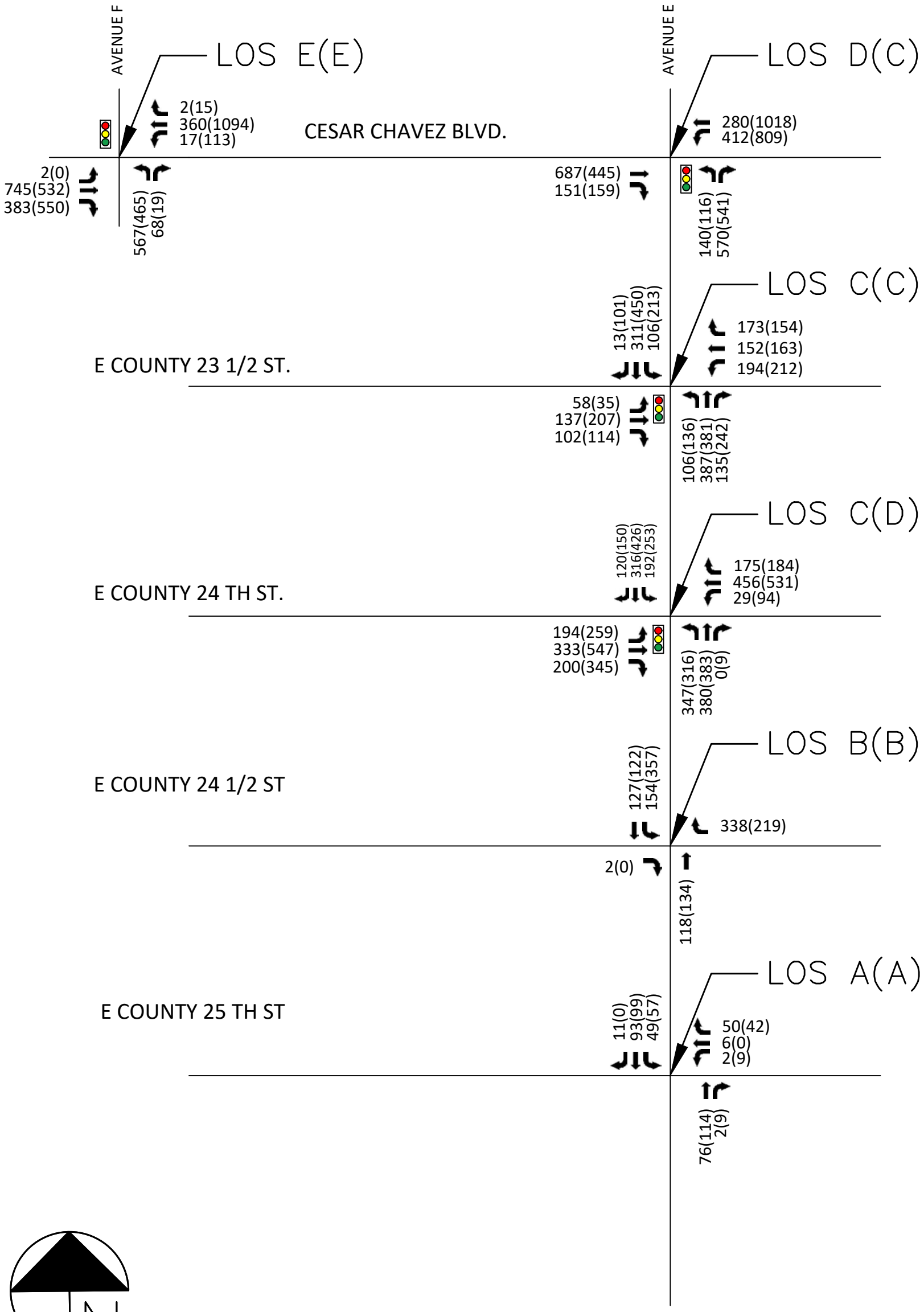
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 22

PHASE III TRIP DISTRIBUTION, COMMERCIAL

VON VERDE, YEAR 2025

NOT TO SCALE



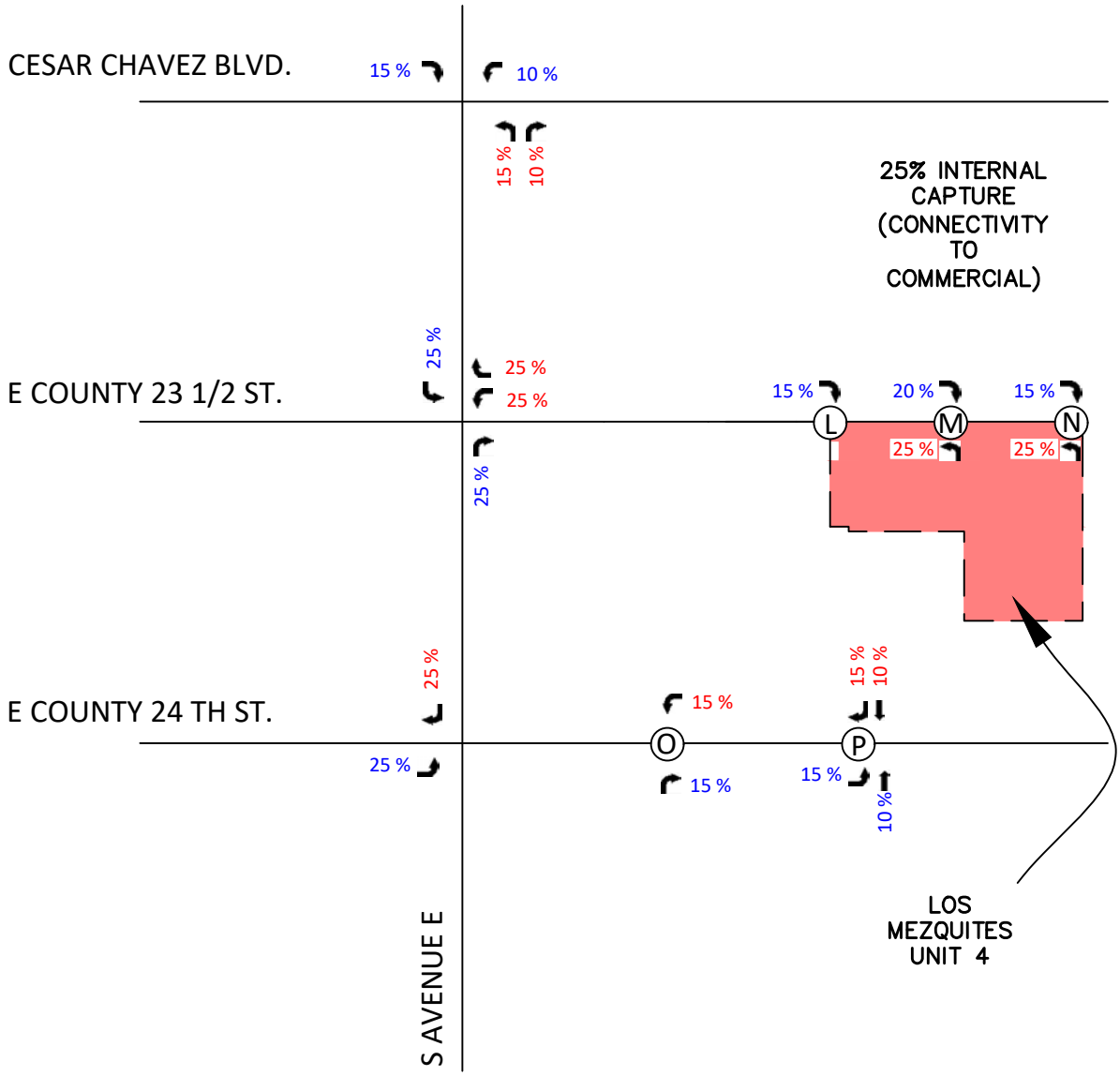
LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 23
Total Traffic Volumes

YEAR 2026

NOT TO SCALE



N

LEGEND

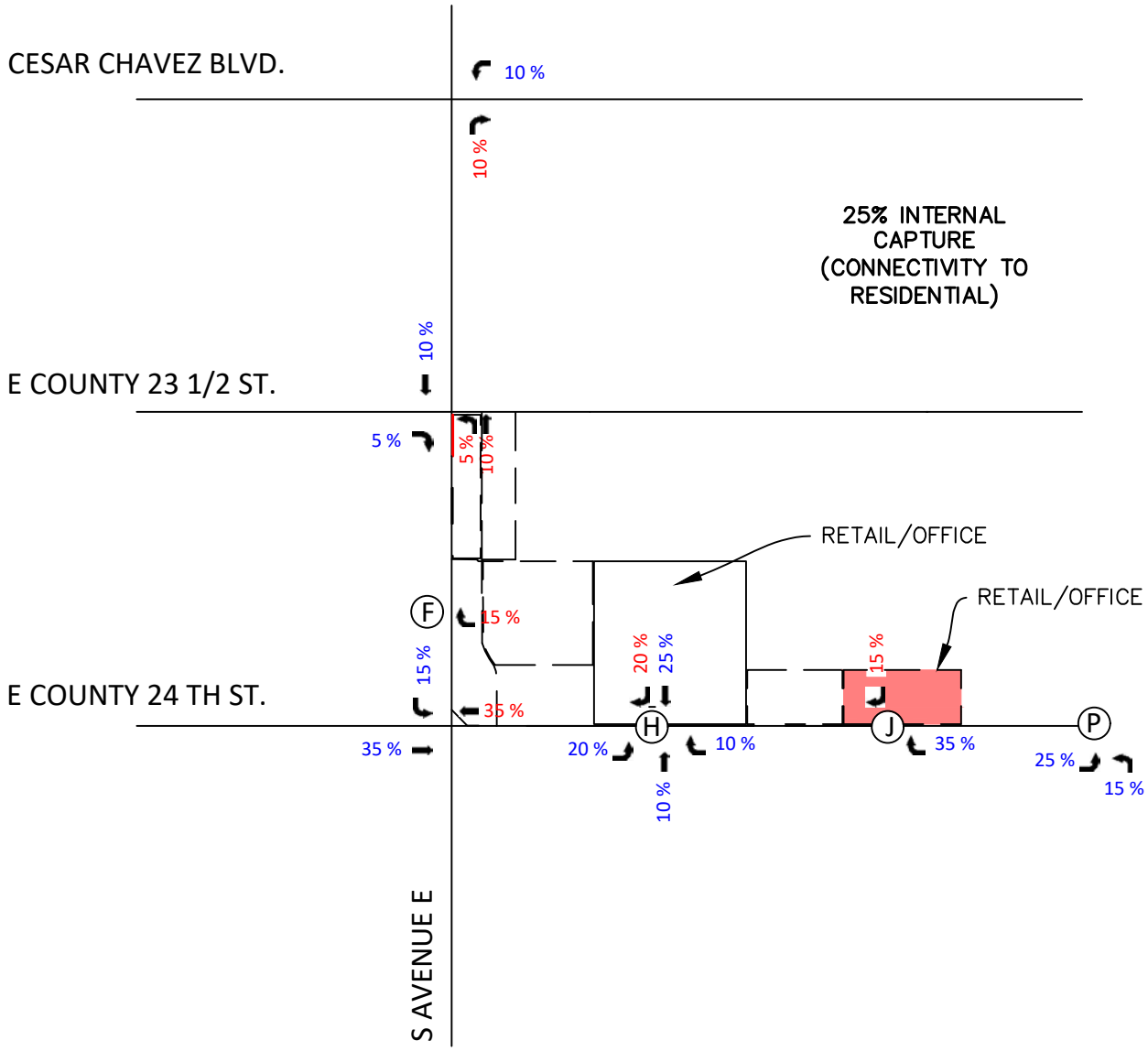
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 24

PHASE IV TRIP DISTRIBUTION, RESIDENTIAL

LOS MEZQUITES, YEAR 2026

NOT TO SCALE



N

LEGEND

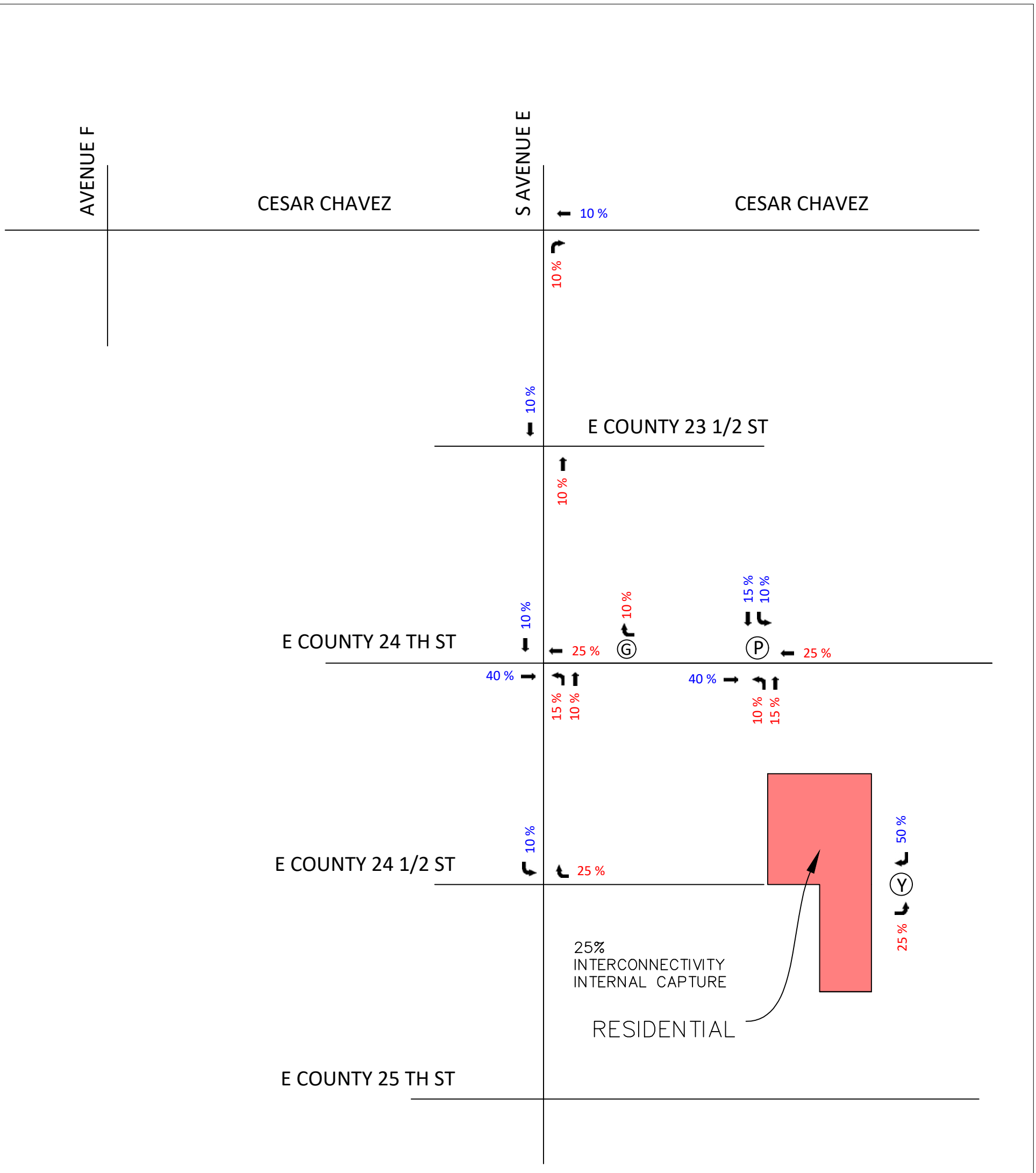
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 25

PHASE IV TRIP DISTRIBUTION, COMMERCIAL

LOS MEZQUITES, YEAR 2026

NOT TO SCALE



LEGEND

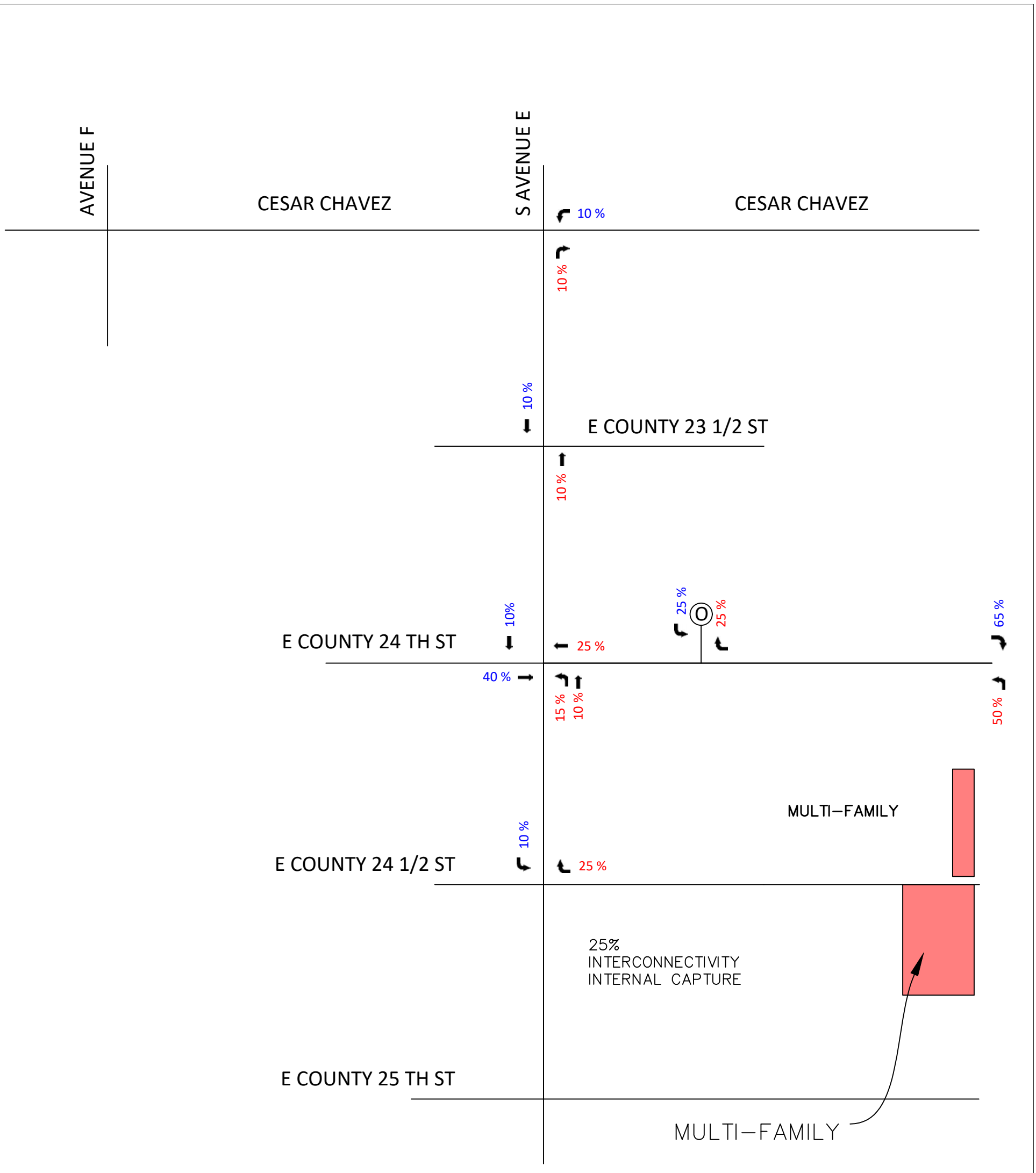
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 26

PHASE IV TRIP DISTRIBUTION, RESIDENTIAL

VON VERDE, YEAR 2026

NOT TO SCALE



LEGEND

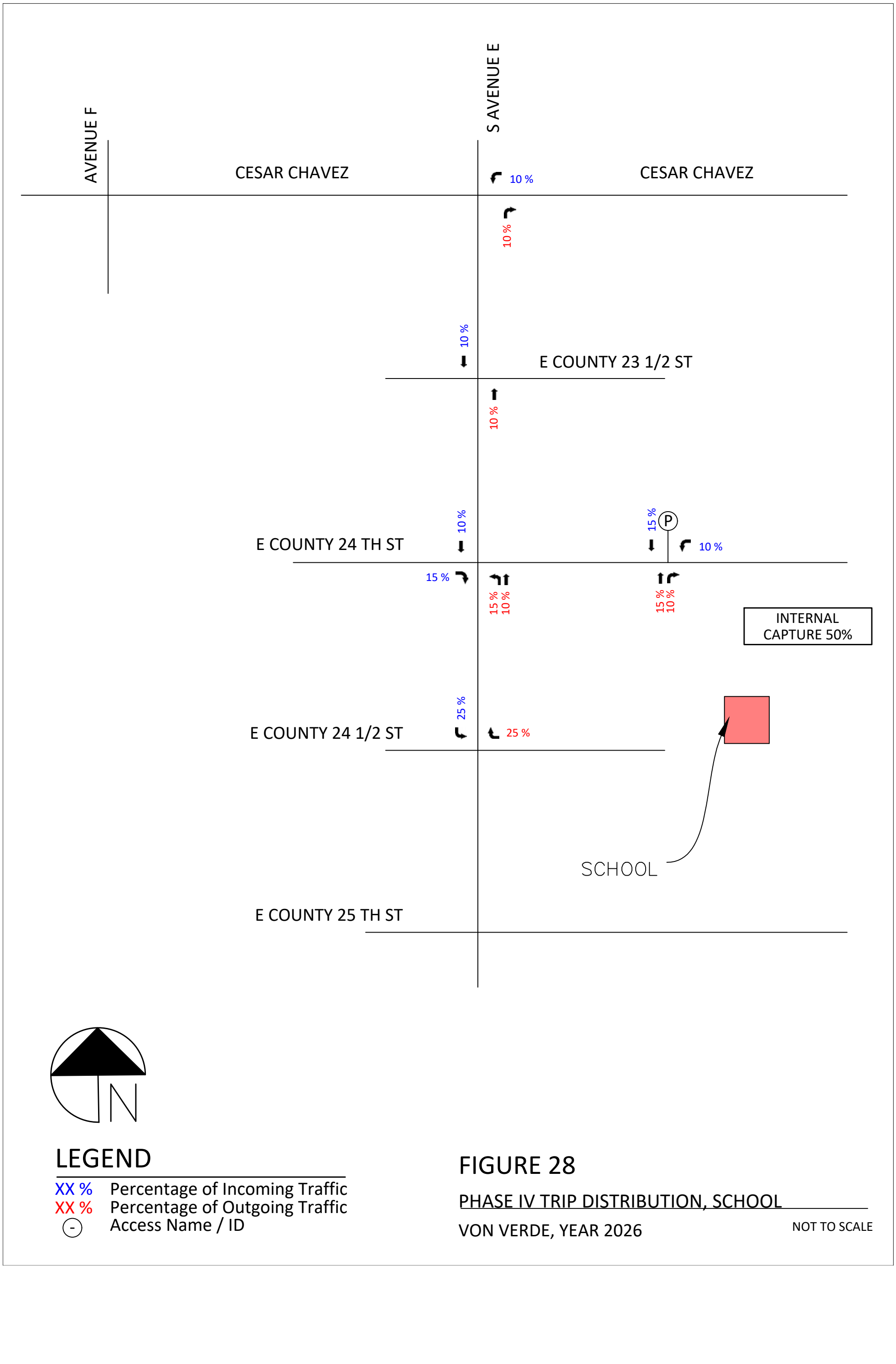
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 27

PHASE IV TRIP DISTRIBUTION, MULTI-FAMILY

VON VERDE, YEAR 2026

NOT TO SCALE



LEGEND

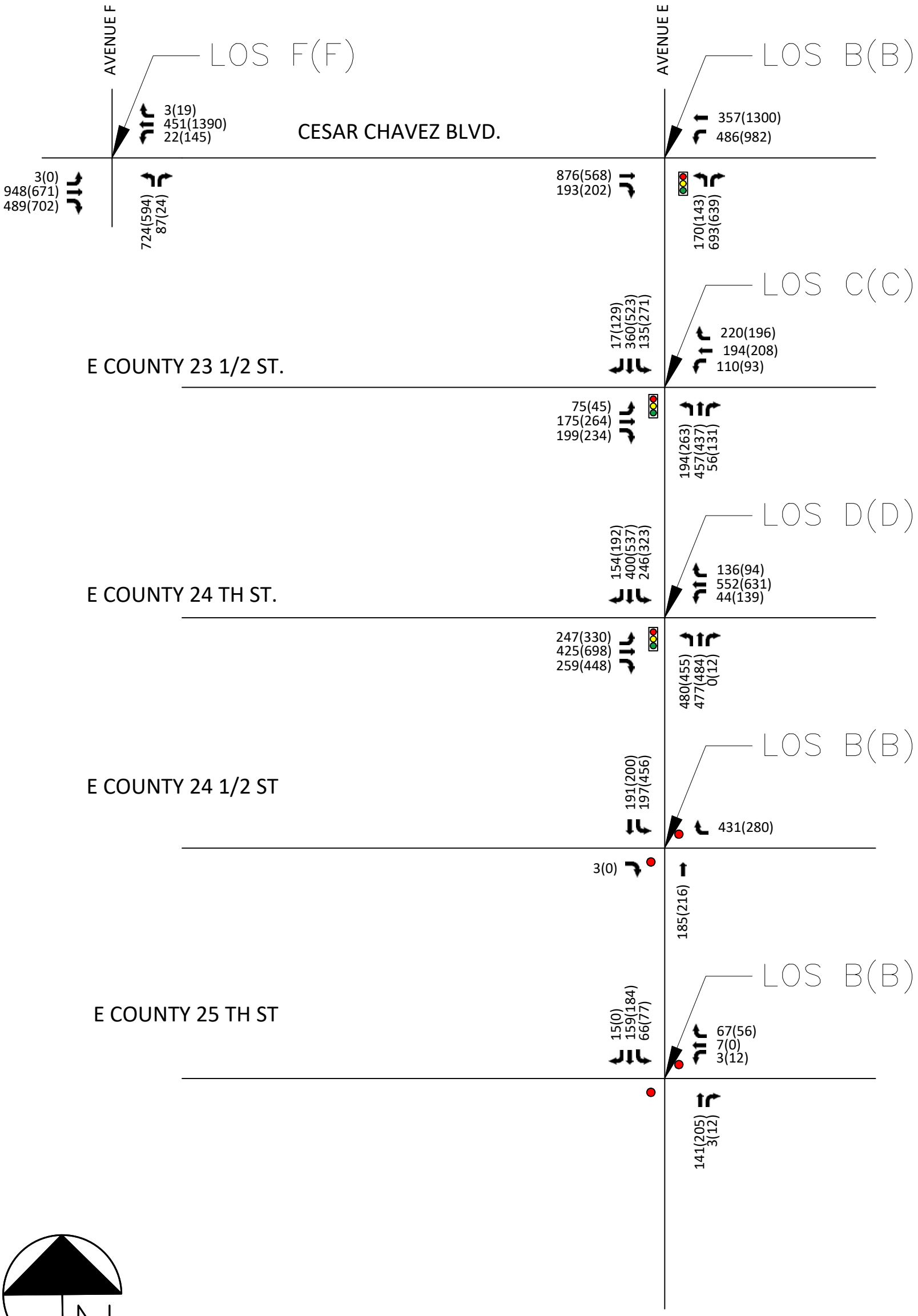
XX % Percentage of Incoming Traffic
XX % Percentage of Outgoing Traffic
(-) Access Name / ID

FIGURE 28

PHASE IV TRIP DISTRIBUTION, SCHOOL

VON VERDE, YEAR 2026

NOT TO SCALE

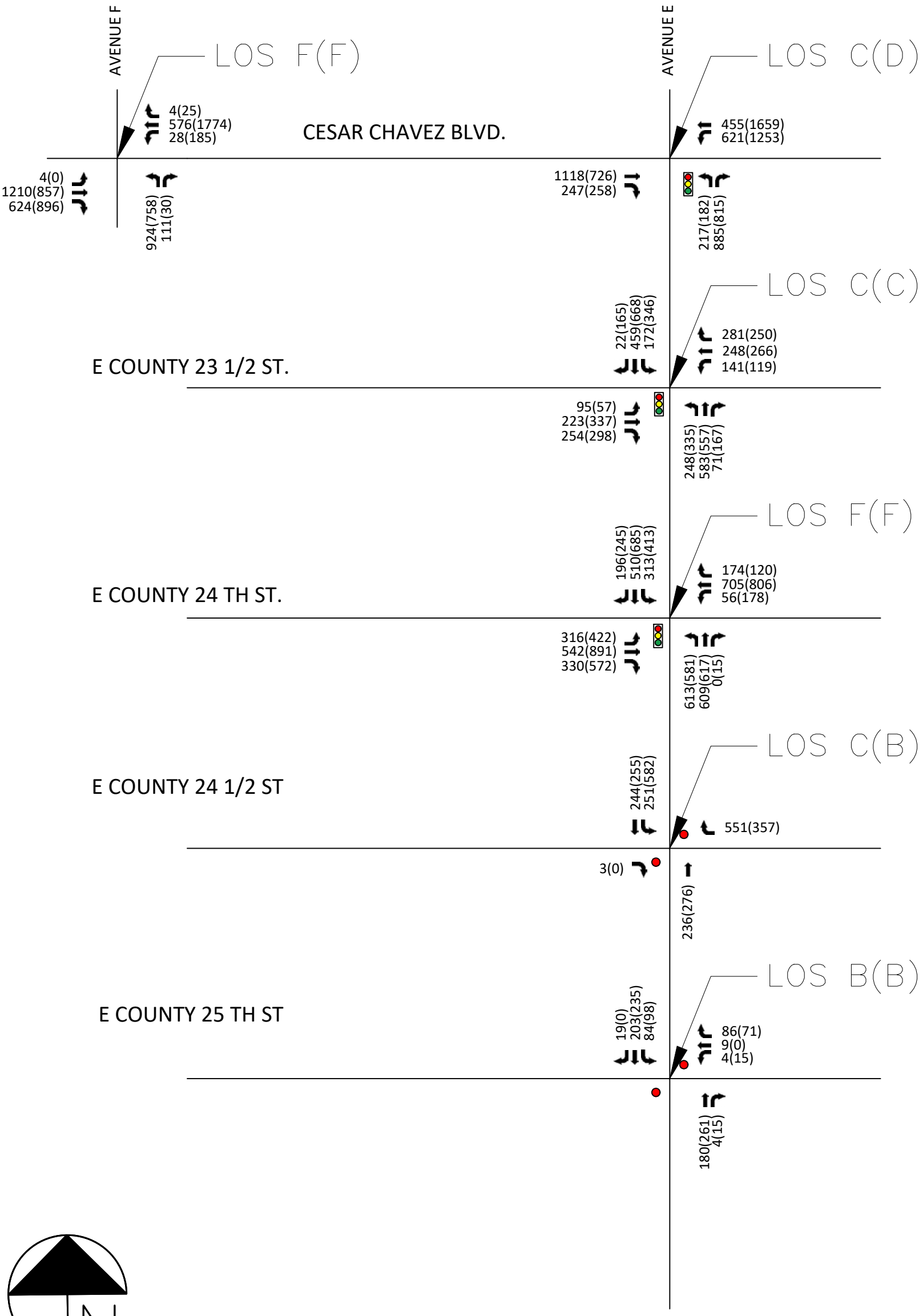


LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 29
Total Traffic Volumes

YEAR 2031 NOT TO SCALE



LEGEND

AM	Peak Hour Traffic Before Noon
(PM)	Peak Hour Traffic After Noon
●	Stop Sign
	Traffic Light

FIGURE 30
Total Traffic Volumes

YEAR 2036

NOT TO SCALE

APPENDIX B

Traffic Counts

		4	3	2		12	11	10		8	7	6		16	15	14					
Vehicle Movements at Avenue F / Cesar Chavez Blvd.																					
Time		**From North**				**From South**				**From East**				**From West**				**Total Veh**	**Truck Factor**	**Peak Hour**	**Peak Hour Factor**
Mov		**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**				
7:00	7:15	0	0	0	0	107	17	0	124	4	57	0	61	0	128	53	181	366	2.9%	366	
7:15	7:30	0	0	0	0	1	37	0	38	82	1	10	93	0	86	37	123	254	4.2%	620	
7:30	7:45	0	0	0	0	42	0	7	49	3	21	0	24	0	60	19	79	152	1.9%	772	
7:45	8:00	0	0	0	0	111	0	9	120	2	59	1	62	0	114	54	168	350	2.5%	1122	
8:00	8:15	0	0	0	0	93	0	13	106	3	33	0	36	0	121	60	181	323	3.3%	1079	
8:15	8:30	0	0	0	0	114	0	11	125	1	36	0	37	1	123	76	200	362	2.9%	1187	
8:30	8:45	0	0	0	0	32	0	9	41	3	23	0	26	0	71	45	116	183	2.1%	1218	1.66
8:45	9:00	0	0	0	0	52	0	8	60	2	40	1	43	0	71	38	109	212	4.9%	1080	
Peak Hour Total		0	0	0	0	350	0	42	392	9	151	1	161	1	429	235	665	1218			
Vehicle & Truck Peak		0	0	0	0	355	0	42	397	10	166	1	177	1	438	240	679	1253			
2021 Peak hour Total		0	0	0	0	374	0	44	418	11	175	1	186	1.1	461	253	715	1319			
4:00	4:15	0	0	0	0	78	0	3	81	16	157	0	173	0	88	89	177	431	3.1%	1184	0.92
4:15	4:30	0	0	0	0	67	0	2	69	14	149	0	163	0	56	95	151	383	5.0%	1184	
4:30	4:45	0	0	0	0	74	0	2	76	19	138	0	157	0	59	78	137	370	3.4%	1184	
4:45	5:00	0	0	0	0	69	0	2	71	21	179	0	200	0	50	77	127	398	1.5%	1582	
5:00	5:15	0	0	0	0	90	0	1	91	19	187	0	206	0	69	63	132	429	2.1%	1580	
5:15	5:30	0	0	0	0	69	0	6	75	21	163	4	188	0	83	92	175	438	2.4%	1635	
5:30	5:45	0	0	0	0	80	0	3	83	19	156	1	176	0	59	85	144	403	2.7%	1668	
5:45	6:00	0	0	0	0	91	0	6	97	7	153	4	164	0	55	74	129	390	2.3%	1660	
Peak Hour Total		0	0	0	0	288	0	9	297	70	623	0	693	0	253	339	592	1582			
Vehicle & Truck Peak		0	0	0	0	291	0	11	302	70	642	9	721	0	268	344	612	1635			
2021 Peak hr. Tot		0	0	0	0	306	0	12	318	74	676	9.5	759	0	282	362	644	1721			

Truck Movements at Avenue E /County 23rd 1/2 Street																		
7:00	7:15	0	0	0	0	1	0	0	1	1	0	0	1	0	9	0	9	11
7:15	7:30	0	0	0	0	0	0	0	0	1	0	0	1	0	8	2	10	11
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
7:45	8:00	0	0	0	0	3	0	0	3	0	5	0	5	0	1	0	1	9
8:00	8:15	0	0	0	0	1	0	0	1	0	6	0	6	0	1	3	4	11
8:15	8:30	0	0	0	0	1	0	0	1	1	2	0	3	0	5	2	7	11
8:30	8:45	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
8:45	9:00	0	0	0	0	2	0	0	2	0	7	0	7	0	2	0	2	11

Vehicle Movements at Avenue E /Cesar Chavez Boulevard																				
Time		From North				From South				From East				From West				Total Veh	Truck Factor	Peak Hour	Peak Hour Factor
Mov		LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot				
7:00	7:15	0	0	0	0	0	0	32	32	4	54	0	58	0	105	12	117	207	6.3%	207	
7:15	7:30	0	0	0	0	3	0	31	34	8	67	0	75	0	152	2	154	263	5.4%	470	
7:30	7:45	0	0	0	0	1	0	39	40	9	72	0	81	0	148	12	160	281	2.1%	751	
7:45	8:00	0	0	0	0	5	0	27	32	33	52	0	85	0	100	20	120	237	4.4%	988	
8:00	8:15	0	0	0	0	9	0	15	24	18	27	0	45	0	103	14	117	186	4.1%	967	
8:15	8:30	0	0	0	0	5	0	14	19	7	39	0	46	0	119	13	132	197	4.4%	901	
8:30	8:45	0	0	0	0	9	0	12	21	9	46	0	55	0	97	9	106	182	3.2%	802	0.85
8:45	9:00	0	0	0	0	6	0	16	22	23	44	0	67	0	60	16	76	165	5.2%	730	
Peak Hour Total		0	0	0	0	28	0	68	96	67	164	0	231	0	419	56	475	802			
Vehicle & Truck Peak		0	0	0	0	29	0	70	99	74	175	0	249	0	430	58	488	836			
2021 Peak hour Total		0	0	0	0	31	0	74	104	78	184	0	262	0	453	61	514	880			
4:00	4:15	0	0	0	0	10	0	23	33	36	158	0	194	0	84	9	93	320	4.5%	844	0.89
4:15	4:30	0	0	0	0	5	0	13	18	35	137	0	172	0	68	5	73	263	9.9%	844	
4:30	4:45	0	0	0	0	4	0	15	19	35	146	0	181	0	59	2	61	261	7.1%	844	
4:45	5:00	0	0	0	0	1	0	16	17	48	171	0	219	0	55	3	58	294	6.4%	1138	
5:00	5:15	0	0	0	0	18	0	35	53	38	138	0	176	0	73	5	78	307	8.1%	1125	
5:15	5:30	0	0	0	0	2	0	23	25	38	161	0	199	0	92	2	94	318	4.5%	1180	
5:30	5:45	0	0	0	0	10	0	10	20	48	185	0	233	0	67	4	71	324	4.4%	1243	
5:45	6:00	0	0	0	0	14	0	10	24	36	135	0	171	0	49	2	51	246	5.7%	1195	
Peak Hour Total		0	0	0	0	20	0	67	87	154	612	0	766	0	266	19	285	1138			
Vehicle & Truck Peak		0	0	0	0	30	0	79	109	168	638	0	806	0	279	28	307	1222			
2021 Peak hr. Tot		0	0	0	0	32	0	83	115	177	672	0	848	0	294	29	323	1286			

Truck Movements at Avenue E /Cesar Chavez Boulevard																		
7:00	7:15	0	0	0	0	0	0	0	0	1	2	0	3	0	11	0	11	14
7:15	7:30	0	0	0	0	0	0	2	2	3	4	0	7	0	6	0	6	15
7:30	7:45	0	0	0	0	0	0	2	2	0	3	0	3	0	1	0	1	6
7:45	8:00	0	0	0	0	0	0	1	1	2	4	0	6	0	3	1	4	11
8:00	8:15	0	0	0	0	1	0	0	1	1	0	0	1	0	5	1	6	8
8:15	8:30	0	0	0	0	0	0	1	1	4	3	0	7	0	1	0	1	9
8:30	8:45	0	0	0	0	0	0	0	0	0	4	0	4	0	2	0	2	6
8:45	9:00	0	0	0	0	0	1	0	1	4	2	0	6	0	2	0	2	9

Vehicle Movements at Avenue E /County 23rd 1/2 Street																				
Time		From North				From South				From East				From West				Total Veh	Truck Factor	Peak Hour	Peak Hour Factor
Mov		LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot				
7:00	7:15	0	18	3	21	0	14	0	14	0	0	0	0	22	0	0	22	57	3.4%	57	
7:15	7:30	0	12	3	15	0	16	0	16	0	0	0	0	36	0	0	36	67	0.0%	124	
7:30	7:45	0	31	1	32	0	15	0	15	0	0	0	0	26	0	0	26	73	6.4%	197	
7:45	8:00	0	42	0	42	0	12	0	12	0	0	0	0	16	0	2	18	72	2.7%	269	
8:00	8:15	0	21	4	25	0	12	0	12	0	0	0	0	11	0	1	12	49	2.0%	261	
8:15	8:30	0	14	4	18	0	13	0	13	0	0	0	0	12	0	0	12	43	6.5%	237	
8:30	8:45	0	17	3	20	0	14	0	14	0	0	0	0	11	0	0	11	45	4.3%	209	0.73
8:45	9:00	0	30	0	30	0	15	0	15	0	0	0	0	14	0	0	14	59	6.3%	196	
Peak Hour Total		0	94	11	105	0	51	0	51	0	0	0	0	50	0	3	53	209			
Vehicle & Truck Peak		0	95	11	106	0	58	0	58	0	0	0	0	50	0	3	53	217			
2021 Peak hour Total		0	100	12	112	0	61	0	61	0	0	0	0	53	0	3.2	55.8	228			
4:00	4:15	0	19	28	47	0	39	0	39	0	0	0	0	8	0	1	9	95	1.0%	213	0.73
4:15	4:30	0	14	23	37	0	17	0	17	0	0	0	0	10	0	0	10	64	3.0%	213	
4:30	4:45	0	14	16	30	0	19	0	19	0	0	0	0	4	0	1	5	54	8.5%	213	
4:45	5:00	0	20	20	40	0	17	0	17	0	0	0	0	7	0	0	7	64	3.0%	277	
5:00	5:15	0	16	26	42	1	23	0	24	0	0	0	0	12	0	1	13	79	2.5%	261	
5:15	5:30	0	16	19	35	0	19	0	19	0	0	0	0	9	0	0	9	63	3.1%	260	
5:30	5:45	0	21	30	51	0	10	0	10	0	0	0	0	7	0	0	7	68	2.9%	274	
5:45	6:00	0	22	19	41	0	11	0	11	0	0	0	0	8	0	0	8	60	9.1%	270	
Peak Hour Total		0	67	87	154	0	92	0	92	0	0	0	0	29	0	2	31	277			
Vehicle & Truck Peak		0	74	88	162	0	93	0	93	0	0	0	0	30	0	2	32	287			
2021 Peak hr. Tot		0	78	93	171	0	98	0	98	0	0	0	0	32	0	2.1	33.7	302			

Truck Movements at Avenue E /County 23rd 1/2 Street																		
7:00	7:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45	8:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
8:00	8:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:15	8:30	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
8:30	8:45	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
8:45	9:00	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4

Vehicle Movements at Avenue E /County 24th Street																				
Time		From North				From South				From East				From West				Total Veh	Truck Factor	Peak Hour	Peak Hour Factor
Mov		LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot				
7:00	7:15	3	8	7	18	0	4	1	5	0	1	0	1	10	1	1	12	36	5.3%	36	
7:15	7:30	0	4	7	11	1	4	0	5	0	1	1	2	11	0	0	11	29	0.0%	65	
7:30	7:45	3	19	8	30	0	2	0	2	0	2	2	4	12	0	1	13	49	9.3%	114	
7:45	8:00	14	22	7	43	0	3	0	3	0	0	2	2	7	3	2	12	60	3.2%	174	
8:00	8:15	3	12	9	24	1	3	0	4	0	1	1	2	8	1	3	12	42	2.3%	180	
8:15	8:30	0	4	9	13	1	3	0	4	0	0	2	2	7	0	1	8	27	15.6%	178	
8:30	8:45	0	11	5	16	0	5	0	5	0	0	1	1	8	0	0	8	30	11.8%	159	0.66
8:45	9:00	2	19	9	30	1	5	0	6	0	0	3	3	5	2	1	8	47	9.6%	146	
Peak Hour Total		17	49	30	96	2	14	0	16	0	1	6	7	30	4	6	40	159			
Vehicle & Truck Peak		17	52	30	99	2	22	0	24	0	1	6	7	31	4	6	41	171			
2021 Peak hour Total		18	55	32	104	2.1	23	0	25	0	1	6	7.4	33	4.2	6.3	43.2	180			
4:00	4:15	0	4	15	19	0	4	8	12	0	17	0	17	12	0	0	12	60	1.6%	127	0.70
4:15	4:30	0	3	11	14	1	7	0	8	0	0	4	4	8	0	1	9	35	5.4%	127	
4:30	4:45	0	3	10	13	0	6	0	6	0	0	1	1	12	0	0	12	32	8.6%	127	
4:45	5:00	0	3	18	21	0	6	0	6	0	1	3	4	8	1	1	10	41	4.7%	168	
5:00	5:15	1	2	14	17	3	11	0	14	0	1	2	3	11	0	0	11	45	4.3%	153	
5:15	5:30	1	1	14	16	2	5	0	7	0	0	0	0	14	0	0	14	37	5.1%	155	
5:30	5:45	9	0	12	21	1	1	0	2	0	0	1	1	8	1	0	9	33	5.7%	156	
5:45	6:00	9	2	11	22	1	3	0	4	0	0	2	2	6	4	1	11	39	9.3%	154	
Peak Hour Total		0	13	54	67	1	23	8	32	0	18	8	26	40	1	2	43	168			
Vehicle & Truck Peak		0	18	56	74	1	24	8	33	0	18	8	26	40	1	2	43	176			
2021 Peak hr. Tot		0	19	59	78	1.1	25	8.4	35	0	19	8.4	27	42	1.1	2.1	45.3	185			

Truck Movements at Avenue E /County 24th Street																		
7:00	7:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
7:45	8:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
8:00	8:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:15	8:30	0	2	0	2	0	2	0	2	0	0	0	0	1	0	0	1	5
8:30	8:45	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
8:45	9:00	0	2	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5

Vehicle Movements at Avenue E /County 24 1/2 Street																				
Time		Southbound				Northbound				Westbound				Eastbound				Total Veh	Truck Factor	Peak Hour	Peak Hour Factor
Mov		LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot	LT	ST	RT	Tot				
7:00	7:15	0	8	0	8	0	2	0	2	0	0	0	0	0	0	0	0	10	16.7%	10	
7:15	7:30	0	10	0	10	0	2	0	2	0	0	0	0	0	0	0	0	12	7.7%	22	
7:30	7:45	0	19	0	19	1	2	0	3	0	0	0	0	0	0	0	0	22	4.3%	44	
7:45	8:00	0	20	0	20	0	3	0	3	0	0	0	0	0	0	1	1	24	7.7%	68	
8:00	8:15	0	12	0	12	0	7	0	7	0	0	0	0	0	0	0	0	19	20.8%	77	
8:15	8:30	0	6	0	6	0	8	0	8	0	0	0	0	0	0	0	0	14	12.5%	79	
8:30	8:45	0	16	0	16	0	3	0	3	0	0	0	0	0	0	0	0	19	24.0%	76	0.79
8:45	9:00	0	9	0	9	0	4	0	4	0	0	0	0	0	0	0	0	13	27.8%	65	
Peak Hour Total		0	54	0	54	0	21	0	21	0	0	0	0	0	0	1	1	76			
Vehicle & Truck Peak		0	62	0	60	0	29	0	29	0	0	1	1	0	0	1	1	91			
2021 Peak hour Total		0	65	0	63	0	31	0	31	0	0	1	1.1	0	0	1.1	1.05	96			
4:00	4:15	0	3	0	3	0	12	0	12	0	0	0	0	0	0	0	0	15	42.3%	27	0.60
4:15	4:30	0	2	0	2	0	6	0	6	0	0	0	0	0	0	0	0	8	52.9%	27	
4:30	4:45	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4	63.6%	27	
4:45	5:00	0	2	0	2	0	7	0	7	0	0	0	0	0	0	0	0	9	40.0%	36	
5:00	5:15	0	0	1	1	0	18	0	18	0	0	0	0	0	0	0	0	19	29.6%	40	
5:15	5:30	0	1	0	1	0	6	0	6	0	0	0	0	0	0	0	0	7	74.1%	39	
5:30	5:45	0	1	0	1	0	5	0	5	0	0	0	0	0	0	0	0	6	76.9%	41	
5:45	6:00	0	0	1	1	0	5	0	5	0	0	0	0	0	0	0	0	6	76.9%	38	
Peak Hour Total		0	9	0	9	0	27	0	27	0	0	0	0	0	0	0	0	36			
Vehicle & Truck Peak		0	27	0	27	0	42	0	42	0	0	0	0	0	0	0	0	69			
2021 Peak hr. Tot		0	28	0	28	0	44	0	44	0	0	0	0	0	0	0	0	73			

Truck Movements at Avenue E /County 24th Street																		
7:00	7:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15	7:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
7:30	7:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45	8:00	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
8:00	8:15	0	1	0	1	0	4	0	4	0	0	0	0	0	0	0	0	5
8:15	8:30	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30	8:45	0	3	0	3	0	2	0	2	0	0	1	1	0	0	0	0	6
8:45	9:00	0	2	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5

		4	3	2		12	11	10		8	7	6		16	15	14					
Vehicle Movements at Avenue E /County 25th Street																					
Time		**From North**				**From South**				**From East**				**From West**				**Total Veh**	**Truck Factor**	**Peak Hour**	**Peak Hour Factor**
Mov		**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**				
7:00	7:15	3	4	0	7	0	0	1	1	0	1	1	2	0	0	0	0	10	16.7%	10	
7:15	7:30	3	6	0	9	0	1	0	1	0	0	1	1	0	0	0	0	11	8.3%	21	
7:30	7:45	4	10	0	14	0	3	0	3	0	0	0	0	0	0	0	0	17	5.6%	38	
7:45	8:00	10	11	0	21	0	2	1	3	1	0	1	2	0	0	0	0	26	16.1%	64	
8:00	8:15	0	4	9	13	0	4	0	4	0	0	4	4	0	0	0	0	21	8.7%	75	
8:15	8:30	2	4	0	6	0	4	0	4	0	4	0	4	0	0	0	0	14	22.2%	78	
8:30	8:45	4	13	0	17	0	1	0	1	0	0	2	2	0	0	0	0	20	16.7%	81	0.78
8:45	9:00	3	10	0	13	0	4	0	4	0	0	0	0	0	0	0	0	17	19.0%	72	
Peak Hour Total		16	32	9	57	0	11	1	12	1	4	7	12	0	0	0	0	81			
Vehicle & Truck Peak		24	33	9	66	0	12	1	13	1	4	12	17	0	0	0	0	96			
2021 Peak hour Total		25	35	9.5	69	0	13	1.1	14	1	4	13	18	0	0	0	0	101			
4:00	4:15	1	2	0	3	0	6	0	6	1	0	5	6	0	0	0	0	15	50.0%	28	0.65
4:15	4:30	1	1	0	2	0	4	0	4	0	0	2	2	0	0	0	0	8	61.9%	28	
4:30	4:45	1	1	0	2	0	2	0	2	1	0	0	1	0	0	0	0	5	61.5%	28	
4:45	5:00	0	1	0	1	0	8	0	8	1	0	1	2	0	0	0	0	11	42.1%	39	
5:00	5:15	0	1	0	1	0	2	0	2	0	0	14	14	0	0	0	0	17	51.4%	41	
5:15	5:30	1	0	0	1	0	0	0	0	0	0	4	4	0	0	0	0	5	82.8%	38	
5:30	5:45	1	0	0	1	0	1	0	1	0	0	5	5	0	0	0	0	7	77.4%	40	
5:45	6:00	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	4	81.8%	33	
Peak Hour Total		3	5	0	8	0	20	0	20	3	0	8	11	0	0	0	0	39			
Vehicle & Truck Peak		9	17	0	26	0	29	7	36	7	0	14	21	0	0	0	0	83			
2021 Peak hr. Tot		9.5	18	0	27	0	31	7.4	38	7.4	0	15	22	0	0	0	0	87			

Truck Movements at Avenue E /County 23rd 1/2 Street																		
7:00	7:15	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15	7:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
7:30	7:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45	8:00	3	0	0	3	0	1	0	1	0	0	1	1	0	0	0	0	5
8:00	8:15	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
8:15	8:30	3	0	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
8:30	8:45	2	1	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
8:45	9:00	0	1	0	1	0	1	0	1	0	0	2	2	0	0	0	0	4

APPENDIX C

Accident data, analysis, and summaries

Accidents By Location Report

Print Date/Time: 09/30/2021 13:14
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: CESAR CHAVEZ BLVD

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Results
E CESAR CHAVEZ BLVD	2019-00023500	10/09/2019 13:11	1	1		
E CESAR CHAVEZ BLVD	2019-00028333	12/10/2019 15:14	2	0		
E CESAR CHAVEZ BLVD	2019-00029244	12/20/2019 17:29	2	0		
E CESAR CHAVEZ BLVD	2020-00000873	01/11/2020 22:40	2	0		
E CESAR CHAVEZ BLVD	2020-00006020	03/12/2020 17:02	2	0		
E CESAR CHAVEZ BLVD	2020-00016123	08/10/2020 19:48	2	1		
E CESAR CHAVEZ BLVD	2020-00025947	12/10/2020 06:36	3	1		
E CESAR CHAVEZ BLVD	2021-00002308	01/26/2021 17:01	3	0		
E CESAR CHAVEZ BLVD	2021-00003067	02/03/2021 20:13	2	1		
E CESAR CHAVEZ BLVD	2021-00004190	02/16/2021 17:55	2			
E CESAR CHAVEZ BLVD	2021-00007462	03/22/2021 16:39	3	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 17						
E CESAR CHAVEZ BLVD @ N AVE G	2021-00006420	03/11/2021 16:23	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
E CESAR CHAVEZ BLVD @ N E 1/2 AVE	2021-00008263	03/30/2021 17:05	2	0		

One (1) accident found by Ave E 1/2 - see highlight

Accidents By Location Report

Print Date/Time: 09/30/2021 13:30
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: JUAN SANCHEZ BLVD

TOTAL ACCIDENTS AT ABOVE LOCATION: 1

N 9TH AVE @ E JUAN SANCHEZ BLVD	2017-00026203	12/14/2017 17:54	2	0

TOTAL ACCIDENTS AT ABOVE LOCATION: 1

N AVE E @ E JUAN SANCHEZ BLVD BLVD @ AVE E	2017-00011896	06/08/2017 10:40	2	0

One (1) accident reported by Ave E and former Juan Sanchez Blvd - now Cesar Chavez

Accidents By Location Report

Print Date/Time: 09/30/2021 12:53
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: AVE E

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Reslts
S AVE E / S SR 195 HWY	2020-00006439	03/16/2020 18:26	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 23 1/2 ST @ AVE E ST	2014-00021122	09/08/2014 13:28	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
N AVE E @ E JUAN SANCHEZ BLVD BLVD @ AVE E	2017-00011896	06/08/2017 10:40	2	0		. .
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						

TOTAL ACCIDENTS FOR ORI : 3

Accidents By Location Report

Print Date/Time: 09/30/2021 12:55
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: COUNTY 24TH

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Reslts
4200 W COUNTY 24TH ST S	2021-00017599	07/08/2021 15:01	2	1		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 24TH ST @ "G" ST	2015-00024705	11/24/2015 17:16	1	1		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 24TH ST @ AVE I	2017-00027228	12/29/2017 15:47	1	0		.
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
E COUNTY 24TH ST @ N 10TH AVE	2017-00001297	01/18/2017 20:31	1	5		.
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
N PRIVATE PROPERTY AVE @ W COUNTY 24TH ST	2021-00014787	06/08/2021 08:43	1			
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						

TOTAL ACCIDENTS FOR ORI : 5

One (1) accident as shown highlighted

APPENDIX D

Traffic signal warrants analysis

Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase II AM (County 23.5 St)

Intersection Information			
Major Street (N/S Road)	Avenue E	Minor Street (E/W Road)	County 23.5 St
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	677 vehicles	Total Approach Volume	403 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

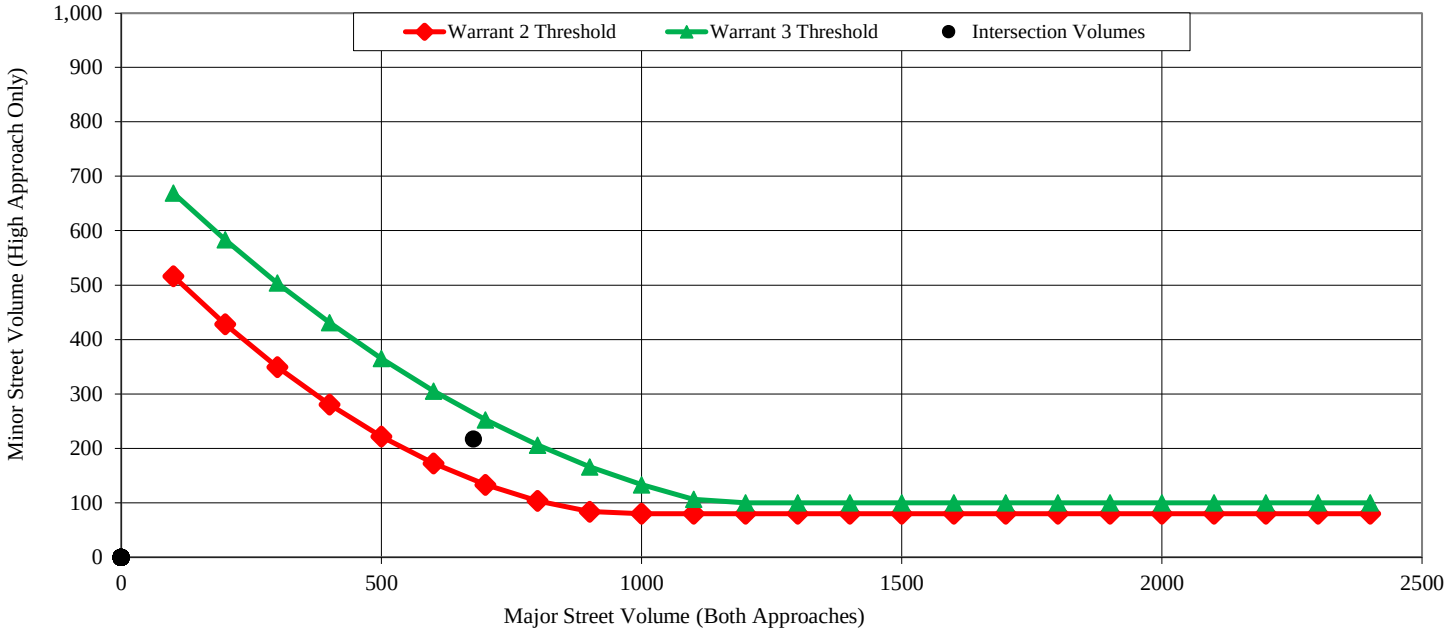
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	1 hour	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	420	630	336 (Cond. A) & 504 (Cond. B)
Criteria - Minor Street (veh/hr)	140	70	112 (Cond. A) & 56 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**
Required values reached for	1112 total, 217 minor, 1.8 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-2 (Warrant 2 - 70% Factor) & Figure 4C-4 (Warrant 3 - 70% Factor)



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Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase II PM (County 23 1/2 St)

Intersection Information			
Major Street (N/S Road)	Avenue E	Minor Street (E/W Road)	County 23 1/2 St.
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	994 vehicles	Total Approach Volume	408 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

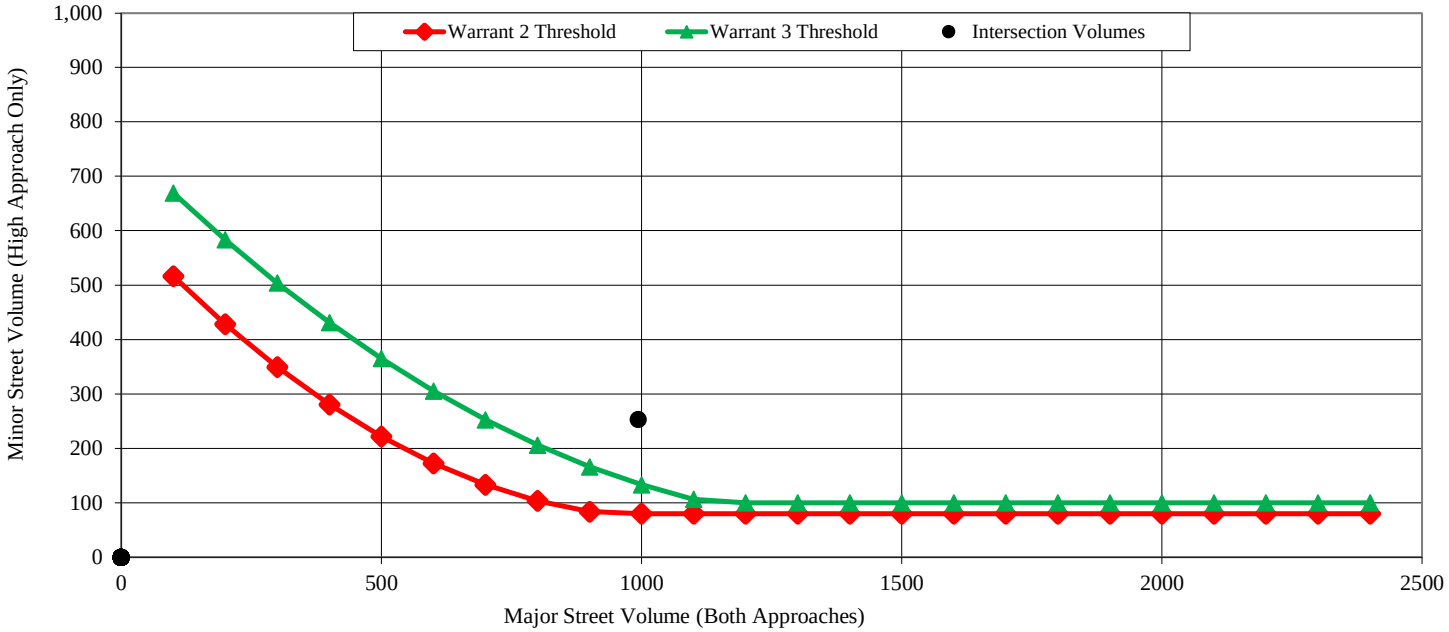
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	1 hour	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	420	630	336 (Cond. A) & 504 (Cond. B)
Criteria - Minor Street (veh/hr)	140	70	112 (Cond. A) & 56 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Satisfied**	**Satisfied**
Required values reached for	1402 total, 253 minor, 45 delay	1 hour
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-2 (Warrant 2 - 70% Factor) & Figure 4C-4 (Warrant 3 - 70% Factor)



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Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase I AM (County 24 St)

Intersection Information			
Major Street (N/S Road)	Avenue E	Minor Street (E/W Road)	County 24th St.
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	810 vehicles	Total Approach Volume	487 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

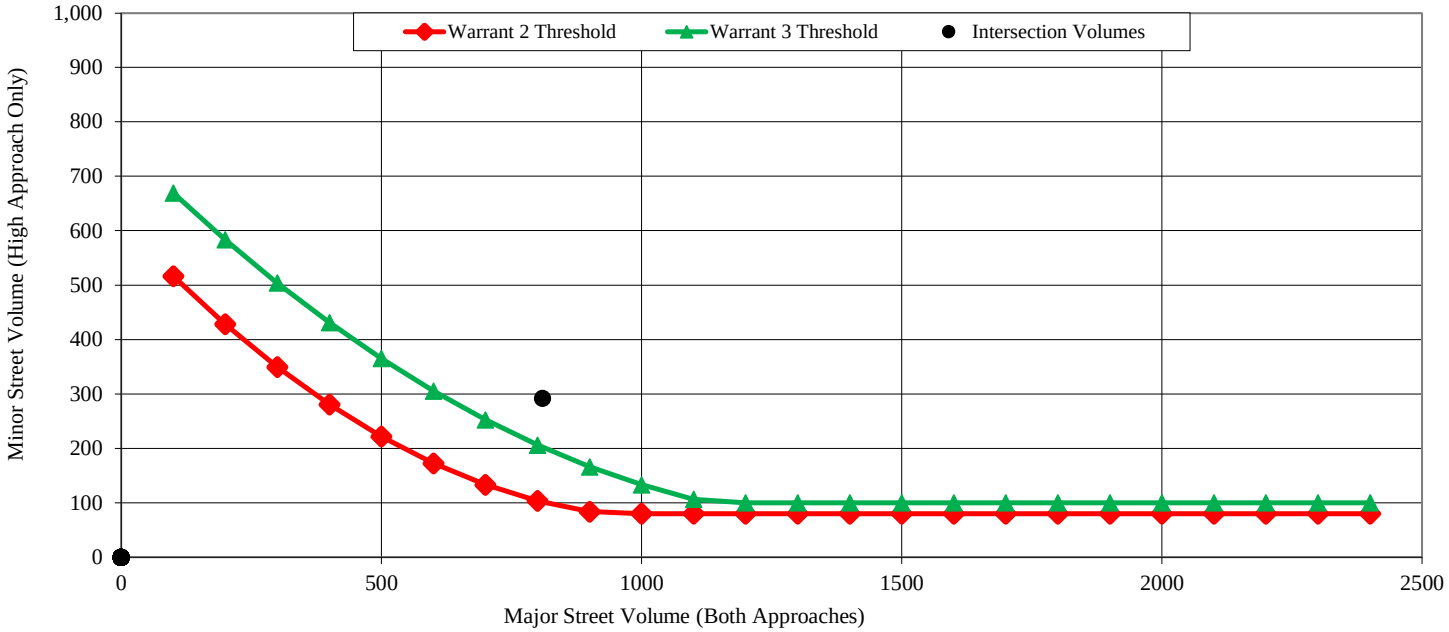
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	1 hour	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	420	630	336 (Cond. A) & 504 (Cond. B)
Criteria - Minor Street (veh/hr)	140	70	112 (Cond. A) & 56 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Satisfied**	**Satisfied**
Required values reached for	1297 total, 292 minor, 21.3 delay	1 hour
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-2 (Warrant 2 - 70% Factor) & Figure 4C-4 (Warrant 3 - 70% Factor)



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Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verdee - Signal Warrant
Project/File #	020-0238
Scenario	Phase I PM (County 24 St)

Intersection Information			
Major Street (N/S Road)	Avenue E	Minor Street (E/W Road)	County 24.5 St
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	972 vehicles	Total Approach Volume	684 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

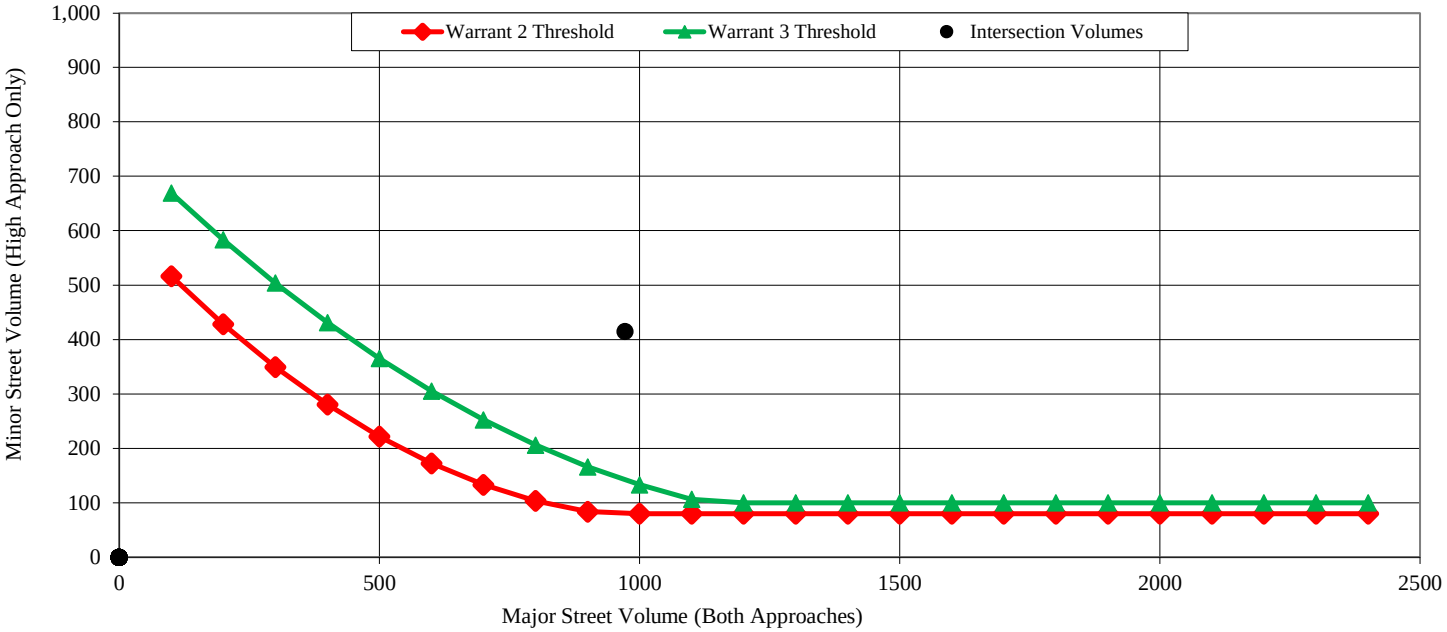
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	1 hour	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	420	630	336 (Cond. A) & 504 (Cond. B)
Criteria - Minor Street (veh/hr)	140	70	112 (Cond. A) & 56 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Satisfied**	**Satisfied**
Required values reached for	1659 total, 415 minor, 31.5 delay	1 hour
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-2 (Warrant 2 - 70% Factor) & Figure 4C-4 (Warrant 3 - 70% Factor)



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Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV AM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	870 vehicles	Total Approach Volume	304 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

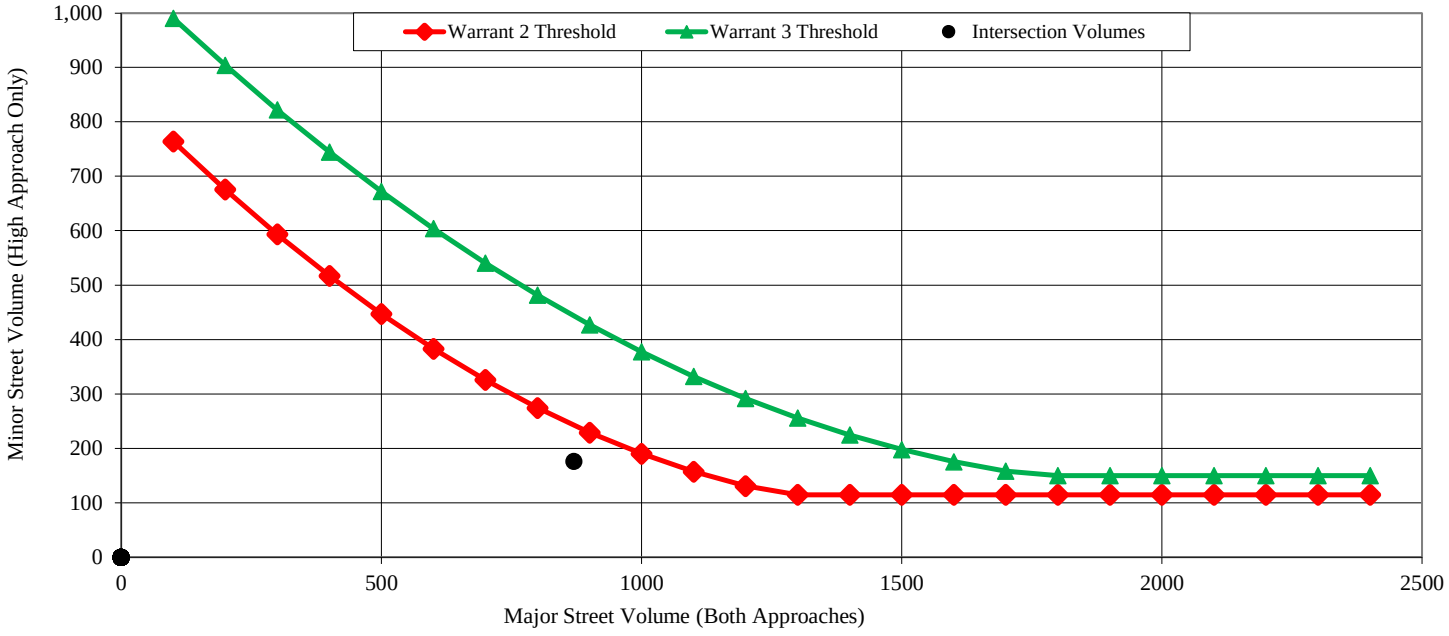
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	0 hours	0 hours	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	600	900	480 (Cond. A) & 720 (Cond. B)
Criteria - Minor Street (veh/hr)	200	100	160 (Cond. A) & 80 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**
Required values reached for	1174 total, 176 minor, 0.6 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)



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Traffic Signal Warrant Analysis

Warrants 4 to 6 (Pedestrian, School, Coordinated Systems)

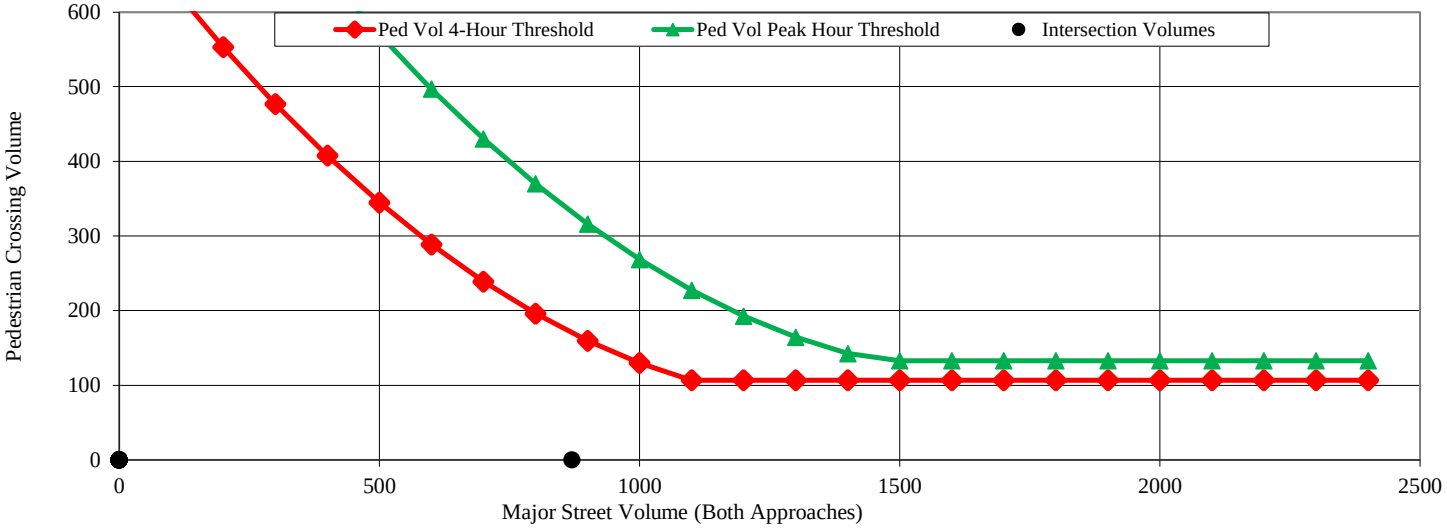
Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV AM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	870 vehicles	Total Approach Volume	304 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Pedestrian Warrant thresholds.

Warrant 4, Pedestrian Volume		
	Condition A - Four Hour Vol.	**Condition B - Peak Hour Vol.**
Condition Satisfied?	**Not Examined**	**Not Examined**
Required values reached for		
Criteria - Min. Distance to Nearest Controlled Crossing		
Criteria - Major Street Volume and Crossing Volume		

Figure 4C-5 & Figure 4C-7 (Warrant 4 Four Hour & Peak Hour)



Warrant 5, School Crossing	
Condition Satisfied?	**Not Examined**
Criteria - School Crossing Data	

Warrant 6, Coordinated Signal System	
Condition Satisfied?	**Not Examined**
Criteria - Coordinated Signal System	

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Traffic Signal Warrant Analysis

Warrants 7-9 (Crash, Network, Rail Crossing)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV AM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	870 vehicles	Total Approach Volume	304 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

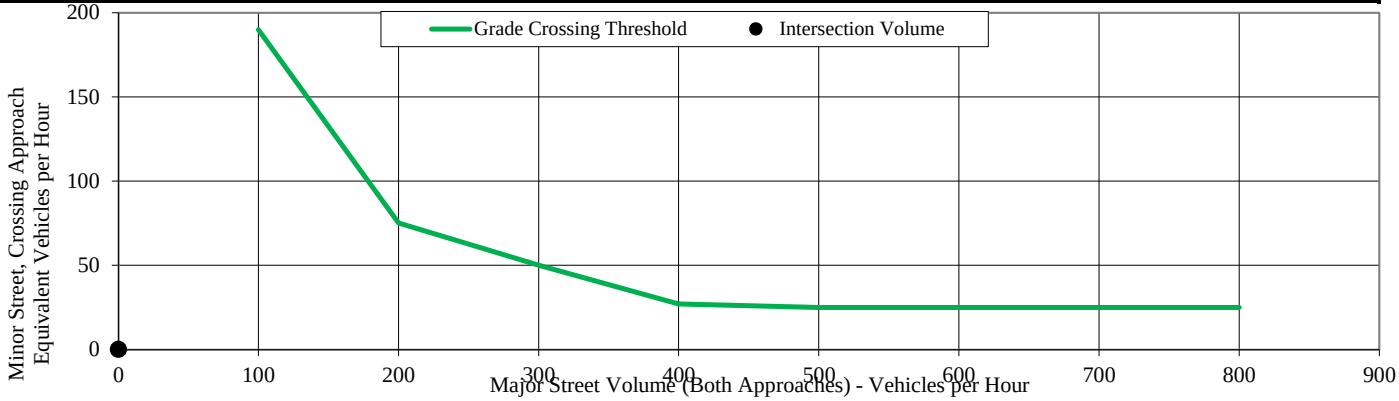
Reduction applied to Crash and Roadway Network Warrant thresholds due to high speed on County 24th St.

Warrant 7, Crash Experience	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Alternatives	
Criteria - Reported Crashes (within 12-month period)	
Criteria - Major Street (veh/hr) - Minor Street (veh/hr)	
(Alternative Volume Requirement) Criteria - Pedestrian Volume	

Warrant 8, Roadway Network	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Common Intersection of Two Major Routes	
Criteria - Existing or Immediately Projected Entering Volume	
Criteria - Warrants	
(Alternative Requirement) Criteria - Non-normal Business Day	

Warrant 9, Intersection Near a Grade Crossing	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Alternatives	
Criteria - Max. Distance to Nearest Controlled Crossing	
Criteria - Major Street Volume and Crossing Volume	

Figure 4C-10 (Two or More Approach Lanes): Distance D = 70 feet



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Traffic Signal Warrant Analysis

Multi-Way Stop Warrants

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV AM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	870 vehicles	Total Approach Volume	304 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	**Satisfied**
Criteria*	Traffic Signal Warranted & Justified

* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	**Not satisfied**
Required values reached for	less than 4 correctable crashes
Criteria - Crash Experience	5 or more correctable crashes in 12-month period

Condition C - Intersection Volume & Delay	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour & 13 sec. average delay/veh
Criteria - Major Street (veh/hr)	300 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	200 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hours, less than 4 crashes, & 13 sec. average delay/veh
Criteria - Major Street (veh/hr)	240 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	160 for the same 8 hours of an average day
Criteria - Crash Experience	4 or more correctable crashes in 12-month period
Criteria - Delay (average sec/veh)	24 during the highest hour

Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV PM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	1200 vehicles	Total Approach Volume	426 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

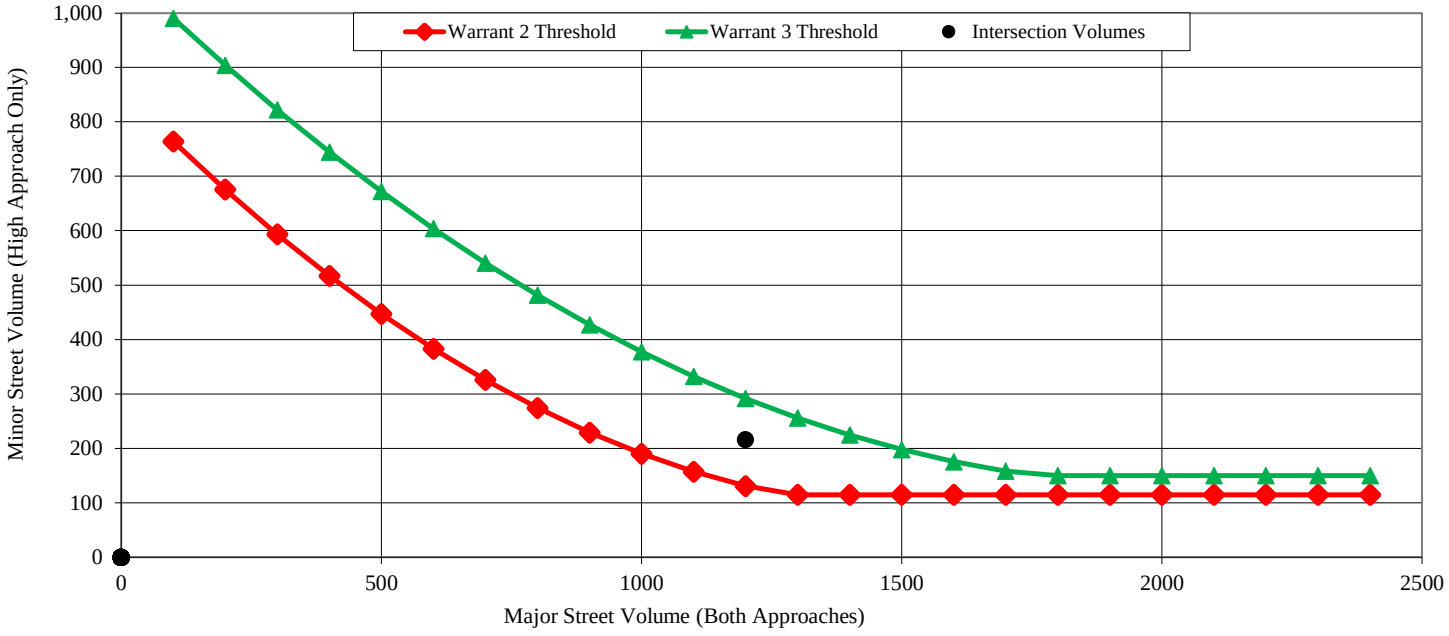
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	1 hour	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	600	900	480 (Cond. A) & 720 (Cond. B)
Criteria - Minor Street (veh/hr)	200	100	160 (Cond. A) & 80 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**
Required values reached for	1626 total, 216 minor, 0.9 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	150	
Criteria - Minor Street High Side Delay (veh-hrs)	5	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)



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Traffic Signal Warrant Analysis

Warrants 4 to 6 (Pedestrian, School, Coordinated Systems)

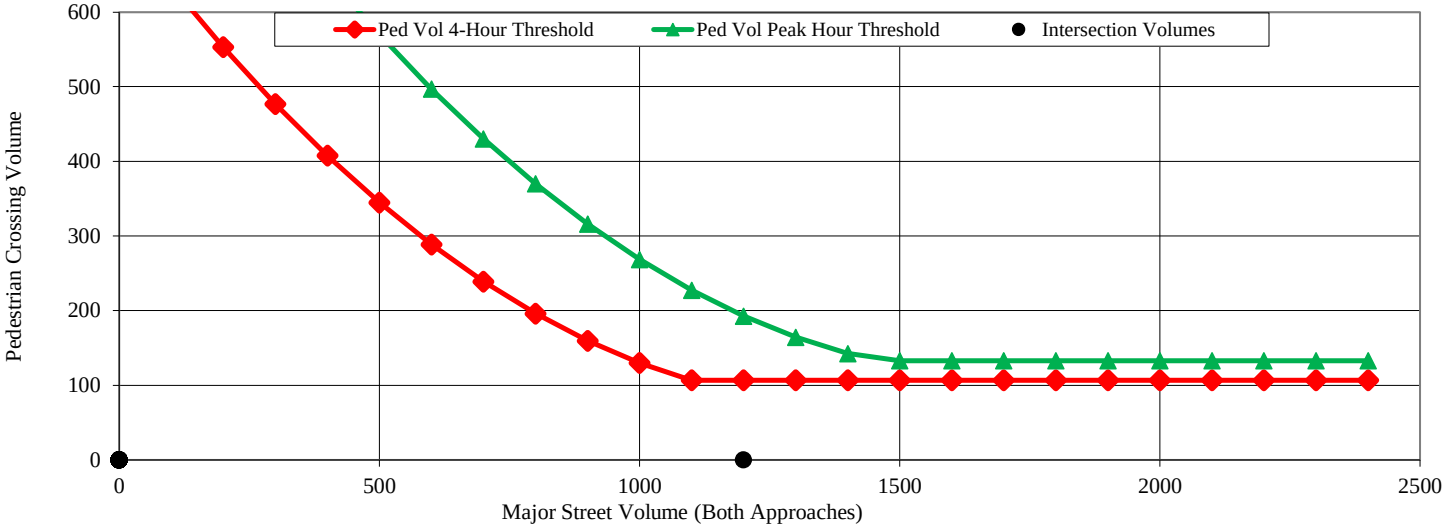
Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV PM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	1200 vehicles	Total Approach Volume	426 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Pedestrian Warrant thresholds.

Warrant 4, Pedestrian Volume		
	Condition A - Four Hour Vol.	**Condition B - Peak Hour Vol.**
Condition Satisfied?	**Not Examined**	**Not Examined**
Required values reached for		
Criteria - Min. Distance to Nearest Controlled Crossing		
Criteria - Major Street Volume and Crossing Volume		

Figure 4C-5 & Figure 4C-7 (Warrant 4 Four Hour & Peak Hour)



Warrant 5, School Crossing	
Condition Satisfied?	**Not Examined**
Criteria - School Crossing Data	

Warrant 6, Coordinated Signal System	
Condition Satisfied?	**Not Examined**
Criteria - Coordinated Signal System	

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Traffic Signal Warrant Analysis

Warrants 7-9 (Crash, Network, Rail Crossing)

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV PM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	1200 vehicles	Total Approach Volume	426 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

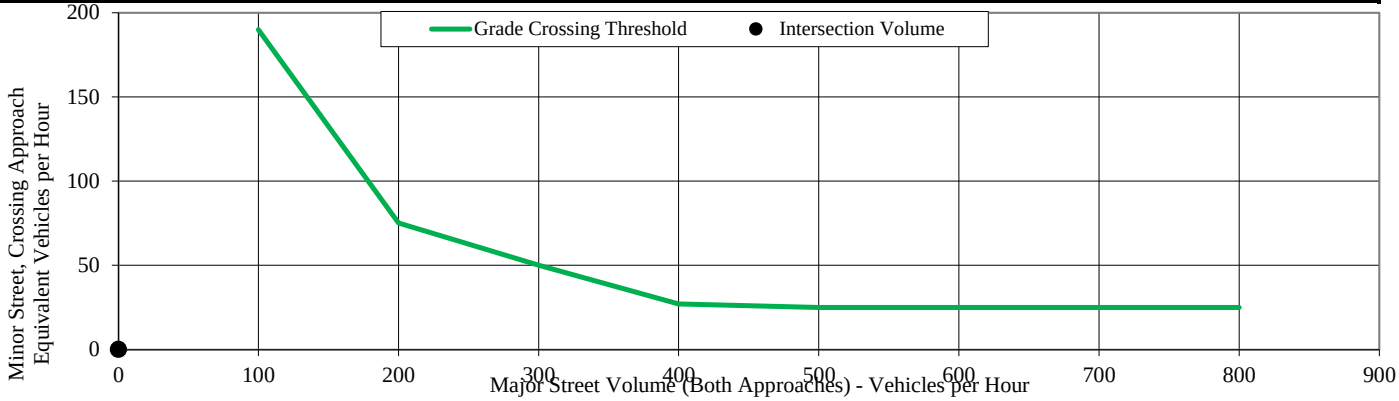
Reduction applied to Crash and Roadway Network Warrant thresholds due to high speed on County 24th St.

Warrant 7, Crash Experience	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Alternatives	
Criteria - Reported Crashes (within 12-month period)	
Criteria - Major Street (veh/hr) - Minor Street (veh/hr)	
(Alternative Volume Requirement) Criteria - Pedestrian Volume	

Warrant 8, Roadway Network	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Common Intersection of Two Major Routes	
Criteria - Existing or Immediately Projected Entering Volume	
Criteria - Warrants	
(Alternative Requirement) Criteria - Non-normal Business Day	

Warrant 9, Intersection Near a Grade Crossing	
Condition Satisfied?	**Not Examined**
Required values reached for	
Criteria - Alternatives	
Criteria - Max. Distance to Nearest Controlled Crossing	
Criteria - Major Street Volume and Crossing Volume	

Figure 4C-10 (Two or More Approach Lanes): Distance D = 70 feet



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Traffic Signal Warrant Analysis

Multi-Way Stop Warrants

Project Name	Mezquites/Von Verde - Signal Warrant
Project/File #	020-0238
Scenario	Phase IV PM (Access O)

Intersection Information			
Major Street (E/W Road)	County 24th St	Minor Street (N/S Road)	Avenue D 1/2
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	1200 vehicles	Total Approach Volume	426 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	**Satisfied**
Criteria*	Traffic Signal Warranted & Justified

* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	**Not satisfied**
Required values reached for	less than 4 correctable crashes
Criteria - Crash Experience	5 or more correctable crashes in 12-month period

Condition C - Intersection Volume & Delay	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hour & 15 sec. average delay/veh
Criteria - Major Street (veh/hr)	300 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	200 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	**Not Satisfied**
Required values reached for	1 hours, less than 4 crashes, & 15 sec. average delay/veh
Criteria - Major Street (veh/hr)	240 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	160 for the same 8 hours of an average day
Criteria - Crash Experience	4 or more correctable crashes in 12-month period
Criteria - Delay (average sec/veh)	24 during the highest hour

APPENDIX E

Synchro reports

EXISTING CONDITIONS

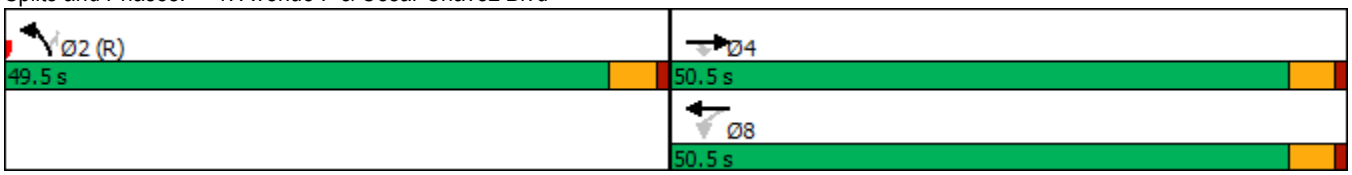
AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	548	849	13	208	444	53
Future Volume (vph)	548	849	13	208	444	53
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.180		0.950	
Satd. Flow (perm)	1667	1417	265	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1011				63
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	652	1011	15	248	529	63
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.85	0.84	0.12	0.32	0.84	0.09
Control Delay	36.6	9.5	18.8	18.6	38.7	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.6	9.5	18.8	18.6	38.7	4.6
LOS	D	A	B	B	D	A
Approach Delay	20.1			18.6	35.1	
Approach LOS	C			B	D	
Queue Length 50th (ft)	357	0	5	97	290	0
Queue Length 95th (ft)	465	37	18	142	#404	20
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	1197	121	766	628	672
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.84	0.12	0.32	0.84	0.09

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	538	73	93	219	37	88
Future Volume (vph)	538	73	93	219	37	88
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.387		0.950	
Satd. Flow (perm)	3167	1417	569	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		86				104
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	633	86	109	258	44	104
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	68.0	68.0	68.0	68.0	32.0	32.0
Total Split (%)	68.0%	68.0%	68.0%	68.0%	32.0%	32.0%
Maximum Green (s)	63.5	63.5	63.5	63.5	27.5	27.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	63.5	63.5	63.5	63.5	27.5	27.5
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.28	0.28
v/c Ratio	0.31	0.09	0.30	0.13	0.09	0.20
Control Delay	11.2	5.3	11.0	7.5	27.7	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	5.3	11.0	7.5	27.7	6.7
LOS	B	A	B	A	C	A
Approach Delay	10.5			8.5	13.0	
Approach LOS	B			A	B	
Queue Length 50th (ft)	81	8	29	31	21	0
Queue Length 95th (ft)	m124	m14	56	44	45	34
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2011	931	361	2011	486	510
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.09	0.30	0.13	0.09	0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	4	0	0	0	0	61	0	0	100	12
Future Vol, veh/h	53	0	4	0	0	0	0	61	0	0	100	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	5	0	0	0	0	84	0	0	137	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	179	-	69	153	237	42	153	0	-	-	-	0
Stage 1	137	-	-	84	84	-	-	-	-	-	-	-
Stage 2	42	-	-	69	153	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	766	0	980	799	663	1019	1425	-	0	0	-	-
Stage 1	852	0	-	915	824	-	-	-	0	0	-	-
Stage 2	967	0	-	933	770	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	766	-	980	794	663	1019	1425	-	-	-	-	-
Mov Cap-2 Maneuver	766	-	-	794	663	-	-	-	-	-	-	-
Stage 1	852	-	-	915	824	-	-	-	-	-	-	-
Stage 2	967	-	-	928	770	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1425	-	778	-	-	-
HCM Lane V/C Ratio	-	-	0.1	-	-	-
HCM Control Delay (s)	0	-	10.1	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2	7	33	5	7	3	24	0	18	55	32
Future Vol, veh/h	0	2	7	33	5	7	3	24	0	18	55	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	3	9	42	6	9	4	30	0	23	70	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	154	35	121	195	15	111	0	0	30	0	0
Stage 1	116	116	-	38	38	-	-	-	-	-	-	-
Stage 2	26	38	-	83	157	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	814	737	1030	842	699	1061	1477	-	-	1581	-	-
Stage 1	876	799	-	972	863	-	-	-	-	-	-	-
Stage 2	988	863	-	916	767	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	791	724	1030	822	686	1061	1477	-	-	1581	-	-
Mov Cap-2 Maneuver	791	724	-	822	686	-	-	-	-	-	-	-
Stage 1	873	787	-	969	860	-	-	-	-	-	-	-
Stage 2	970	860	-	892	755	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.6	0.8	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1477	-	-	942	833	1581	-	-
HCM Lane V/C Ratio	0.003	-	-	0.012	0.068	0.014	-	-
HCM Control Delay (s)	7.4	-	-	8.9	9.6	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	53	2	0	31	0	66
Future Vol, veh/h	53	2	0	31	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	3	0	39	0	84

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	20	0	84	0	-	0
Stage 1	0	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	994	-	1511	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	994	-	1511	-	-	-
Mov Cap-2 Maneuver	994	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s		0	0
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1511	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	-
HCM Lane LOS	A	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	13	5	2	0	13	2	26	35	10
Future Vol, veh/h	0	0	0	13	5	2	0	13	2	26	35	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	17	6	3	0	17	3	33	45	13

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	137	143	19	58	0	0	20	0	0
Stage 1	19	19	-	-	-	-	-	-	-
Stage 2	118	124	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	856	748	1059	1546	-	-	1596	-	-
Stage 1	1004	880	-	-	-	-	-	-	-
Stage 2	907	793	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	838	0	1059	1546	-	-	1596	-	-
Mov Cap-2 Maneuver	838	0	-	-	-	-	-	-	-
Stage 1	1004	0	-	-	-	-	-	-	-
Stage 2	888	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	838	1059	1596	-	-
HCM Lane V/C Ratio	-	-	-	0.02	0.002	0.021	-	-
HCM Control Delay (s)	0	-	-	9.4	8.4	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.1	-	-

EXISTING CONDITIONS

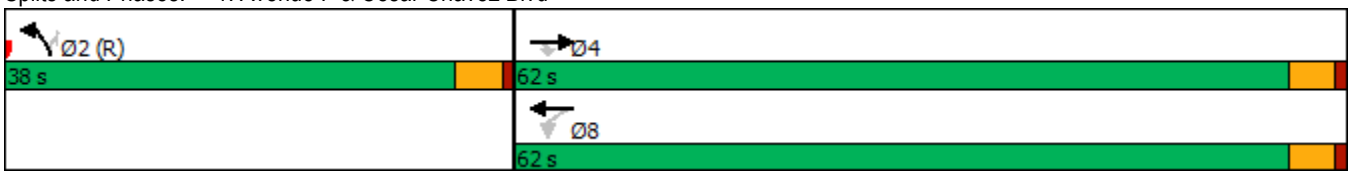
PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	335	430	88	803	364	14
Future Volume (vph)	335	430	88	803	364	14
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.485		0.950	
Satd. Flow (perm)	1667	1417	713	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		467				15
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	364	467	96	873	396	15
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	38.0	38.0
Total Split (%)	62.0%	62.0%	62.0%	62.0%	38.0%	38.0%
Maximum Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.34	0.34
v/c Ratio	0.38	0.46	0.23	0.91	0.85	0.03
Control Delay	13.0	2.6	12.3	34.6	49.5	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	2.6	12.3	34.6	49.5	10.6
LOS	B	A	B	C	D	B
Approach Delay	7.1			32.4	48.0	
Approach LOS	A			C	D	
Queue Length 50th (ft)	118	0	28	465	232	0
Queue Length 95th (ft)	180	41	58	#760	#399	14
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	958	1013	409	958	467	484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.46	0.23	0.91	0.85	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	349	35	210	798	38	99
Future Volume (vph)	349	35	210	798	38	99
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.511		0.950	
Satd. Flow (perm)	3167	1417	751	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		41				116
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	411	41	247	939	45	116
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	72.0	72.0	72.0	72.0	28.0	28.0
Total Split (%)	72.0%	72.0%	72.0%	72.0%	28.0%	28.0%
Maximum Green (s)	67.5	67.5	67.5	67.5	23.5	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	67.5	67.5	67.5	67.5	23.5	23.5
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.24	0.24
v/c Ratio	0.19	0.04	0.49	0.44	0.11	0.25
Control Delay	5.3	1.4	11.9	8.3	31.0	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.3	1.4	11.9	8.3	31.0	7.5
LOS	A	A	B	A	C	A
Approach Delay	4.9			9.0	14.1	
Approach LOS	A			A	B	
Queue Length 50th (ft)	33	0	68	129	23	0
Queue Length 95th (ft)	44	5	116	153	49	38
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2137	969	506	2137	415	460
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.04	0.49	0.44	0.11	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 40.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	3	0	0	0	0	98	0	0	78	93
Future Vol, veh/h	32	0	3	0	0	0	0	98	0	0	78	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	0	4	0	0	0	0	134	0	0	107	127

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	174	-	54	188	368	67	234	0	-	-	-	0
Stage 1	107	-	-	134	134	-	-	-	-	-	-	-
Stage 2	67	-	-	54	234	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	773	0	1002	755	560	983	1331	-	0	0	-	-
Stage 1	887	0	-	855	785	-	-	-	0	0	-	-
Stage 2	936	0	-	952	710	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	773	-	1002	752	560	983	1331	-	-	-	-	-
Mov Cap-2 Maneuver	773	-	-	752	560	-	-	-	-	-	-	-
Stage 1	887	-	-	855	785	-	-	-	-	-	-	-
Stage 2	936	-	-	948	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1331	-	788	-	-	-
HCM Lane V/C Ratio	-	-	0.061	-	-	-
HCM Control Delay (s)	0	-	9.9	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	2	3	0	19	9	2	26	9	0	19	59
Future Vol, veh/h	42	2	3	0	19	9	2	26	9	0	19	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	3	4	0	24	11	3	33	11	0	24	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	59	74	12	53	138	17	99	0	0	44	0	0
Stage 1	24	24	-	39	39	-	-	-	-	-	-	-
Stage 2	35	50	-	14	99	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	930	816	1065	939	752	1058	1492	-	-	1563	-	-
Stage 1	991	875	-	971	862	-	-	-	-	-	-	-
Stage 2	976	853	-	1004	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	897	814	1065	932	750	1058	1492	-	-	1563	-	-
Mov Cap-2 Maneuver	897	814	-	932	750	-	-	-	-	-	-	-
Stage 1	989	875	-	969	860	-	-	-	-	-	-	-
Stage 2	937	851	-	998	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.5	0.4	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1492	-	-	902	827	1563	-	-
HCM Lane V/C Ratio	0.002	-	-	0.066	0.043	-	-	-
HCM Control Delay (s)	7.4	-	-	9.3	9.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	45	29	0
Future Vol, veh/h	0	0	0	45	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	57	37	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	66	19	37	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	932	1055	1572	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	932	1055	1572	-	-	-
Mov Cap-2 Maneuver	932	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	990	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1572	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	9	0	17	0	35	9	10	18	0
Future Vol, veh/h	0	0	0	9	0	17	0	35	9	10	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	22	0	45	12	13	23	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	100	-	51	23	0	0	57	0	0
Stage 1	51	-	-	-	-	-	-	-	-
Stage 2	49	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	899	0	1017	1592	-	-	1547	-	0
Stage 1	971	0	-	-	-	-	-	-	0
Stage 2	973	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	892	0	1017	1592	-	-	1547	-	-
Mov Cap-2 Maneuver	892	0	-	-	-	-	-	-	-
Stage 1	971	0	-	-	-	-	-	-	-
Stage 2	965	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	2.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1592	-	-	892	1017	1547	-
HCM Lane V/C Ratio	-	-	-	0.013	0.021	0.008	-
HCM Control Delay (s)	0	-	-	9.1	8.6	7.3	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

BACKGROUND TRAFFIC

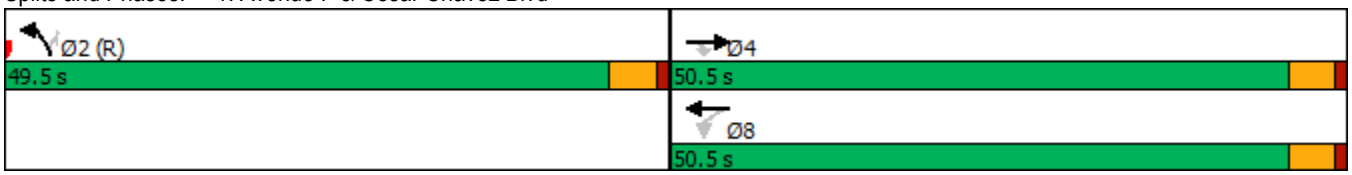
2023

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	605	331	15	230	490	59
Future Volume (vph)	605	331	15	230	490	59
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.123		0.950	
Satd. Flow (perm)	1667	1417	181	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		394				70
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	720	394	18	274	583	70
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.94	0.46	0.22	0.36	0.93	0.10
Control Delay	47.9	3.6	24.4	19.2	49.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	3.6	24.4	19.2	49.6	4.4
LOS	D	A	C	B	D	A
Approach Delay	32.2			19.5	44.8	
Approach LOS	C			B	D	
Queue Length 50th (ft)	423	0	7	109	340	0
Queue Length 95th (ft)	#592	37	23	157	#501	21
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	864	83	766	628	676
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.46	0.22	0.36	0.93	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 34.4		Intersection LOS: C	
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	593	80	103	241	40	97
Future Volume (vph)	593	80	103	241	40	97
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.359		0.950	
Satd. Flow (perm)	3167	1417	528	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		94				114
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	698	94	121	284	47	114
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	69.0	69.0	69.0	69.0	31.0	31.0
Total Split (%)	69.0%	69.0%	69.0%	69.0%	31.0%	31.0%
Maximum Green (s)	64.5	64.5	64.5	64.5	26.5	26.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	64.5	64.5	64.5	64.5	26.5	26.5
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.26	0.26
v/c Ratio	0.34	0.10	0.36	0.14	0.10	0.23
Control Delay	12.0	5.6	11.8	7.1	28.6	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.0	5.6	11.8	7.1	28.6	6.8
LOS	B	A	B	A	C	A
Approach Delay	11.2			8.5	13.2	
Approach LOS	B			A	B	
Queue Length 50th (ft)	107	12	32	33	23	0
Queue Length 95th (ft)	m124	m13	64	46	49	35
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2042	947	340	2042	469	503
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.10	0.36	0.14	0.10	0.23

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 41.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	0	4	0	0	0	0	67	0	0	110	13
Future Vol, veh/h	58	0	4	0	0	0	0	67	0	0	110	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	0	5	0	0	0	0	92	0	0	151	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	197	-	76	168	261	46	169	0	-	-	-	0
Stage 1	151	-	-	92	92	-	-	-	-	-	-	-
Stage 2	46	-	-	76	169	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	744	0	970	780	643	1014	1406	-	0	0	-	-
Stage 1	836	0	-	905	818	-	-	-	0	0	-	-
Stage 2	962	0	-	924	758	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	744	-	970	775	643	1014	1406	-	-	-	-	-
Mov Cap-2 Maneuver	744	-	-	775	643	-	-	-	-	-	-	-
Stage 1	836	-	-	905	818	-	-	-	-	-	-	-
Stage 2	962	-	-	919	758	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1406	-	755	-	-	-
HCM Lane V/C Ratio	-	-	0.112	-	-	-
HCM Control Delay (s)	0	-	10.4	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	4	7	0	1	7	3	25	0	20	61	35
Future Vol, veh/h	36	4	7	0	1	7	3	25	0	20	61	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	5	9	0	1	9	4	32	0	25	77	44

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	152	167	39	131	211	16	121	0	0	32	0	0
Stage 1	127	127	-	40	40	-	-	-	-	-	-	-
Stage 2	25	40	-	91	171	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	801	725	1024	828	685	1059	1464	-	-	1579	-	-
Stage 1	863	790	-	970	861	-	-	-	-	-	-	-
Stage 2	989	861	-	906	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	782	711	1024	805	672	1059	1464	-	-	1579	-	-
Mov Cap-2 Maneuver	782	711	-	805	672	-	-	-	-	-	-	-
Stage 1	860	777	-	967	858	-	-	-	-	-	-	-
Stage 2	977	858	-	878	744	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	8.7	0.8	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1464	-	-	803	988	1579	-	-
HCM Lane V/C Ratio	0.003	-	-	0.074	0.01	0.016	-	-
HCM Control Delay (s)	7.5	-	-	9.8	8.7	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	35	73	0
Future Vol, veh/h	0	3	0	35	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	44	92	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	114	46	92	0	-	0
Stage 1	92	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	870	1014	1501	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	870	1014	1501	-	-	-
Mov Cap-2 Maneuver	870	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1501	-	1014	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	6	15	0	15	3	29	39	12
Future Vol, veh/h	0	0	0	3	6	15	0	15	3	29	39	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	8	19	0	19	4	37	50	15

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	153	160	21	65	0	0	23	0	0
Stage 1	21	21	-	-	-	-	-	-	-
Stage 2	132	139	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	839	732	1056	1537	-	-	1592	-	-
Stage 1	1002	878	-	-	-	-	-	-	-
Stage 2	894	782	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	820	0	1056	1537	-	-	1592	-	-
Mov Cap-2 Maneuver	820	0	-	-	-	-	-	-	-
Stage 1	1002	0	-	-	-	-	-	-	-
Stage 2	873	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	820	1056	1592	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.018	0.023	-	-
HCM Control Delay (s)	0	-	-	9.4	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	370	475	98	886	402	16
Future Volume (vph)	370	475	98	886	402	16
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.459		0.950	
Satd. Flow (perm)	1667	1417	675	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		516				17
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	516	107	963	437	17
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	63.0	63.0	63.0	63.0	37.0	37.0
Total Split (%)	63.0%	63.0%	63.0%	63.0%	37.0%	37.0%
Maximum Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.32	0.32
v/c Ratio	0.41	0.49	0.27	0.99	0.96	0.04
Control Delay	13.0	2.7	8.9	41.5	68.7	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	2.7	8.9	41.5	68.7	10.6
LOS	B	A	A	D	E	B
Approach Delay	7.2			38.3	66.5	
Approach LOS	A			D	E	
Queue Length 50th (ft)	131	0	18	575	272	0
Queue Length 95th (ft)	197	41	32	#880	#470	15
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	975	1043	394	975	454	472
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.49	0.27	0.99	0.96	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 31.8		Intersection LOS: C	
Intersection Capacity Utilization 87.8%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	385	39	232	880	42	109
Future Volume (vph)	385	39	232	880	42	109
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.491		0.950	
Satd. Flow (perm)	3167	1417	722	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		46				128
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	453	46	273	1035	49	128
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	75.0	75.0	75.0	75.0	25.0	25.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%
Maximum Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.20	0.20
v/c Ratio	0.20	0.05	0.54	0.46	0.14	0.30
Control Delay	4.6	1.2	11.8	7.3	33.8	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.6	1.2	11.8	7.3	33.8	8.2
LOS	A	A	B	A	C	A
Approach Delay	4.3			8.2	15.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	36	0	72	132	26	0
Queue Length 95th (ft)	47	5	125	155	54	41
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2232	1012	509	2232	362	426
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.05	0.54	0.46	0.14	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 7.9		Intersection LOS: A	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	3	0	0	0	0	108	0	0	86	101
Future Vol, veh/h	35	0	3	0	0	0	0	108	0	0	86	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	0	4	0	0	0	0	148	0	0	118	138

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	192	-	59	207	404	74	256	0	-	-	-	0
Stage 1	118	-	-	148	148	-	-	-	-	-	-	-
Stage 2	74	-	-	59	256	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	750	0	994	732	534	973	1306	-	0	0	-	-
Stage 1	874	0	-	840	774	-	-	-	0	0	-	-
Stage 2	927	0	-	946	694	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	750	-	994	729	534	973	1306	-	-	-	-	-
Mov Cap-2 Maneuver	750	-	-	729	534	-	-	-	-	-	-	-
Stage 1	874	-	-	840	774	-	-	-	-	-	-	-
Stage 2	927	-	-	942	694	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1306	-	765	-	-	-
HCM Lane V/C Ratio	-	-	0.068	-	-	-
HCM Control Delay (s)	0	-	10	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	2	3	0	21	9	2	28	9	0	21	65
Future Vol, veh/h	46	2	3	0	21	9	2	28	9	0	21	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	3	4	0	27	11	3	35	11	0	27	82

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	64	79	14	56	150	18	109	0	0	46	0	0
Stage 1	27	27	-	41	41	-	-	-	-	-	-	-
Stage 2	37	52	-	15	109	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	923	811	1062	935	741	1056	1479	-	-	1560	-	-
Stage 1	987	872	-	968	860	-	-	-	-	-	-	-
Stage 2	974	851	-	1003	804	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	887	809	1062	928	740	1056	1479	-	-	1560	-	-
Mov Cap-2 Maneuver	887	809	-	928	740	-	-	-	-	-	-	-
Stage 1	985	872	-	966	858	-	-	-	-	-	-	-
Stage 2	932	849	-	997	804	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.6	0.4	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1479	-	-	892	813	1560	-	-
HCM Lane V/C Ratio	0.002	-	-	0.072	0.047	-	-	-
HCM Control Delay (s)	7.4	-	-	9.4	9.6	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	50	32	0
Future Vol, veh/h	0	0	0	50	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	63	41	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	73	21	41	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	922	1051	1567	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	922	1051	1567	-	-	-
Mov Cap-2 Maneuver	922	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1567	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	9	17	15	0	35	9	12	20	0
Future Vol, veh/h	0	0	0	9	17	15	0	35	9	12	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	22	19	0	45	12	15	26	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	107	107	51	26	0	0	57	0	0
Stage 1	51	51	-	-	-	-	-	-	-
Stage 2	56	56	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	891	783	1017	1588	-	-	1547	-	0
Stage 1	971	852	-	-	-	-	-	-	0
Stage 2	967	848	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	882	0	1017	1588	-	-	1547	-	-
Mov Cap-2 Maneuver	882	0	-	-	-	-	-	-	-
Stage 1	971	0	-	-	-	-	-	-	-
Stage 2	957	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1588	-	-	882	1017	1547	-
HCM Lane V/C Ratio	-	-	-	0.013	0.019	0.01	-
HCM Control Delay (s)	0	-	-	9.1	8.6	7.3	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

BACKGROUND TRAFFIC

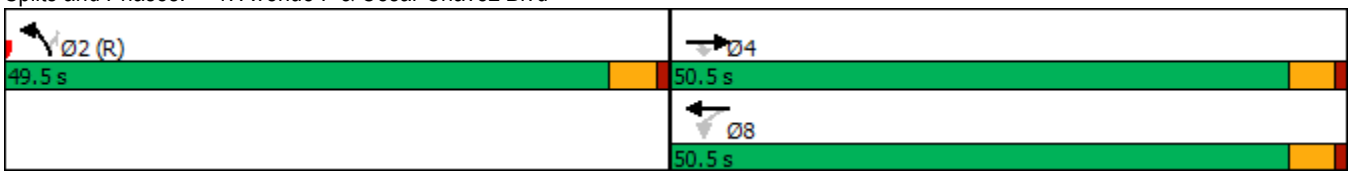
2024

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	635	348	16	242	515	62
Future Volume (vph)	635	348	16	242	515	62
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.094		0.950	
Satd. Flow (perm)	1667	1417	138	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		402				74
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	756	414	19	288	613	74
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.99	0.48	0.30	0.38	0.98	0.11
Control Delay	57.6	4.0	32.6	19.5	59.1	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	4.0	32.6	19.5	59.1	4.3
LOS	E	A	C	B	E	A
Approach Delay	38.6			20.3	53.2	
Approach LOS	D			C	D	
Queue Length 50th (ft)	462	4	7	116	372	0
Queue Length 95th (ft)	#640	42	28	165	#541	21
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	868	63	766	628	678
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.48	0.30	0.38	0.98	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 40.6		Intersection LOS: D	
Intersection Capacity Utilization 81.0%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	623	84	108	253	42	102
Future Volume (vph)	623	84	108	253	42	102
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.347		0.950	
Satd. Flow (perm)	3167	1417	510	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		99				120
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	733	99	127	298	49	120
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	71.0	71.0	71.0	71.0	29.0	29.0
Total Split (%)	71.0%	71.0%	71.0%	71.0%	29.0%	29.0%
Maximum Green (s)	66.5	66.5	66.5	66.5	24.5	24.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	66.5	66.5	66.5	66.5	24.5	24.5
Actuated g/C Ratio	0.66	0.66	0.66	0.66	0.24	0.24
v/c Ratio	0.35	0.10	0.37	0.14	0.11	0.25
Control Delay	11.4	5.2	11.4	6.4	30.3	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	5.2	11.4	6.4	30.3	7.2
LOS	B	A	B	A	C	A
Approach Delay	10.7			7.9	13.9	
Approach LOS	B			A	B	
Queue Length 50th (ft)	116	12	32	33	24	0
Queue Length 95th (ft)	m125	m13	64	45	51	38
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2106	975	339	2106	433	478
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.10	0.37	0.14	0.11	0.25

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 42.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	0	4	0	0	0	0	70	0	0	116	14
Future Vol, veh/h	61	0	4	0	0	0	0	70	0	0	116	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	84	0	5	0	0	0	0	96	0	0	159	19

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	207	-	80	176	274	48	178	0	-	-	-	0
Stage 1	159	-	-	96	96	-	-	-	-	-	-	-
Stage 2	48	-	-	80	178	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	732	0	964	770	632	1011	1395	-	0	0	-	-
Stage 1	827	0	-	900	815	-	-	-	0	0	-	-
Stage 2	959	0	-	919	751	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	732	-	964	765	632	1011	1395	-	-	-	-	-
Mov Cap-2 Maneuver	732	-	-	765	632	-	-	-	-	-	-	-
Stage 1	827	-	-	900	815	-	-	-	-	-	-	-
Stage 2	959	-	-	914	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1395	-	743	-	-	-
HCM Lane V/C Ratio	-	-	0.12	-	-	-
HCM Control Delay (s)	0	-	10.5	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	4	7	0	1	7	3	26	0	21	64	37
Future Vol, veh/h	38	4	7	0	1	7	3	26	0	21	64	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	5	9	0	1	9	4	33	0	27	81	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	160	176	41	138	223	17	128	0	0	33	0	0
Stage 1	135	135	-	41	41	-	-	-	-	-	-	-
Stage 2	25	41	-	97	182	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	790	716	1021	819	675	1058	1456	-	-	1577	-	-
Stage 1	854	784	-	968	860	-	-	-	-	-	-	-
Stage 2	989	860	-	899	748	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	770	702	1021	795	662	1058	1456	-	-	1577	-	-
Mov Cap-2 Maneuver	770	702	-	795	662	-	-	-	-	-	-	-
Stage 1	851	771	-	965	857	-	-	-	-	-	-	-
Stage 2	977	857	-	870	735	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	8.7	0.8	1.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	792	984	1577	-	-
HCM Lane V/C Ratio	0.003	-	-	0.078	0.01	0.017	-	-
HCM Control Delay (s)	7.5	-	-	9.9	8.7	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	37	77	0
Future Vol, veh/h	0	3	0	37	77	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	47	97	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	121	49	97	0	-	0
Stage 1	97	-	-	-	-	-
Stage 2	24	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	862	1009	1494	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	995	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	862	1009	1494	-	-	-
Mov Cap-2 Maneuver	862	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	995	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1494	-	1009	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	6	16	0	16	3	30	41	13
Future Vol, veh/h	0	0	0	3	6	16	0	16	3	30	41	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	8	21	0	21	4	38	53	17

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	161	169	23	70	0	0	25	0	0
Stage 1	23	23	-	-	-	-	-	-	-
Stage 2	138	146	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	830	724	1054	1531	-	-	1589	-	-
Stage 1	1000	876	-	-	-	-	-	-	-
Stage 2	889	776	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	810	0	1054	1531	-	-	1589	-	-
Mov Cap-2 Maneuver	810	0	-	-	-	-	-	-	-
Stage 1	1000	0	-	-	-	-	-	-	-
Stage 2	868	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	2.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1531	-	-	810	1054	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.019	0.024	-	-
HCM Control Delay (s)	0	-	-	9.5	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	389	499	103	930	422	17
Future Volume (vph)	389	499	103	930	422	17
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.380		0.950	
Satd. Flow (perm)	1667	1417	559	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		542				18
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	423	542	112	1011	459	18
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.55	0.57	0.44	1.32	0.73	0.03
Control Delay	23.0	4.2	25.0	179.5	30.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	4.2	25.0	179.5	30.9	6.8
LOS	C	A	C	F	C	A
Approach Delay	12.4			164.1	30.0	
Approach LOS	B			F	C	
Queue Length 50th (ft)	189	0	47	~837	233	0
Queue Length 95th (ft)	284	57	99	#1080	361	13
Internal Link Dist (ft)	2815			2430	1908	

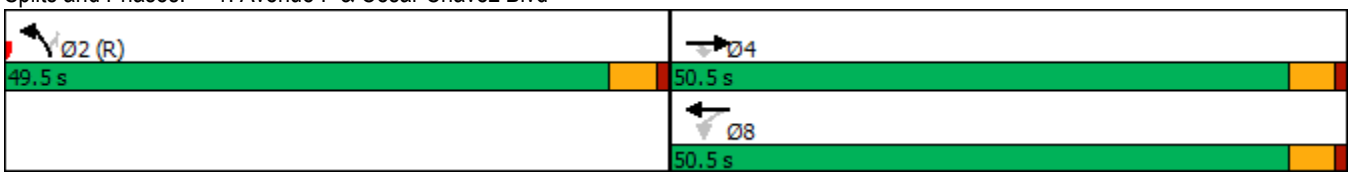
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	944	257	766	628	647
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.57	0.44	1.32	0.73	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.32			
Intersection Signal Delay: 82.1		Intersection LOS: F	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	404	41	244	924	44	114
Future Volume (vph)	404	41	244	924	44	114
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.478		0.950	
Satd. Flow (perm)	3167	1417	703	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		48				134
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	475	48	287	1087	52	134
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	75.0	75.0	75.0	75.0	25.0	25.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%
Maximum Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.20	0.20
v/c Ratio	0.21	0.05	0.58	0.49	0.14	0.31
Control Delay	5.1	1.8	13.1	7.5	33.9	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	1.8	13.1	7.5	33.9	8.1
LOS	A	A	B	A	C	A
Approach Delay	4.8			8.7	15.3	
Approach LOS	A			A	B	
Queue Length 50th (ft)	37	0	79	142	27	0
Queue Length 95th (ft)	60	m7	140	165	57	41
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2232	1013	495	2232	362	431
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.05	0.58	0.49	0.14	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	3	0	0	0	0	113	0	0	90	106
Future Vol, veh/h	37	0	3	0	0	0	0	113	0	0	90	106
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	0	4	0	0	0	0	155	0	0	123	145

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	201	-	62	217	423	78	268	0	-	-	-	0
Stage 1	123	-	-	155	155	-	-	-	-	-	-	-
Stage 2	78	-	-	62	268	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	739	0	990	721	521	967	1293	-	0	0	-	-
Stage 1	868	0	-	832	768	-	-	-	0	0	-	-
Stage 2	922	0	-	942	686	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	739	-	990	718	521	967	1293	-	-	-	-	-
Mov Cap-2 Maneuver	739	-	-	718	521	-	-	-	-	-	-	-
Stage 1	868	-	-	832	768	-	-	-	-	-	-	-
Stage 2	922	-	-	938	686	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1293	-	753	-	-	-
HCM Lane V/C Ratio	-	-	0.073	-	-	-
HCM Control Delay (s)	0	-	10.2	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	2	3	0	22	9	2	29	9	0	22	68
Future Vol, veh/h	48	2	3	0	22	9	2	29	9	0	22	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	3	4	0	28	11	3	37	11	0	28	86

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	67	82	14	59	157	19	114	0	0	48	0	0
Stage 1	28	28	-	43	43	-	-	-	-	-	-	-
Stage 2	39	54	-	16	114	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	918	807	1062	930	734	1055	1473	-	-	1557	-	-
Stage 1	985	871	-	966	858	-	-	-	-	-	-	-
Stage 2	971	849	-	1001	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	880	805	1062	923	733	1055	1473	-	-	1557	-	-
Mov Cap-2 Maneuver	880	805	-	923	733	-	-	-	-	-	-	-
Stage 1	983	871	-	964	856	-	-	-	-	-	-	-
Stage 2	927	847	-	995	800	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.7	0.4	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1473	-	-	885	804	1557	-	-
HCM Lane V/C Ratio	0.002	-	-	0.076	0.049	-	-	-
HCM Control Delay (s)	7.4	-	-	9.4	9.7	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	53	34	0
Future Vol, veh/h	0	0	0	53	34	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	67	43	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	77	22	43	0	-	0
Stage 1	43	-	-	-	-	-
Stage 2	34	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	917	1050	1564	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	917	1050	1564	-	-	-
Mov Cap-2 Maneuver	917	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	984	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1564	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	9	0	18	0	37	9	13	21	0
Future Vol, veh/h	0	0	0	9	0	18	0	37	9	13	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	23	0	47	12	17	27	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	114	-	53	27	0	0	59	0	0
Stage 1	53	-	-	-	-	-	-	-	-
Stage 2	61	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	882	0	1014	1587	-	-	1545	-	0
Stage 1	970	0	-	-	-	-	-	-	0
Stage 2	962	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	872	0	1014	1587	-	-	1545	-	-
Mov Cap-2 Maneuver	872	0	-	-	-	-	-	-	-
Stage 1	970	0	-	-	-	-	-	-	-
Stage 2	951	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1587	-	-	872	1014	1545	-
HCM Lane V/C Ratio	-	-	-	0.013	0.023	0.011	-
HCM Control Delay (s)	0	-	-	9.2	8.6	7.4	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

BACKGROUND TRAFFIC

2025

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	667	365	17	254	540	65
Future Volume (vph)	667	365	17	254	540	65
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.087		0.950	
Satd. Flow (perm)	1667	1417	128	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		402				77
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	794	435	20	302	643	77
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	1.04	0.50	0.34	0.39	1.02	0.11
Control Delay	70.5	4.6	37.2	19.8	71.0	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	4.6	37.2	19.8	71.0	4.2
LOS	E	A	D	B	E	A
Approach Delay	47.2			20.8	63.9	
Approach LOS	D			C	E	
Queue Length 50th (ft)	~548	11	8	123	~439	0
Queue Length 95th (ft)	#689	50	31	174	#581	22
Internal Link Dist (ft)	2815			2430	1908	

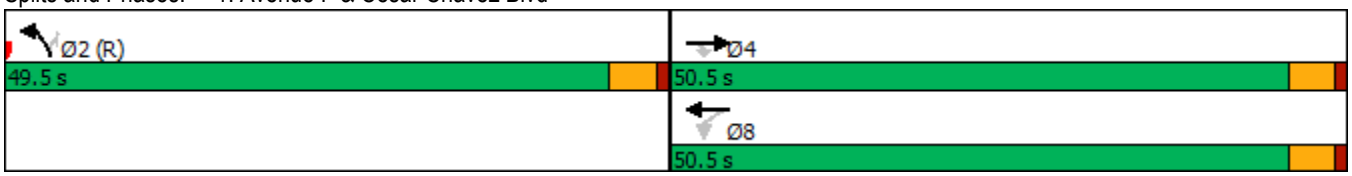
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	868	58	766	628	680
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.50	0.34	0.39	1.02	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 48.8		Intersection LOS: D	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	654	88	113	266	44	107
Future Volume (vph)	654	88	113	266	44	107
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.334		0.950	
Satd. Flow (perm)	3167	1417	491	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		104				126
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	104	133	313	52	126
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	72.0	72.0	72.0	72.0	28.0	28.0
Total Split (%)	72.0%	72.0%	72.0%	72.0%	28.0%	28.0%
Maximum Green (s)	67.5	67.5	67.5	67.5	23.5	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	67.5	67.5	67.5	67.5	23.5	23.5
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.24	0.24
v/c Ratio	0.36	0.11	0.40	0.15	0.13	0.27
Control Delay	11.4	5.1	11.7	6.1	31.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	5.1	11.7	6.1	31.2	7.3
LOS	B	A	B	A	C	A
Approach Delay	10.6			7.7	14.3	
Approach LOS	B			A	B	
Queue Length 50th (ft)	124	12	34	33	26	0
Queue Length 95th (ft)	m125	m12	68	46	55	39
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2137	990	331	2137	415	468
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.11	0.40	0.15	0.13	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	4	0	0	0	0	74	0	0	122	15
Future Vol, veh/h	64	0	4	0	0	0	0	74	0	0	122	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	0	5	0	0	0	0	101	0	0	167	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	218	-	84	185	289	51	188	0	-	-	-	0
Stage 1	167	-	-	101	101	-	-	-	-	-	-	-
Stage 2	51	-	-	84	188	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	719	0	958	759	620	1006	1384	-	0	0	-	-
Stage 1	818	0	-	894	811	-	-	-	0	0	-	-
Stage 2	956	0	-	915	743	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	719	-	958	754	620	1006	1384	-	-	-	-	-
Mov Cap-2 Maneuver	719	-	-	754	620	-	-	-	-	-	-	-
Stage 1	818	-	-	894	811	-	-	-	-	-	-	-
Stage 2	956	-	-	910	743	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1384	-	730	-	-	-
HCM Lane V/C Ratio	-	-	0.128	-	-	-
HCM Control Delay (s)	0	-	10.7	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	4	7	0	1	7	3	27	0	22	67	39
Future Vol, veh/h	40	4	7	0	1	7	3	27	0	22	67	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	5	9	0	1	9	4	34	0	28	85	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	167	183	43	143	232	17	134	0	0	34	0	0
Stage 1	141	141	-	42	42	-	-	-	-	-	-	-
Stage 2	26	42	-	101	190	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	781	710	1018	812	667	1058	1448	-	-	1576	-	-
Stage 1	847	779	-	967	859	-	-	-	-	-	-	-
Stage 2	988	859	-	894	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	761	695	1018	788	653	1058	1448	-	-	1576	-	-
Mov Cap-2 Maneuver	761	695	-	788	653	-	-	-	-	-	-	-
Stage 1	844	765	-	964	856	-	-	-	-	-	-	-
Stage 2	976	856	-	865	729	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	8.7	0.7	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1448	-	-	782	982	1576	-	-
HCM Lane V/C Ratio	0.003	-	-	0.083	0.01	0.018	-	-
HCM Control Delay (s)	7.5	-	-	10	8.7	7.3	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	39	80	0
Future Vol, veh/h	0	3	0	39	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	49	101	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	126	51	101	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	856	1006	1489	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	856	1006	1489	-	-	-
Mov Cap-2 Maneuver	856	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	994	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	1006	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	7	17	0	17	3	32	43	13
Future Vol, veh/h	0	0	0	3	7	17	0	17	3	32	43	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	9	22	0	22	4	41	55	17

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	170	178	24	72	0	0	26	0	0
Stage 1	24	24	-	-	-	-	-	-	-
Stage 2	146	154	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	820	716	1052	1528	-	-	1588	-	-
Stage 1	999	875	-	-	-	-	-	-	-
Stage 2	881	770	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	799	0	1052	1528	-	-	1588	-	-
Mov Cap-2 Maneuver	799	0	-	-	-	-	-	-	-
Stage 1	999	0	-	-	-	-	-	-	-
Stage 2	858	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1528	-	-	799	1052	1588	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.021	0.026	-	-
HCM Control Delay (s)	0	-	-	9.5	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	408	524	108	977	443	18
Future Volume (vph)	408	524	108	977	443	18
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.362		0.950	
Satd. Flow (perm)	1667	1417	532	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		570				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	443	570	117	1062	482	20
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.58	0.59	0.48	1.39	0.77	0.03
Control Delay	23.6	4.3	26.9	208.0	33.0	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.6	4.3	26.9	208.0	33.0	6.6
LOS	C	A	C	F	C	A
Approach Delay	12.8			190.1	31.9	
Approach LOS	B			F	C	
Queue Length 50th (ft)	201	0	50	~905	251	0
Queue Length 95th (ft)	301	58	109	#1151	#390	13
Internal Link Dist (ft)	2815			2430	1908	

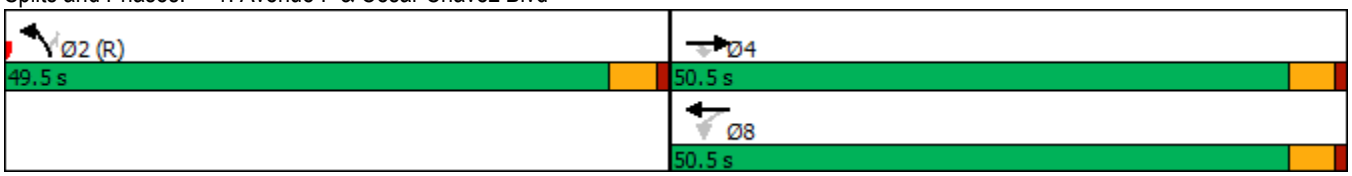
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	959	244	766	628	648
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.59	0.48	1.39	0.77	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 93.9		Intersection LOS: F	
Intersection Capacity Utilization 96.1%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	424	43	256	970	46	120
Future Volume (vph)	424	43	256	970	46	120
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.467		0.950	
Satd. Flow (perm)	3167	1417	687	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		51				141
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	499	51	301	1141	54	141
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	76.0	76.0	76.0	76.0	24.0	24.0
Total Split (%)	76.0%	76.0%	76.0%	76.0%	24.0%	24.0%
Maximum Green (s)	71.5	71.5	71.5	71.5	19.5	19.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	71.5	71.5	71.5	71.5	19.5	19.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.20	0.20
v/c Ratio	0.22	0.05	0.61	0.50	0.16	0.33
Control Delay	5.1	1.9	13.9	7.3	34.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	1.9	13.9	7.3	34.9	8.3
LOS	A	A	B	A	C	A
Approach Delay	4.8			8.7	15.7	
Approach LOS	A			A	B	
Queue Length 50th (ft)	39	0	84	146	29	0
Queue Length 95th (ft)	67	m9	151	170	60	43
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2264	1027	491	2264	345	422
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.05	0.61	0.50	0.16	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 46.5%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	3	0	0	0	0	119	0	0	95	111
Future Vol, veh/h	39	0	3	0	0	0	0	119	0	0	95	111
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	0	4	0	0	0	0	163	0	0	130	152

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	212	-	65	228	445	82	282	0	-	-	-	0
Stage 1	130	-	-	163	163	-	-	-	-	-	-	-
Stage 2	82	-	-	65	282	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	726	0	986	708	506	961	1277	-	0	0	-	-
Stage 1	860	0	-	823	762	-	-	-	0	0	-	-
Stage 2	917	0	-	938	676	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	726	-	986	705	506	961	1277	-	-	-	-	-
Mov Cap-2 Maneuver	726	-	-	705	506	-	-	-	-	-	-	-
Stage 1	860	-	-	823	762	-	-	-	-	-	-	-
Stage 2	917	-	-	934	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1277	-	740	-	-	-
HCM Lane V/C Ratio	-	-	0.078	-	-	-
HCM Control Delay (s)	0	-	10.3	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	2	3	0	23	9	2	30	9	0	23	71
Future Vol, veh/h	50	2	3	0	23	9	2	30	9	0	23	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	3	4	0	29	11	3	38	11	0	29	90

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	69	84	15	60	163	19	119	0	0	49	0	0
Stage 1	29	29	-	44	44	-	-	-	-	-	-	-
Stage 2	40	55	-	16	119	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	915	805	1061	929	728	1055	1467	-	-	1556	-	-
Stage 1	984	870	-	965	858	-	-	-	-	-	-	-
Stage 2	970	848	-	1001	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	876	803	1061	922	727	1055	1467	-	-	1556	-	-
Mov Cap-2 Maneuver	876	803	-	922	727	-	-	-	-	-	-	-
Stage 1	982	870	-	963	856	-	-	-	-	-	-	-
Stage 2	925	846	-	995	796	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.8	0.4	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	881	797	1556	-	-
HCM Lane V/C Ratio	0.002	-	-	0.079	0.051	-	-	-
HCM Control Delay (s)	7.5	-	-	9.4	9.8	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	55	35	0
Future Vol, veh/h	0	0	0	55	35	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	70	44	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	79	22	44	0	-	0
Stage 1	44	-	-	-	-	-
Stage 2	35	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	915	1050	1563	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	915	1050	1563	-	-	-
Mov Cap-2 Maneuver	915	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	983	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1563	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	19	0	39	10	13	22	0
Future Vol, veh/h	0	0	0	10	0	19	0	39	10	13	22	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	13	0	24	0	50	13	17	28	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	119	-	57	28	0	0	63	0	0
Stage 1	57	-	-	-	-	-	-	-	-
Stage 2	62	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	877	0	1009	1585	-	-	1540	-	0
Stage 1	966	0	-	-	-	-	-	-	0
Stage 2	961	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	867	0	1009	1585	-	-	1540	-	-
Mov Cap-2 Maneuver	867	0	-	-	-	-	-	-	-
Stage 1	966	0	-	-	-	-	-	-	-
Stage 2	950	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1585	-	-	867	1009	1540	-
HCM Lane V/C Ratio	-	-	-	0.015	0.024	0.011	-
HCM Control Delay (s)	0	-	-	9.2	8.7	7.4	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

BACKGROUND TRAFFIC

2026

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	700	383	17	266	567	68
Future Volume (vph)	700	383	17	266	567	68
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.087		0.950	
Satd. Flow (perm)	1667	1417	128	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		401				81
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	833	456	20	317	675	81
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	1.09	0.53	0.34	0.41	1.07	0.12
Control Delay	86.8	5.3	37.2	20.1	86.3	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.8	5.3	37.2	20.1	86.3	4.1
LOS	F	A	D	C	F	A
Approach Delay	58.0			21.1	77.5	
Approach LOS	E			C	E	
Queue Length 50th (ft)	~600	19	8	130	~481	0
Queue Length 95th (ft)	#741	60	31	184	#624	22
Internal Link Dist (ft)	2815			2430	1908	

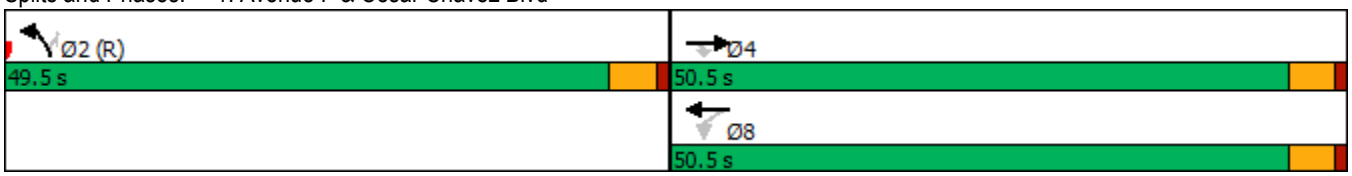
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	868	58	766	628	682
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.53	0.34	0.41	1.07	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 58.9		Intersection LOS: E	
Intersection Capacity Utilization 88.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	687	92	119	279	46	112
Future Volume (vph)	687	92	119	279	46	112
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.320		0.950	
Satd. Flow (perm)	3167	1417	471	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		108				132
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	808	108	140	328	54	132
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	27.0	27.0
Total Split (%)	73.0%	73.0%	73.0%	73.0%	27.0%	27.0%
Maximum Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
v/c Ratio	0.37	0.11	0.43	0.15	0.14	0.29
Control Delay	11.3	4.9	12.2	5.7	32.2	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	4.9	12.2	5.7	32.2	7.5
LOS	B	A	B	A	C	A
Approach Delay	10.6			7.7	14.7	
Approach LOS	B			A	B	
Queue Length 50th (ft)	130	13	35	34	28	0
Queue Length 95th (ft)	m125	m12	72	46	57	40
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2169	1004	322	2169	398	458
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.11	0.43	0.15	0.14	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	0	4	0	0	0	0	78	0	0	128	16
Future Vol, veh/h	67	0	4	0	0	0	0	78	0	0	128	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	0	5	0	0	0	0	107	0	0	175	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	229	-	88	195	304	54	197	0	-	-	-	0
Stage 1	175	-	-	107	107	-	-	-	-	-	-	-
Stage 2	54	-	-	88	197	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	707	0	953	747	608	1002	1373	-	0	0	-	-
Stage 1	810	0	-	887	806	-	-	-	0	0	-	-
Stage 2	952	0	-	910	737	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	707	-	953	743	608	1002	1373	-	-	-	-	-
Mov Cap-2 Maneuver	707	-	-	743	608	-	-	-	-	-	-	-
Stage 1	810	-	-	887	806	-	-	-	-	-	-	-
Stage 2	952	-	-	905	737	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1373	-	717	-	-	-
HCM Lane V/C Ratio	-	-	0.136	-	-	-
HCM Control Delay (s)	0	-	10.8	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑↑	↱	↰	↑↑	↱
Traffic Vol, veh/h	42	4	7	0	1	7	3	28	0	23	70	41
Future Vol, veh/h	42	4	7	0	1	7	3	28	0	23	70	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	5	9	0	1	9	4	35	0	29	89	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	173	190	45	148	242	18	141	0	0	35	0	0
Stage 1	147	147	-	43	43	-	-	-	-	-	-	-
Stage 2	26	43	-	105	199	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	774	704	1015	806	658	1056	1440	-	-	1575	-	-
Stage 1	841	774	-	966	858	-	-	-	-	-	-	-
Stage 2	988	858	-	889	735	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	754	689	1015	782	644	1056	1440	-	-	1575	-	-
Mov Cap-2 Maneuver	754	689	-	782	644	-	-	-	-	-	-	-
Stage 1	838	760	-	963	855	-	-	-	-	-	-	-
Stage 2	976	855	-	859	722	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	8.7	0.7	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	775	978	1575	-	-
HCM Lane V/C Ratio	0.003	-	-	0.087	0.01	0.018	-	-
HCM Control Delay (s)	7.5	-	-	10.1	8.7	7.3	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	0	41	85	0
Future Vol, veh/h	0	3	0	41	85	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	0	52	108	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	134	54	108	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	846	1002	1480	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	846	1002	1480	-	-	-
Mov Cap-2 Maneuver	846	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	993	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1480	-	1002	-	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	7	17	0	17	3	34	45	14
Future Vol, veh/h	0	0	0	3	7	17	0	17	3	34	45	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	9	22	0	22	4	44	58	18

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	179	188	24	76	0	0	26	0	0
Stage 1	24	24	-	-	-	-	-	-	-
Stage 2	155	164	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	811	707	1052	1523	-	-	1588	-	-
Stage 1	999	875	-	-	-	-	-	-	-
Stage 2	873	762	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	788	0	1052	1523	-	-	1588	-	-
Mov Cap-2 Maneuver	788	0	-	-	-	-	-	-	-
Stage 1	999	0	-	-	-	-	-	-	-
Stage 2	849	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1523	-	-	788	1052	1588	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.021	0.027	-	-
HCM Control Delay (s)	0	-	-	9.6	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

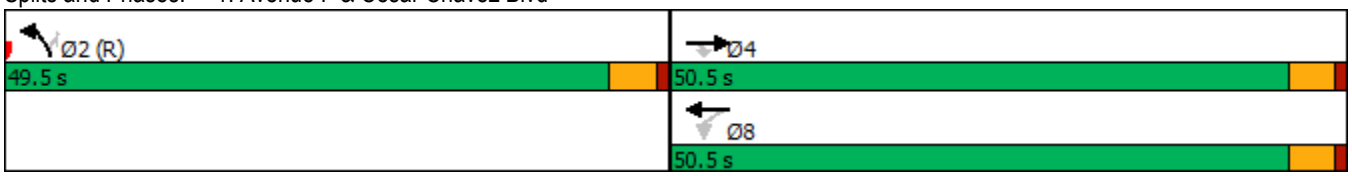
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	428	550	113	1026	465	19
Future Volume (vph)	428	550	113	1026	465	19
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.342		0.950	
Satd. Flow (perm)	1667	1417	503	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		598				21
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	465	598	123	1115	505	21
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.5	50.5	50.5	50.5	49.5	49.5
Total Split (%)	50.5%	50.5%	50.5%	50.5%	49.5%	49.5%
Maximum Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.0	46.0	46.0	46.0	45.0	45.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.45	0.45
v/c Ratio	0.61	0.61	0.53	1.46	0.80	0.03
Control Delay	24.4	4.5	29.7	237.9	35.5	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	4.5	29.7	237.9	35.5	6.5
LOS	C	A	C	F	D	A
Approach Delay	13.2			217.2	34.4	
Approach LOS	B			F	C	
Queue Length 50th (ft)	215	0	54	~976	269	0
Queue Length 95th (ft)	321	59	119	#1224	#453	13
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	766	974	231	766	628	649
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.61	0.53	1.46	0.80	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.46			
Intersection Signal Delay: 106.5		Intersection LOS: F	
Intersection Capacity Utilization 100.5%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	445	45	269	1019	48	126
Future Volume (vph)	445	45	269	1019	48	126
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.455		0.950	
Satd. Flow (perm)	3167	1417	669	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		53				148
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	524	53	316	1199	56	148
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	23.0	23.0
Total Split (%)	77.0%	77.0%	77.0%	77.0%	23.0%	23.0%
Maximum Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.18	0.18
v/c Ratio	0.23	0.05	0.65	0.52	0.17	0.36
Control Delay	5.0	2.0	15.0	7.1	36.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.0	2.0	15.0	7.1	36.0	8.7
LOS	A	A	B	A	D	A
Approach Delay	4.7			8.7	16.2	
Approach LOS	A			A	B	
Queue Length 50th (ft)	41	0	90	152	30	0
Queue Length 95th (ft)	76	m10	166	175	62	44
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2296	1041	485	2296	327	413
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.05	0.65	0.52	0.17	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 8.4		Intersection LOS: A	
Intersection Capacity Utilization 48.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	0	3	0	0	0	0	125	0	0	100	117
Future Vol, veh/h	41	0	3	0	0	0	0	125	0	0	100	117
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	0	4	0	0	0	0	171	0	0	137	160

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	223	-	69	240	468	86	297	0	-	-	-	0
Stage 1	137	-	-	171	171	-	-	-	-	-	-	-
Stage 2	86	-	-	69	297	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	714	0	980	694	491	956	1261	-	0	0	-	-
Stage 1	852	0	-	814	756	-	-	-	0	0	-	-
Stage 2	912	0	-	933	666	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	714	-	980	691	491	956	1261	-	-	-	-	-
Mov Cap-2 Maneuver	714	-	-	691	491	-	-	-	-	-	-	-
Stage 1	852	-	-	814	756	-	-	-	-	-	-	-
Stage 2	912	-	-	929	666	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1261	-	727	-	-	-
HCM Lane V/C Ratio	-	-	0.083	-	-	-
HCM Control Delay (s)	0	-	10.4	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	2	3	0	24	9	2	32	9	0	24	75
Future Vol, veh/h	53	2	3	0	24	9	2	32	9	0	24	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	3	4	0	30	11	3	41	11	0	30	95

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	72	88	15	64	172	21	125	0	0	52	0	0
Stage 1	30	30	-	47	47	-	-	-	-	-	-	-
Stage 2	42	58	-	17	125	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	911	801	1061	923	720	1051	1459	-	-	1552	-	-
Stage 1	983	870	-	961	855	-	-	-	-	-	-	-
Stage 2	967	846	-	1000	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	871	799	1061	916	719	1051	1459	-	-	1552	-	-
Mov Cap-2 Maneuver	871	799	-	916	719	-	-	-	-	-	-	-
Stage 1	981	870	-	959	853	-	-	-	-	-	-	-
Stage 2	921	844	-	994	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	9.8	0.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1459	-	-	876	787	1552	-	-
HCM Lane V/C Ratio	0.002	-	-	0.084	0.053	-	-	-
HCM Control Delay (s)	7.5	-	-	9.5	9.8	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	58	37	0
Future Vol, veh/h	0	0	0	58	37	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	73	47	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	84	24	47	0	-	0
Stage 1	47	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	908	1047	1559	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	908	1047	1559	-	-	-
Mov Cap-2 Maneuver	908	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	981	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	20	0	41	10	14	23	0
Future Vol, veh/h	0	0	0	10	0	20	0	41	10	14	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	13	0	26	0	53	13	18	29	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	125	-	60	29	0	0	66	0	0
Stage 1	60	-	-	-	-	-	-	-	-
Stage 2	65	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	870	0	1005	1584	-	-	1536	-	0
Stage 1	963	0	-	-	-	-	-	-	0
Stage 2	958	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	860	0	1005	1584	-	-	1536	-	-
Mov Cap-2 Maneuver	860	0	-	-	-	-	-	-	-
Stage 1	963	0	-	-	-	-	-	-	-
Stage 2	947	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1584	-	-	860	1005	1536	-
HCM Lane V/C Ratio	-	-	-	0.015	0.026	0.012	-
HCM Control Delay (s)	0	-	-	9.2	8.7	7.4	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-

BACKGROUND TRAFFIC

2031

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	894	489	22	340	724	87
Future Volume (vph)	894	489	22	340	724	87
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.072		0.950	
Satd. Flow (perm)	1667	1417	106	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		336				50
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1064	582	26	405	862	104
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	55.5	55.5	55.5	55.5	55.5	55.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	1.38	0.70	0.53	0.53	1.33	0.15
Control Delay	208.8	15.1	70.5	29.5	190.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	208.8	15.1	70.5	29.5	190.2	10.8
LOS	F	B	E	C	F	B
Approach Delay	140.3			32.0	170.9	
Approach LOS	F			C	F	
Queue Length 50th (ft)	~1094	146	15	239	~869	23
Queue Length 95th (ft)	#1218	232	#58	307	#1006	51
Internal Link Dist (ft)	2815			2430	1908	

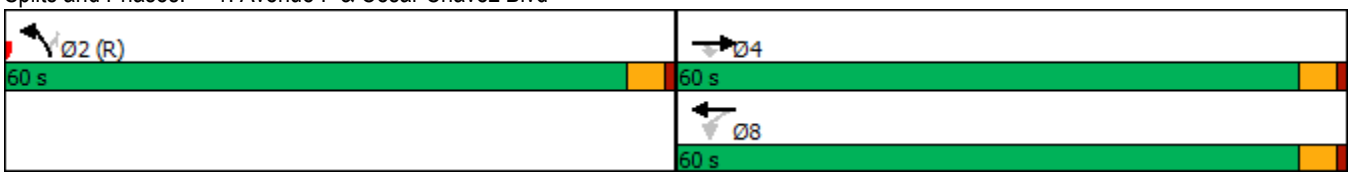
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	770	835	49	770	646	682
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.38	0.70	0.53	0.53	1.33	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.38			
Intersection Signal Delay: 134.7		Intersection LOS: F	
Intersection Capacity Utilization 110.9%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	877	117	152	356	59	143
Future Volume (vph)	877	117	152	356	59	143
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.255		0.950	
Satd. Flow (perm)	3167	1417	375	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		138				168
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1032	138	179	419	69	168
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.0	97.0	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	80.8%	80.8%	19.2%	19.2%
Maximum Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Actuated g/C Ratio	0.77	0.77	0.77	0.77	0.15	0.15
v/c Ratio	0.42	0.12	0.62	0.17	0.25	0.44
Control Delay	1.1	0.0	17.3	3.8	47.5	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.1	0.0	17.3	3.8	47.5	10.5
LOS	A	A	B	A	D	B
Approach Delay	1.0			7.9	21.2	
Approach LOS	A			A	C	
Queue Length 50th (ft)	22	1	51	37	48	0
Queue Length 95th (ft)	m20	m0	119	48	87	52
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2441	1123	289	2441	272	386
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.12	0.62	0.17	0.25	0.44

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 5.4		Intersection LOS: A	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	0	4	0	0	0	0	100	0	0	163	20
Future Vol, veh/h	86	0	4	0	0	0	0	100	0	0	163	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	0	5	0	0	0	0	137	0	0	223	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	292	-	112	249	387	69	250	0	-	-	-	0
Stage 1	223	-	-	137	137	-	-	-	-	-	-	-
Stage 2	69	-	-	112	250	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	638	0	920	684	546	980	1313	-	0	0	-	-
Stage 1	759	0	-	852	782	-	-	-	0	0	-	-
Stage 2	933	0	-	881	699	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	638	-	920	680	546	980	1313	-	-	-	-	-
Mov Cap-2 Maneuver	638	-	-	680	546	-	-	-	-	-	-	-
Stage 1	759	-	-	852	782	-	-	-	-	-	-	-
Stage 2	933	-	-	876	699	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1313	-	647	-	-	-
HCM Lane V/C Ratio	-	-	0.191	-	-	-
HCM Control Delay (s)	0	-	11.9	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	5	9	0	1	9	3	36	0	29	89	52
Future Vol, veh/h	54	5	9	0	1	9	3	36	0	29	89	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	6	11	0	1	11	4	46	0	37	113	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	219	241	57	188	307	23	179	0	0	46	0	0
Stage 1	187	187	-	54	54	-	-	-	-	-	-	-
Stage 2	32	54	-	134	253	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	718	659	997	755	606	1048	1394	-	-	1560	-	-
Stage 1	797	744	-	952	849	-	-	-	-	-	-	-
Stage 2	980	849	-	855	696	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	695	641	997	726	590	1048	1394	-	-	1560	-	-
Mov Cap-2 Maneuver	695	641	-	726	590	-	-	-	-	-	-	-
Stage 1	795	726	-	949	846	-	-	-	-	-	-	-
Stage 2	965	846	-	818	679	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	8.7	0.6	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1394	-	-	719	973	1560	-	-
HCM Lane V/C Ratio	0.003	-	-	0.12	0.013	0.024	-	-
HCM Control Delay (s)	7.6	-	-	10.7	8.7	7.4	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	52	108	0
Future Vol, veh/h	0	4	0	52	108	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	0	66	137	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	170	69	137	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	33	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	804	980	1445	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	804	980	1445	-	-	-
Mov Cap-2 Maneuver	804	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	980	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	0	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	9	22	0	22	4	43	58	18
Future Vol, veh/h	0	0	0	4	9	22	0	22	4	43	58	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	12	28	0	28	5	55	74	23

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	227	238	31	97	0	0	33	0	0
Stage 1	31	31	-	-	-	-	-	-	-
Stage 2	196	207	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	761	663	1043	1496	-	-	1579	-	-
Stage 1	992	869	-	-	-	-	-	-	-
Stage 2	837	731	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	734	0	1043	1496	-	-	1579	-	-
Mov Cap-2 Maneuver	734	0	-	-	-	-	-	-	-
Stage 1	992	0	-	-	-	-	-	-	-
Stage 2	808	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1496	-	-	734	1043	1579	-	-
HCM Lane V/C Ratio	-	-	-	0.007	0.027	0.035	-	-
HCM Control Delay (s)	0	-	-	9.9	8.5	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	547	702	145	1309	594	24
Future Volume (vph)	547	702	145	1309	594	24
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.310		0.950	
Satd. Flow (perm)	1667	1417	456	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		763				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	595	763	158	1423	646	26
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	74.0	74.0	74.0	74.0	46.0	46.0
Total Split (%)	61.7%	61.7%	61.7%	61.7%	38.3%	38.3%
Maximum Green (s)	69.5	69.5	69.5	69.5	41.5	41.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	69.5	69.5	69.5	69.5	41.5	41.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.35	0.35
v/c Ratio	0.62	0.67	0.60	1.47	1.34	0.05
Control Delay	20.0	4.1	22.0	241.2	198.7	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.0	4.1	22.0	241.2	198.7	13.1
LOS	C	A	C	F	F	B
Approach Delay	11.1			219.3	191.5	
Approach LOS	B			F	F	
Queue Length 50th (ft)	286	0	78	~1532	~652	3
Queue Length 95th (ft)	406	51	166	#1801	#881	23
Internal Link Dist (ft)	2815			2430	1908	

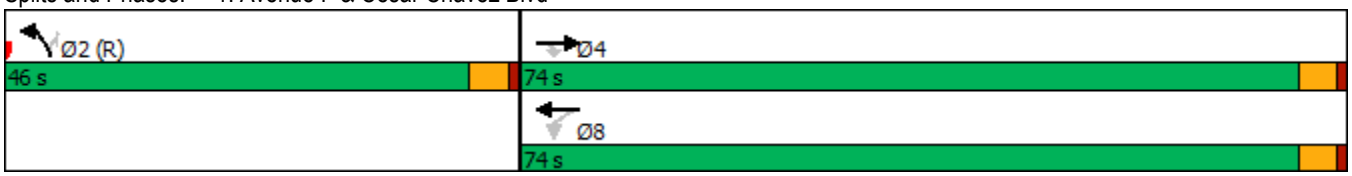
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	965	1141	264	965	483	503
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.67	0.60	1.47	1.34	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.47			
Intersection Signal Delay: 135.8		Intersection LOS: F	
Intersection Capacity Utilization 126.2%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	568	57	343	1301	61	161
Future Volume (vph)	568	57	343	1301	61	161
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.388		0.950	
Satd. Flow (perm)	3167	1417	571	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		67				189
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	668	67	404	1531	72	189
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.0	97.0	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	80.8%	80.8%	19.2%	19.2%
Maximum Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Actuated g/C Ratio	0.77	0.77	0.77	0.77	0.15	0.15
v/c Ratio	0.27	0.06	0.92	0.63	0.26	0.47
Control Delay	1.1	0.1	40.7	7.5	47.7	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.1	0.1	40.7	7.5	47.7	10.5
LOS	A	A	D	A	D	B
Approach Delay	1.1			14.4	20.8	
Approach LOS	A			B	C	
Queue Length 50th (ft)	13	0	207	233	50	0
Queue Length 95th (ft)	18	m1	#446	254	90	54
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2441	1107	440	2441	272	403
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.06	0.92	0.63	0.26	0.47

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	0	3	0	0	0	0	160	0	0	128	149
Future Vol, veh/h	52	0	3	0	0	0	0	160	0	0	128	149
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	71	0	4	0	0	0	0	219	0	0	175	204

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	285	-	88	307	598	110	379	0	-	-	-	0
Stage 1	175	-	-	219	219	-	-	-	-	-	-	-
Stage 2	110	-	-	88	379	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	645	0	953	622	414	922	1176	-	0	0	-	-
Stage 1	810	0	-	763	721	-	-	-	0	0	-	-
Stage 2	883	0	-	910	613	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	645	-	953	620	414	922	1176	-	-	-	-	-
Mov Cap-2 Maneuver	645	-	-	620	414	-	-	-	-	-	-	-
Stage 1	810	-	-	763	721	-	-	-	-	-	-	-
Stage 2	883	-	-	906	613	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.2	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1176	-	657	-	-	-
HCM Lane V/C Ratio	-	-	0.115	-	-	-
HCM Control Delay (s)	0	-	11.2	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	2	3	0	31	11	2	41	11	0	31	96
Future Vol, veh/h	68	2	3	0	31	11	2	41	11	0	31	96
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	86	3	4	0	39	14	3	52	14	0	39	122

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	91	111	20	79	219	26	161	0	0	66	0	0
Stage 1	39	39	-	58	58	-	-	-	-	-	-	-
Stage 2	52	72	-	21	161	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	883	778	1053	901	678	1044	1416	-	-	1534	-	-
Stage 1	971	862	-	947	846	-	-	-	-	-	-	-
Stage 2	954	834	-	995	764	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	831	776	1053	894	677	1044	1416	-	-	1534	-	-
Mov Cap-2 Maneuver	831	776	-	894	677	-	-	-	-	-	-	-
Stage 1	969	862	-	945	844	-	-	-	-	-	-	-
Stage 2	896	832	-	988	764	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	10.2	0.3	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1416	-	-	837	746	1534	-	-
HCM Lane V/C Ratio	0.002	-	-	0.11	0.071	-	-	-
HCM Control Delay (s)	7.5	-	-	9.8	10.2	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	74	47	0
Future Vol, veh/h	0	0	0	74	47	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	94	59	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	106	30	59	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	47	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	880	1038	1543	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	880	1038	1543	-	-	-
Mov Cap-2 Maneuver	880	-	-	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1543	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	13	0	25	0	52	13	18	30	0
Future Vol, veh/h	0	0	0	13	0	25	0	52	13	18	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	17	0	32	0	67	17	23	38	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	160	-	76	38	0	0	84	0	0
Stage 1	76	-	-	-	-	-	-	-	-
Stage 2	84	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	831	0	985	1572	-	-	1513	-	0
Stage 1	947	0	-	-	-	-	-	-	0
Stage 2	939	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	819	0	985	1572	-	-	1513	-	-
Mov Cap-2 Maneuver	819	0	-	-	-	-	-	-	-
Stage 1	947	0	-	-	-	-	-	-	-
Stage 2	925	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1572	-	-	819	985	1513	-
HCM Lane V/C Ratio	-	-	-	0.02	0.033	0.015	-
HCM Control Delay (s)	0	-	-	9.5	8.8	7.4	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-

BACKGROUND TRAFFIC

2036

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1141	624	28	434	924	111
Future Volume (vph)	1141	624	28	434	924	111
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.072		0.950	
Satd. Flow (perm)	1667	1417	106	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		336				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1358	743	33	517	1100	132
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	55.5	55.5	55.5	55.5	55.5	55.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	1.76	0.89	0.67	0.67	1.70	0.20
Control Delay	374.0	30.2	91.5	34.0	348.5	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	374.0	30.2	91.5	34.0	348.5	17.0
LOS	F	C	F	C	F	B
Approach Delay	252.4			37.5	313.0	
Approach LOS	F			D	F	
Queue Length 50th (ft)	~1568	318	21	330	~1252	49
Queue Length 95th (ft)	#1667	452	#76	411	#1373	83
Internal Link Dist (ft)	2815			2430	1908	

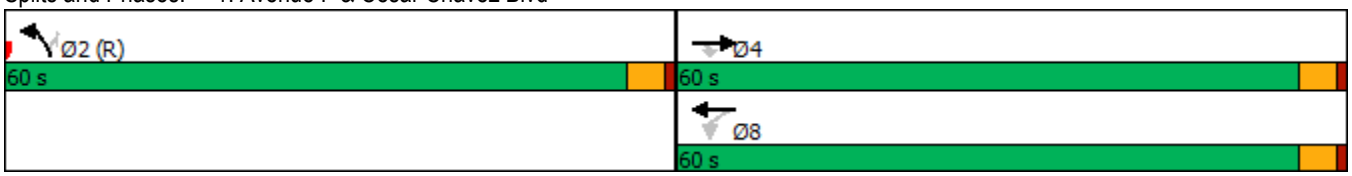
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	770	835	49	770	646	666
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.76	0.89	0.67	0.67	1.70	0.20

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.76			
Intersection Signal Delay: 241.2		Intersection LOS: F	
Intersection Capacity Utilization 139.5%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1119	149	194	454	75	183
Future Volume (vph)	1119	149	194	454	75	183
Ideal Flow (vphpl)	1700	1700	1500	1700	1900	1900
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1770	1583
Flt Permitted			0.180		0.950	
Satd. Flow (perm)	3167	1417	265	3167	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		175				114
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1316	175	228	534	88	215
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.0	97.0	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	80.8%	80.8%	19.2%	19.2%
Maximum Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Actuated g/C Ratio	0.77	0.77	0.77	0.77	0.15	0.15
v/c Ratio	0.54	0.15	1.12	0.22	0.32	0.63
Control Delay	1.4	0.0	117.2	4.0	48.9	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.4	0.0	117.2	4.0	48.9	31.2
LOS	A	A	F	A	D	C
Approach Delay	1.2			37.9	36.4	
Approach LOS	A			D	D	
Queue Length 50th (ft)	37	1	~203	50	62	72
Queue Length 95th (ft)	m23	m0	#173	62	106	142
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2441	1132	204	2441	272	340
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.15	1.12	0.22	0.32	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 63.6%		ICU Level of Service B	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	0	5	0	0	0	0	128	0	0	208	26
Future Vol, veh/h	110	0	5	0	0	0	0	128	0	0	208	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	151	0	7	0	0	0	0	175	0	0	285	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	373	-	143	318	496	88	321	0	-	-	-	0
Stage 1	285	-	-	175	175	-	-	-	-	-	-	-
Stage 2	88	-	-	143	321	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	559	0	879	611	474	953	1236	-	0	0	-	-
Stage 1	698	0	-	810	753	-	-	-	0	0	-	-
Stage 2	910	0	-	845	650	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	559	-	879	606	474	953	1236	-	-	-	-	-
Mov Cap-2 Maneuver	559	-	-	606	474	-	-	-	-	-	-	-
Stage 1	698	-	-	810	753	-	-	-	-	-	-	-
Stage 2	910	-	-	838	650	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1236	-	568	-	-	-
HCM Lane V/C Ratio	-	-	0.277	-	-	-
HCM Control Delay (s)	0	-	13.8	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	1.1	-	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	6	11	0	1	11	4	46	0	37	114	66
Future Vol, veh/h	69	6	11	0	1	11	4	46	0	37	114	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	8	14	0	1	14	5	58	0	47	144	84

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	278	306	72	238	390	29	228	0	0	58	0	0
Stage 1	238	238	-	68	68	-	-	-	-	-	-	-
Stage 2	40	68	-	170	322	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	652	606	975	696	544	1039	1337	-	-	1544	-	-
Stage 1	744	707	-	934	838	-	-	-	-	-	-	-
Stage 2	970	838	-	815	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	625	585	975	662	526	1039	1337	-	-	1544	-	-
Mov Cap-2 Maneuver	625	585	-	662	526	-	-	-	-	-	-	-
Stage 1	741	686	-	930	835	-	-	-	-	-	-	-
Stage 2	952	835	-	770	631	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	8.8	0.6	1.3
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1337	-	-	652	961	1544	-	-
HCM Lane V/C Ratio	0.004	-	-	0.167	0.016	0.03	-	-
HCM Control Delay (s)	7.7	-	-	11.6	8.8	7.4	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	0	66	138	0
Future Vol, veh/h	0	6	0	66	138	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	84	175	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	217	88	175	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	752	953	1399	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	752	953	1399	-	-	-
Mov Cap-2 Maneuver	752	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	975	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1399	-	953	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	6	11	28	0	28	6	55	74	23
Future Vol, veh/h	0	0	0	6	11	28	0	28	6	55	74	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	8	14	36	0	36	8	71	95	29

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	292	306	40	124	0	0	44	0	0
Stage 1	40	40	-	-	-	-	-	-	-
Stage 2	252	266	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	699	608	1031	1463	-	-	1564	-	-
Stage 1	982	862	-	-	-	-	-	-	-
Stage 2	790	689	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	668	0	1031	1463	-	-	1564	-	-
Mov Cap-2 Maneuver	668	0	-	-	-	-	-	-	-
Stage 1	982	0	-	-	-	-	-	-	-
Stage 2	754	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1463	-	-	668	1031	1564	-	-
HCM Lane V/C Ratio	-	-	-	0.012	0.035	0.045	-	-
HCM Control Delay (s)	0	-	-	10.5	8.6	7.4	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0.1	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	698	896	185	1671	758	30
Future Volume (vph)	698	896	185	1671	758	30
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.195		0.950	
Satd. Flow (perm)	1667	1417	287	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		974				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	759	974	201	1816	824	33
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	60.8%	60.8%	39.2%	39.2%
Maximum Green (s)	68.5	68.5	68.5	68.5	42.5	42.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	42.5	42.5
Actuated g/C Ratio	0.57	0.57	0.57	0.57	0.35	0.35
v/c Ratio	0.80	0.79	1.23	1.91	1.67	0.06
Control Delay	28.2	6.6	155.9	432.1	337.8	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	6.6	155.9	432.1	337.8	14.6
LOS	C	A	F	F	F	B
Approach Delay	16.1			404.6	325.3	
Approach LOS	B			F	F	
Queue Length 50th (ft)	441	0	~152	~2188	~929	7
Queue Length 95th (ft)	628	55	m#188	#2456	#1173	30
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	951	1226	163	951	494	514
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.79	1.23	1.91	1.67	0.06

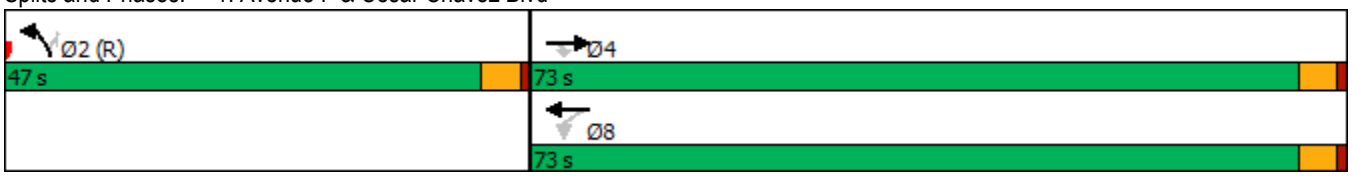
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.91			
Intersection Signal Delay: 243.7		Intersection LOS: F	
Intersection Capacity Utilization 159.0%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	725	73	438	1660	78	205
Future Volume (vph)	725	73	438	1660	78	205
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		560	580		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.315		0.950	
Satd. Flow (perm)	3167	1417	463	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		86				241
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	853	86	515	1953	92	241
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.0	97.0	97.0	97.0	23.0	23.0
Total Split (%)	80.8%	80.8%	80.8%	80.8%	19.2%	19.2%
Maximum Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	92.5	92.5	92.5	92.5	18.5	18.5
Actuated g/C Ratio	0.77	0.77	0.77	0.77	0.15	0.15
v/c Ratio	0.35	0.08	1.45	0.80	0.43	0.57
Control Delay	1.3	0.1	235.5	11.5	52.9	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.3	0.1	235.5	11.5	52.9	11.5
LOS	A	A	F	B	D	B
Approach Delay	1.2			58.3	22.9	
Approach LOS	A			E	C	
Queue Length 50th (ft)	18	0	~262	401	65	0
Queue Length 95th (ft)	25	m0	#419	426	112	59
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		560	580			
Base Capacity (vph)	2441	1111	356	2441	215	422
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.08	1.45	0.80	0.43	0.57

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.45			
Intersection Signal Delay: 40.8		Intersection LOS: D	
Intersection Capacity Utilization 69.9%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	0	4	0	0	0	0	204	0	0	163	190
Future Vol, veh/h	66	0	4	0	0	0	0	204	0	0	163	190
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	250	-	-	-	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	0	5	0	0	0	0	279	0	0	223	260

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	363	-	112	391	762	140	483	0	-	-	-	0
Stage 1	223	-	-	279	279	-	-	-	-	-	-	-
Stage 2	140	-	-	112	483	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	568	0	920	543	333	882	1076	-	0	0	-	-
Stage 1	759	0	-	704	678	-	-	-	0	0	-	-
Stage 2	849	0	-	881	551	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	568	-	920	540	333	882	1076	-	-	-	-	-
Mov Cap-2 Maneuver	568	-	-	540	333	-	-	-	-	-	-	-
Stage 1	759	-	-	704	678	-	-	-	-	-	-	-
Stage 2	849	-	-	876	551	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1076	-	581	-	-	-
HCM Lane V/C Ratio	-	-	0.165	-	-	-
HCM Control Delay (s)	0	-	12.4	0	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	87	2	4	0	40	14	4	52	14	0	40	123
Future Vol, veh/h	87	2	4	0	40	14	4	52	14	0	40	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	110	3	5	0	51	18	5	66	18	0	51	156

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	120	145	26	103	283	33	207	0	0	84	0	0
Stage 1	51	51	-	76	76	-	-	-	-	-	-	-
Stage 2	69	94	-	27	207	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	843	745	1044	866	625	1033	1361	-	-	1511	-	-
Stage 1	956	852	-	924	831	-	-	-	-	-	-	-
Stage 2	933	816	-	987	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	775	742	1044	857	623	1033	1361	-	-	1511	-	-
Mov Cap-2 Maneuver	775	742	-	857	623	-	-	-	-	-	-	-
Stage 1	952	852	-	920	828	-	-	-	-	-	-	-
Stage 2	858	813	-	979	729	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	10.8	0.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1361	-	-	783	694	1511	-	-
HCM Lane V/C Ratio	0.004	-	-	0.15	0.098	-	-	-
HCM Control Delay (s)	7.7	-	-	10.4	10.8	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.3	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	94	60	0
Future Vol, veh/h	0	0	0	94	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	119	76	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	136	38	76	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	844	1026	1521	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	844	1026	1521	-	-	-
Mov Cap-2 Maneuver	844	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1521	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	17	0	32	0	66	17	23	38	0
Future Vol, veh/h	0	0	0	17	0	32	0	66	17	23	38	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	0	250	-	-	250	-	-
Veh in Median Storage, #	1	507328	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	22	0	41	0	85	22	29	49	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	203	-	96	49	0	0	107	0	0
Stage 1	96	-	-	-	-	-	-	-	-
Stage 2	107	-	-	-	-	-	-	-	-
Critical Hdwy	6.42	-	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	786	0	960	1558	-	-	1484	-	0
Stage 1	928	0	-	-	-	-	-	-	0
Stage 2	917	0	-	-	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	770	0	960	1558	-	-	1484	-	-
Mov Cap-2 Maneuver	770	0	-	-	-	-	-	-	-
Stage 1	928	0	-	-	-	-	-	-	-
Stage 2	899	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	1558	-	-	770	960	1484	-
HCM Lane V/C Ratio	-	-	-	0.028	0.043	0.02	-
HCM Control Delay (s)	0	-	-	9.8	8.9	7.5	-
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-

PHASE I, YEAR 2023

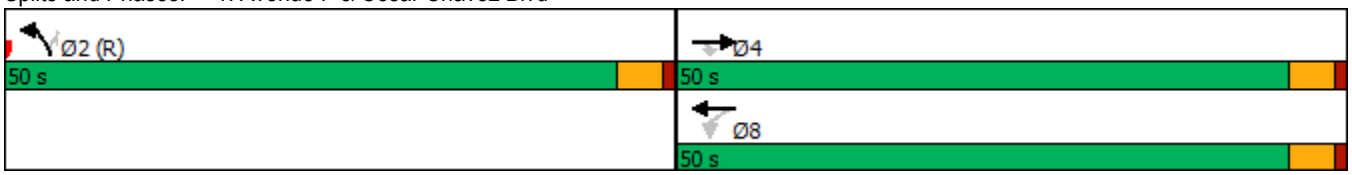
AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	609	331	15	241	490	59
Future Volume (vph)	609	331	15	241	490	59
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.113		0.950	
Satd. Flow (perm)	1667	1417	166	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		394				70
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	725	394	18	287	583	70
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	45.5	45.5	45.5	45.5	45.5	45.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	45.5	45.5	45.5	45.5	45.5	45.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	0.96	0.46	0.24	0.38	0.92	0.10
Control Delay	51.3	3.6	25.3	17.8	47.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	3.6	25.3	17.8	47.5	4.3
LOS	D	A	C	B	D	A
Approach Delay	34.5			18.2	42.9	
Approach LOS	C			B	D	
Queue Length 50th (ft)	432	0	7	135	337	0
Queue Length 95th (ft)	#604	37	24	188	#496	21
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	758	859	75	758	635	682
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.46	0.24	0.38	0.92	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 34.8		Intersection LOS: C	
Intersection Capacity Utilization 77.7%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	593	84	171	241	51	213
Future Volume (vph)	593	84	171	241	51	213
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.366		0.950	
Satd. Flow (perm)	3167	1417	538	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		99				251
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	698	99	201	284	60	251
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	27.0	27.0
Total Split (%)	73.0%	73.0%	73.0%	73.0%	27.0%	27.0%
Maximum Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
v/c Ratio	0.32	0.10	0.55	0.13	0.19	0.49
Control Delay	10.4	5.0	14.8	5.6	33.4	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	5.0	14.8	5.6	33.4	7.8
LOS	B	A	B	A	C	A
Approach Delay	9.7			9.4	12.8	
Approach LOS	A			A	B	
Queue Length 50th (ft)	107	13	57	28	31	0
Queue Length 95th (ft)	m123	m14	112	40	63	51
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2169	1001	368	2169	314	513
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.10	0.55	0.13	0.19	0.49

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	10	122	55	28	28	105	167	33	10	173	13
Future Vol, veh/h	58	10	122	55	28	28	105	167	33	10	173	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	150	150	-	150	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	11	167	60	30	30	144	229	36	11	237	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	677	812	119	663	794	115	255	0	0	265	0	0
Stage 1	259	259	-	517	517	-	-	-	-	-	-	-
Stage 2	418	553	-	146	277	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	339	312	910	347	319	916	1307	-	-	1296	-	-
Stage 1	723	692	-	509	532	-	-	-	-	-	-	-
Stage 2	583	513	-	842	680	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	275	910	250	282	916	1307	-	-	1296	-	-
Mov Cap-2 Maneuver	274	275	-	250	282	-	-	-	-	-	-	-
Stage 1	643	686	-	453	473	-	-	-	-	-	-	-
Stage 2	469	457	-	671	675	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	19	2.9	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1307	-	-	274	798	250	282	916	1296	-	-
HCM Lane V/C Ratio	0.11	-	-	0.29	0.223	0.239	0.108	0.033	0.008	-	-
HCM Control Delay (s)	8.1	-	-	23.4	10.8	23.9	19.3	9.1	7.8	-	-
HCM Lane LOS	A	-	-	C	B	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.2	0.9	0.9	0.4	0.1	0	-	-

Intersection	
Int Delay, s/veh	48.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	45	135	35	114	46	174	205	0	170	226	35
Future Vol, veh/h	112	45	135	35	114	46	174	205	0	170	226	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	250	200	-	200	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	142	57	171	44	144	58	220	259	0	215	286	44

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1358	1415	143	1301	1459	130	330	0	0	259	0	0
Stage 1	716	716	-	699	699	-	-	-	-	-	-	-
Stage 2	642	699	-	602	760	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 107	136	879	118	~ 128	896	1226	-	-	1303	-	-
Stage 1	387	432	-	397	440	-	-	-	-	-	-	-
Stage 2	429	440	-	453	413	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	93	879	~ 38	~ 88	896	1226	-	-	1303	-	-
Mov Cap-2 Maneuver	-	93	-	~ 38	~ 88	-	-	-	-	-	-	-
Stage 1	318	361	-	326	361	-	-	-	-	-	-	-
Stage 2	198	361	-	257	345	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		$ 310.3	3.9	3.3
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1226	-	-	-	93	879	38	88	896	1303	-	-
HCM Lane V/C Ratio	0.18	-	-	-	0.612	0.194	1.166	1.64	0.065	0.165	-	-
HCM Control Delay (s)	8.6	-	-	-	91.7	10.1	$ 363.1	$ 415.5	9.3	8.3	-	-
HCM Lane LOS	A	-	-	-	F	B	F	F	A	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	2.9	0.7	4.5	11.7	0.2	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	0	0	90	0	114	0	49	141	0
Future Vol, veh/h	0	0	2	0	0	90	0	114	0	49	141	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	114	0	144	0	62	178	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	374	446	89	357	446	72	178	0	0	144	0	0
Stage 1	302	302	-	144	144	-	-	-	-	-	-	-
Stage 2	72	144	-	213	302	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	558	506	951	574	506	975	1395	-	-	1436	-	-
Stage 1	682	663	-	844	777	-	-	-	-	-	-	-
Stage 2	929	777	-	769	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	477	484	951	553	484	975	1395	-	-	1436	-	-
Mov Cap-2 Maneuver	477	484	-	553	484	-	-	-	-	-	-	-
Stage 1	682	634	-	844	777	-	-	-	-	-	-	-
Stage 2	820	777	-	734	634	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.2	0	2
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1395	-	-	951	-	-	975	1436	-	-
HCM Lane V/C Ratio	-	-	-	0.003	-	-	0.117	0.043	-	-
HCM Control Delay (s)	0	-	-	8.8	0	0	9.2	7.6	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	5	15	0	95	2	28	108	10
Future Vol, veh/h	0	0	0	2	5	15	0	95	2	28	108	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	200	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	6	19	0	122	3	36	138	13

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	341	347	124	151	0	0	125	0	0
Stage 1	124	124	-	-	-	-	-	-	-
Stage 2	217	223	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	655	576	927	1430	-	-	1462	-	-
Stage 1	902	793	-	-	-	-	-	-	-
Stage 2	819	719	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	639	0	927	1430	-	-	1462	-	-
Mov Cap-2 Maneuver	639	0	-	-	-	-	-	-	-
Stage 1	902	0	-	-	-	-	-	-	-
Stage 2	799	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	1.4
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1430	-	-	639	-	927	1462	-	-
HCM Lane V/C Ratio	-	-	-	0.004	-	0.021	0.025	-	-
HCM Control Delay (s)	0	-	-	10.7	-	9	7.5	-	-
HCM Lane LOS	A	-	-	B	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	14	0	22	39	0
Future Vol, veh/h	8	14	0	22	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	15	0	24	42	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	33	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	980	1073
Stage 1	-	-	0	-	1014	-
Stage 2	-	-	0	-	999	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	980	1073
Mov Cap-2 Maneuver	-	-	-	-	980	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	980	-	-	-
HCM Lane V/C Ratio	0.043	-	-	-
HCM Control Delay (s)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	31	0	62	49	0
Future Vol, veh/h	22	31	0	62	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	34	0	67	53	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	91	24
Stage 1	-	-	-	-	24	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	909	1052
Stage 1	-	-	0	-	999	-
Stage 2	-	-	0	-	956	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	909	1052
Mov Cap-2 Maneuver	-	-	-	-	909	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	909	-	-	-
HCM Lane V/C Ratio	0.059	-	-	-
HCM Control Delay (s)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	90	312	126	0	0
Future Vol, veh/h	0	90	312	126	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	98	339	137	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	170	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	844	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	844	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	844	-
HCM Lane V/C Ratio	-	-	0.116	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	118	103	0	163
Future Vol, veh/h	0	0	118	103	0	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	128	112	0	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	128
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	922
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	922
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	922
HCM Lane V/C Ratio	-	-	-	0.192
HCM Control Delay (s)	-	-	-	9.8
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.7

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	51	43	0	116	105	0
Future Vol, veh/h	51	43	0	116	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	47	0	126	114	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	181	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	808	1012
Stage 1	-	-	0	-	968	-
Stage 2	-	-	0	-	900	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	808	1012
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	808	-	-	-
HCM Lane V/C Ratio	0.141	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	51	0	0	78	0
Future Vol, veh/h	0	51	0	0	78	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	55	0	0	85	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	1	0
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	1022	-
Stage 1	-	-	0	-	-	-
Stage 2	-	-	0	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	1022	-
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	1022	-	-	-	-
HCM Lane V/C Ratio	0.083	-	-	-	-
HCM Control Delay (s)	8.8	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	8	0	0	0	22	0	0	0	0	0
Future Vol, veh/h	0	0	8	0	0	0	22	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	9	0	0	0	24	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	97	113	54	167	222
Future Vol, veh/h	46	97	113	54	167	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	105	123	59	182	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	608	62	0	0	182	0
Stage 1	123	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	427	990	-	-	1391	-
Stage 1	889	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	371	990	-	-	1391	-
Mov Cap-2 Maneuver	371	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	508	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	371	990	1391	-
HCM Lane V/C Ratio	-	-	0.135	0.106	0.13	-
HCM Control Delay (s)	-	-	16.2	9.1	8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.4	0.4	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	249	0	0	0	91
Future Vol, veh/h	0	249	0	0	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	271	0	0	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	-
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	29	167	11	0	0
Future Vol, veh/h	0	29	167	11	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	182	12	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	91	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	949	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	949	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	949	-
HCM Lane V/C Ratio	-	-	0.033	-
HCM Control Delay (s)	-	-	8.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	210	0	0	0
Future Vol, veh/h	0	114	210	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	228	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	114	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	917	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	917	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	917	-
HCM Lane V/C Ratio	-	-	0.135	-
HCM Control Delay (s)	-	-	9.5	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.5	-

PHASE I, YEAR 2023

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	383	475	98	893	402	16
Future Volume (vph)	383	475	98	893	402	16
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.448		0.950	
Satd. Flow (perm)	1667	1417	659	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		516				17
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	416	516	107	971	437	17
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	63.0	63.0	63.0	63.0	37.0	37.0
Total Split (%)	63.0%	63.0%	63.0%	63.0%	37.0%	37.0%
Maximum Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.32	0.32
v/c Ratio	0.43	0.49	0.28	1.00	0.96	0.04
Control Delay	13.2	2.7	9.1	44.6	68.7	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	2.7	9.1	44.6	68.7	10.6
LOS	B	A	A	D	E	B
Approach Delay	7.4			41.1	66.5	
Approach LOS	A			D	E	
Queue Length 50th (ft)	137	0	18	587	272	0
Queue Length 95th (ft)	205	41	32	#893	#470	15
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	975	1043	385	975	454	472
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.49	0.28	1.00	0.96	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 33.0		Intersection LOS: C	
Intersection Capacity Utilization 88.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	385	121	371	880	49	210
Future Volume (vph)	385	121	371	880	49	210
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.491		0.950	
Satd. Flow (perm)	3167	1417	722	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		142				247
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	453	142	436	1035	58	247
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	23.0	23.0
Total Split (%)	77.0%	77.0%	77.0%	77.0%	23.0%	23.0%
Maximum Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.18	0.18
v/c Ratio	0.20	0.13	0.83	0.45	0.22	0.53
Control Delay	4.2	0.8	26.6	6.4	37.4	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	0.8	26.6	6.4	37.4	9.4
LOS	A	A	C	A	D	A
Approach Delay	3.4			12.4	14.7	
Approach LOS	A			B	B	
Queue Length 50th (ft)	36	0	165	121	32	0
Queue Length 95th (ft)	45	8	#379	142	65	53
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2296	1066	523	2296	258	463
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.13	0.83	0.45	0.22	0.53

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	32	149	53	18	18	147	198	67	32	207	101
Future Vol, veh/h	35	32	149	53	18	18	147	198	67	32	207	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	150	150	-	150	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	85	85	85	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	35	204	62	21	21	201	271	73	35	284	138

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	902	1100	142	903	1165	136	422	0	0	344	0	0
Stage 1	354	354	-	673	673	-	-	-	-	-	-	-
Stage 2	548	746	-	230	492	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	233	211	880	232	193	888	1134	-	-	1212	-	-
Stage 1	636	629	-	411	452	-	-	-	-	-	-	-
Stage 2	488	419	-	752	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	173	169	880	128	154	888	1134	-	-	1212	-	-
Mov Cap-2 Maneuver	173	169	-	128	154	-	-	-	-	-	-	-
Stage 1	523	611	-	338	372	-	-	-	-	-	-	-
Stage 2	370	345	-	529	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.4	42.5	3.3	0.6
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1134	-	-	173	546	128	154	888	1212	-	-
HCM Lane V/C Ratio	0.178	-	-	0.277	0.438	0.487	0.138	0.024	0.029	-	-
HCM Control Delay (s)	8.9	-	-	33.6	16.6	57.3	32.1	9.2	8.1	-	-
HCM Lane LOS	A	-	-	D	C	F	D	A	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	1.1	2.2	2.2	0.5	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	130	81	204	104	131	34	212	244	9	204	241	65
Future Vol, veh/h	130	81	204	104	131	34	212	244	9	204	241	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	250	200	-	200	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	165	103	258	132	166	43	268	309	11	258	305	82

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1595	1677	153	1565	1748	155	387	0	0	320	0	0
Stage 1	821	821	-	845	845	-	-	-	-	-	-	-
Stage 2	774	856	-	720	903	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 72	~ 94	866	~ 75	~ 85	863	1168	-	-	1237	-	-
Stage 1	335	387	-	324	377	-	-	-	-	-	-	-
Stage 2	357	373	-	385	354	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 57	866	-	~ 52	863	1168	-	-	1237	-	-
Mov Cap-2 Maneuver	-	~ 57	-	-	~ 52	-	-	-	-	-	-	-
Stage 1	258	306	-	250	291	-	-	-	-	-	-	-
Stage 2	~ 112	288	-	142	280	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			4.1	3.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1168	-	-	-	57	866	-	52	863	1237	-	-
HCM Lane V/C Ratio	0.23	-	-	-	1.799	0.298	-	3.189	0.05	0.209	-	-
HCM Control Delay (s)	9	-	-	-$	536.7	10.9	$	1151.5	9.4	8.7	-	-
HCM Lane LOS	A	-	-	-	F	B	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	-	9.7	1.3	-	17.7	0.2	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	55	0	149	0	149	133	0
Future Vol, veh/h	0	0	0	0	0	55	0	149	0	149	133	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	60	0	189	0	162	168	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	587	681	84	597	681	95	168	0	0	189	0	0
Stage 1	492	492	-	189	189	-	-	-	-	-	-	-
Stage 2	95	189	-	408	492	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	393	371	958	387	371	943	1407	-	-	1382	-	-
Stage 1	527	546	-	795	743	-	-	-	-	-	-	-
Stage 2	901	743	-	591	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	335	328	958	352	328	943	1407	-	-	1382	-	-
Mov Cap-2 Maneuver	335	328	-	352	328	-	-	-	-	-	-	-
Stage 1	527	482	-	795	743	-	-	-	-	-	-	-
Stage 2	844	743	-	522	482	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	3.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1407	-	-	-	-	-	943	1382	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.063	0.117	-	-
HCM Control Delay (s)	0	-	-	0	0	0	9.1	8	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	0.2	0.4	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	17	0	139	8	10	125	0
Future Vol, veh/h	0	0	0	8	0	17	0	139	8	10	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	200	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	22	0	178	10	13	160	0

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	369	369	183	160	0	0	188	0	0
Stage 1	183	183	-	-	-	-	-	-	-
Stage 2	186	186	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	631	560	859	1419	-	-	1386	-	-
Stage 1	848	748	-	-	-	-	-	-	-
Stage 2	846	746	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	625	0	859	1419	-	-	1386	-	-
Mov Cap-2 Maneuver	625	0	-	-	-	-	-	-	-
Stage 1	848	0	-	-	-	-	-	-	-
Stage 2	838	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	625	-	859	1386	-	-
HCM Lane V/C Ratio	-	-	-	0.016	-	0.025	0.009	-	-
HCM Control Delay (s)	0	-	-	10.9	0	9.3	7.6	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	44	0	14	25	0
Future Vol, veh/h	25	44	0	14	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	48	0	15	27	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	42	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	969	1048
Stage 1	-	-	0	-	996	-
Stage 2	-	-	0	-	1008	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	969	1048
Mov Cap-2 Maneuver	-	-	-	-	969	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	969	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-
HCM Control Delay (s)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	60	0	40	49	0
Future Vol, veh/h	71	60	0	40	49	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	65	0	43	53	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	120	77
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	43	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	876	984
Stage 1	-	-	0	-	946	-
Stage 2	-	-	0	-	979	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	876	984
Mov Cap-2 Maneuver	-	-	-	-	876	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	979	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	876	-	-	-
HCM Lane V/C Ratio	0.061	-	-	-
HCM Control Delay (s)	9.4	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	83	376	140	0	0
Future Vol, veh/h	0	83	376	140	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	90	409	152	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	205	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	802	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	802	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	802	-
HCM Lane V/C Ratio	-	-	0.112	-
HCM Control Delay (s)	-	-	10.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	148	95	0	245
Future Vol, veh/h	0	0	148	95	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	161	103	0	266

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	161
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	884
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	884
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	884
HCM Lane V/C Ratio	-	-	-	0.301
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	1.3

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	88	89	0	71	77	0
Future Vol, veh/h	88	89	0	71	77	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	97	0	77	84	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	173	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	77	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	817	960
Stage 1	-	-	0	-	928	-
Stage 2	-	-	0	-	946	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	817	960
Mov Cap-2 Maneuver	-	-	-	-	817	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	817	-	-	-
HCM Lane V/C Ratio	0.102	-	-	-
HCM Control Delay (s)	9.9	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	88	0	0	67	0
Future Vol, veh/h	0	88	0	0	67	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	96	0	0	73	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	1	0
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	1022	-
Stage 1	-	-	0	-	-	-
Stage 2	-	-	0	-	1022	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	1022	-
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	1022	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	1022	-	-	-	-
HCM Lane V/C Ratio	0.071	-	-	-	-
HCM Control Delay (s)	8.8	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	25	0	0	0	14	0	0	0	0	0
Future Vol, veh/h	0	0	25	0	0	0	14	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	27	0	0	0	15	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	143	70	70	223	312
Future Vol, veh/h	70	143	70	70	223	312
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	155	76	76	242	339

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	730	38	0	0	152	0
Stage 1	76	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	357	1026	-	-	1426	-
Stage 1	938	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	296	1026	-	-	1426	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	398	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	3.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	296	1026	1426	-
HCM Lane V/C Ratio	-	-	0.257	0.151	0.17	-
HCM Control Delay (s)	-	-	21.3	9.1	8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1	0.5	0.6	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	315	0	0	0	139
Future Vol, veh/h	0	315	0	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	342	0	0	0	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	-
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	-
HCM Lane LOS	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	140	29	0	0
Future Vol, veh/h	0	20	140	29	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	152	32	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	76	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	970	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	970	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	970	-
HCM Lane V/C Ratio	-	-	0.022	-
HCM Control Delay (s)	-	-	8.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	174	213	0	0	0
Future Vol, veh/h	0	174	213	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	189	232	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	116	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	914	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	914	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

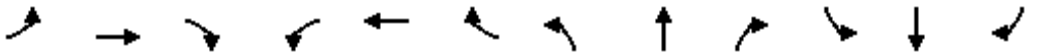
Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	914	-
HCM Lane V/C Ratio	-	-	0.207	-
HCM Control Delay (s)	-	-	10	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-

PHASE I, YEAR 2023

Traffic Signal at County 24th St

AM & PM

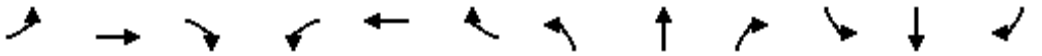


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	45	135	35	114	46	174	205	0	170	226	35
Future Volume (vph)	112	45	135	35	114	46	174	205	0	170	226	35
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	3167	1667	1397	3167	1417
Flt Permitted	0.642			0.720			0.576			0.592		
Satd. Flow (perm)	944	1667	1417	1059	1667	1417	847	3167	1667	871	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			171			58						44
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	57	171	44	144	58	220	259	0	215	286	44
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	61.0	61.0	61.0	61.0	61.0	61.0
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%
Maximum Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5	56.5	56.5	56.5	56.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5		56.5	56.5	56.5
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.56	0.56		0.56	0.56	0.56
v/c Ratio	0.44	0.10	0.28	0.12	0.25	0.11	0.46	0.14		0.44	0.16	0.05
Control Delay	30.5	22.9	5.0	23.6	25.0	6.8	16.7	10.6		16.1	10.7	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	30.5	22.9	5.0	23.6	25.0	6.8	16.7	10.6		16.1	10.7	3.2
LOS	C	C	A	C	C	A	B	B		B	B	A
Approach Delay		17.6			20.4			13.4			12.2	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	69	24	0	19	65	0	77	38		74	43	0
Queue Length 95th (ft)	108	46	29	39	98	20	114	50		110	55	11
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	325	575	600	365	575	526	478	1789		492	1789	819
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.44	0.10	0.28	0.12	0.25	0.11	0.46	0.14		0.44	0.16	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: County 24th St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	81	204	104	131	34	212	244	9	204	241	65
Future Volume (vph)	130	81	204	104	131	34	212	244	9	204	241	65
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	3167	1417	1397	3167	1417
Flt Permitted	0.611			0.690			0.566			0.564		
Satd. Flow (perm)	899	1667	1417	1015	1667	1417	832	3167	1417	829	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			258			43			16			82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	165	103	258	132	166	43	268	309	11	258	305	82
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	61.0	61.0	61.0	61.0	61.0	61.0
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%
Maximum Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5	56.5	56.5	56.5	56.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5	56.5	56.5	56.5	56.5
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.56	0.56	0.56	0.56	0.56	0.56
v/c Ratio	0.53	0.18	0.39	0.38	0.29	0.08	0.57	0.17	0.01	0.55	0.17	0.10
Control Delay	33.9	24.0	5.0	28.6	25.6	7.4	20.0	10.8	3.6	19.4	10.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	24.0	5.0	28.6	25.6	7.4	20.0	10.8	3.6	19.4	10.8	2.6
LOS	C	C	A	C	C	A	B	B	A	B	B	A
Approach Delay		17.8			24.4			14.8			13.2	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	84	45	0	63	76	0	103	46	0	98	46	0
Queue Length 95th (ft)	128	73	31	99	111	18	150	59	5	142	58	14
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	310	575	657	350	575	517	470	1789	807	468	1789	836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.18	0.39	0.38	0.29	0.08	0.57	0.17	0.01	0.55	0.17	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 16.6		Intersection LOS: B	
Intersection Capacity Utilization 54.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: County 24th St

PHASE II, YEAR 2024

AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	653	348	16	291	515	62
Future Volume (vph)	653	348	16	291	515	62
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.086		0.950	
Satd. Flow (perm)	1667	1417	126	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		394				74
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	777	414	19	346	613	74
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	51.0	51.0	51.0	51.0	49.0	49.0
Total Split (%)	51.0%	51.0%	51.0%	51.0%	49.0%	49.0%
Maximum Green (s)	46.5	46.5	46.5	46.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.5	46.5	46.5	46.5	44.5	44.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.44	0.44
v/c Ratio	1.00	0.48	0.33	0.45	0.99	0.11
Control Delay	61.1	4.1	37.1	21.3	62.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	4.1	37.1	21.3	62.2	4.4
LOS	E	A	D	C	E	A
Approach Delay	41.3			22.2	55.9	
Approach LOS	D			C	E	
Queue Length 50th (ft)	~483	7	9	174	376	0
Queue Length 95th (ft)	#662	44	m30	236	#546	22
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	775	869	58	775	621	671
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.48	0.33	0.45	0.99	0.11

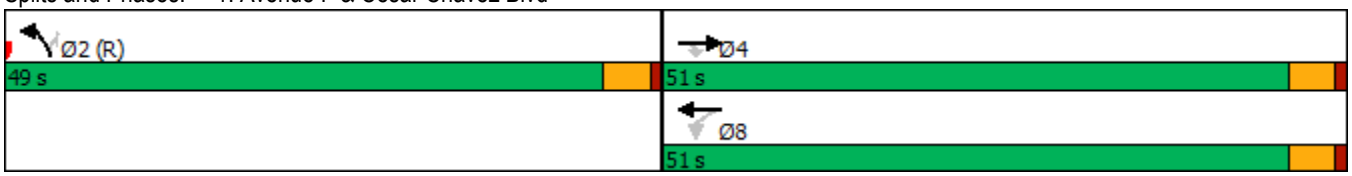
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 42.7		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



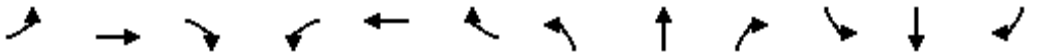
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	623	102	234	254	91	330
Future Volume (vph)	623	102	234	254	91	330
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1583
Flt Permitted			0.354		0.950	
Satd. Flow (perm)	3167	1417	521	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		120				282
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	733	120	275	299	107	388
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	75.0	75.0	75.0	75.0	25.0	25.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%
Maximum Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.20	0.20
v/c Ratio	0.33	0.12	0.75	0.13	0.37	0.71
Control Delay	9.7	4.4	25.1	5.0	44.1	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	4.4	25.1	5.0	44.1	23.5
LOS	A	A	C	A	D	C
Approach Delay	9.0			14.6	28.0	
Approach LOS	A			B	C	
Queue Length 50th (ft)	116	14	95	28	64	76
Queue Length 95th (ft)	m121	m15	#227	39	m105	151
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2232	1034	367	2232	286	548
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.12	0.75	0.13	0.37	0.71

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 53.3%		ICU Level of Service A	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	127	153	35	206	79	251	301	0	170	259	35
Future Volume (vph)	122	127	153	35	206	79	251	301	0	170	259	35
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	3167	1667	1397	3167	1417
Flt Permitted	0.477			0.615			0.554			0.518		
Satd. Flow (perm)	701	1667	1417	904	1667	1417	815	3167	1667	762	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			194			100						44
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	161	194	44	261	100	318	381	0	215	328	44
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	38.0	38.0	38.0	62.0	62.0	62.0	62.0	62.0	62.0
Total Split (%)	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	62.0%	62.0%	62.0%	62.0%	62.0%	62.0%
Maximum Green (s)	33.5	33.5	33.5	33.5	33.5	33.5	57.5	57.5	57.5	57.5	57.5	57.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	33.5	33.5	33.5	33.5	33.5	33.5	57.5	57.5		57.5	57.5	57.5
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.58	0.58		0.58	0.58	0.58
v/c Ratio	0.66	0.29	0.32	0.15	0.47	0.18	0.68	0.21		0.49	0.18	0.05
Control Delay	44.0	26.3	5.1	25.0	29.6	5.8	24.0	10.6		17.4	10.4	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	44.0	26.3	5.1	25.0	29.6	5.8	24.0	10.6		17.4	10.4	3.1
LOS	D	C	A	C	C	A	C	B		B	B	A
Approach Delay		23.6			23.2			16.7			12.4	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	83	75	0	19	130	0	132	57		76	48	0
Queue Length 95th (ft)	133	110	30	40	174	25	190	70		115	61	11
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	234	558	603	302	558	541	468	1821		438	1821	833
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.66	0.29	0.32	0.15	0.47	0.18	0.68	0.21		0.49	0.18	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: County 24th St

Intersection	
Int Delay, s/veh	11.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	37	122	55	49	82	123	257	33	45	206	13
Future Vol, veh/h	58	37	122	55	49	82	123	257	33	45	206	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	40	167	60	53	89	168	352	36	49	282	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	919	1104	141	947	1086	176	300	0	0	388	0	0
Stage 1	380	380	-	688	688	-	-	-	-	-	-	-
Stage 2	539	724	-	259	398	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	226	210	881	216	215	837	1258	-	-	1167	-	-
Stage 1	614	612	-	403	445	-	-	-	-	-	-	-
Stage 2	494	429	-	723	601	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	136	174	881	126	178	837	1258	-	-	1167	-	-
Mov Cap-2 Maneuver	136	174	-	126	178	-	-	-	-	-	-	-
Stage 1	532	586	-	349	385	-	-	-	-	-	-	-
Stage 2	330	372	-	523	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.8	30	2.5	1.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1258	-	-	136	174	881	126	178	837	1167	-	-
HCM Lane V/C Ratio	0.134	-	-	0.584	0.231	0.19	0.474	0.299	0.106	0.042	-	-
HCM Control Delay (s)	8.3	-	-	63.3	31.8	10	57	33.6	9.8	8.2	-	-
HCM Lane LOS	A	-	-	F	D	B	F	D	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	3	0.9	0.7	2.1	1.2	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	0	0	233	0	145	0	100	150	0
Future Vol, veh/h	0	0	2	0	0	233	0	145	0	100	150	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	295	0	184	0	127	190	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	536	628	95	533	628	92	190	0	0	184	0	0
Stage 1	444	444	-	184	184	-	-	-	-	-	-	-
Stage 2	92	184	-	349	444	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	428	398	943	430	398	947	1381	-	-	1388	-	-
Stage 1	563	574	-	800	746	-	-	-	-	-	-	-
Stage 2	905	746	-	640	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	362	943	399	362	947	1381	-	-	1388	-	-
Mov Cap-2 Maneuver	274	362	-	399	362	-	-	-	-	-	-	-
Stage 1	563	522	-	800	746	-	-	-	-	-	-	-
Stage 2	623	746	-	580	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	10.5	0	3.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	943	-	-	947	1388	-	-
HCM Lane V/C Ratio	-	-	-	0.003	-	-	0.311	0.091	-	-
HCM Control Delay (s)	0	-	-	8.8	0	0	10.5	7.9	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	1.3	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	5	45	0	95	2	45	108	10
Future Vol, veh/h	0	0	0	2	5	45	0	95	2	45	108	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	2	949	120	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	6	58	0	122	3	58	138	13

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	385	391	124	151	0	0	125	0	0
Stage 1	124	124	-	-	-	-	-	-	-
Stage 2	261	267	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	618	545	927	1430	-	-	1462	-	-
Stage 1	902	793	-	-	-	-	-	-	-
Stage 2	783	688	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	593	0	927	1430	-	-	1462	-	-
Mov Cap-2 Maneuver	593	0	-	-	-	-	-	-	-
Stage 1	902	0	-	-	-	-	-	-	-
Stage 2	752	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	2.1
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1430	-	-	593	-	927	1462	-	-
HCM Lane V/C Ratio	-	-	-	0.004	-	0.062	0.039	-	-
HCM Control Delay (s)	0	-	-	11.1	-	9.1	7.6	-	-
HCM Lane LOS	A	-	-	B	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	22	0	50	63	0
Future Vol, veh/h	8	22	0	50	63	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	24	0	54	68	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	63	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	54	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	943	1073
Stage 1	-	-	0	-	1014	-
Stage 2	-	-	0	-	969	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	943	1073
Mov Cap-2 Maneuver	-	-	-	-	943	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	969	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	943	-	-	-
HCM Lane V/C Ratio	0.073	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	39	0	113	73	0
Future Vol, veh/h	30	39	0	113	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	42	0	123	79	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	156	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	123	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	835	1041
Stage 1	-	-	0	-	989	-
Stage 2	-	-	0	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	835	1041
Mov Cap-2 Maneuver	-	-	-	-	835	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	902	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	835	-	-	-
HCM Lane V/C Ratio	0.095	-	-	-
HCM Control Delay (s)	9.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	108	412	165	0	0
Future Vol, veh/h	0	108	412	165	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	117	448	179	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	224	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	779	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	779	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	779	-
HCM Lane V/C Ratio	-	-	0.151	-
HCM Control Delay (s)	-	-	10.4	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.5	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	243	109	0	163
Future Vol, veh/h	0	0	243	109	0	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	264	118	0	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	264
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	775
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	775
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	775
HCM Lane V/C Ratio	-	-	-	0.229
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.9

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	69	46	0	0	0	18
Future Vol, veh/h	69	46	0	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	50	0	0	0	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	75
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	986
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	986
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	986	-	-	-
HCM Lane V/C Ratio	0.02	-	-	-
HCM Control Delay (s)	8.7	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	27	43	30	212	52	105	34	11	21	27	35
Future Vol, veh/h	69	27	43	30	212	52	105	34	11	21	27	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	29	47	33	230	57	114	37	12	23	29	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	76	0	0	537	532	29	523	522	230
Stage 1	-	-	-	-	-	-	179	179	-	296	296	-
Stage 2	-	-	-	-	-	-	358	353	-	227	226	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1275	-	-	1523	-	-	455	453	1046	465	459	809
Stage 1	-	-	-	-	-	-	823	751	-	712	668	-
Stage 2	-	-	-	-	-	-	660	631	-	776	717	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1275	-	-	1523	-	-	386	417	1046	403	422	809
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	417	-	403	422	-
Stage 1	-	-	-	-	-	-	774	707	-	670	653	-
Stage 2	-	-	-	-	-	-	588	617	-	684	675	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4	0.8	16.6	12.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	386	417	1046	1275	-	-	1523	-	-	403	422	809
HCM Lane V/C Ratio	0.296	0.089	0.011	0.059	-	-	0.021	-	-	0.057	0.07	0.047
HCM Control Delay (s)	18.2	14.5	8.5	8	-	-	7.4	-	-	14.5	14.2	9.7
HCM Lane LOS	C	B	A	A	-	-	A	-	-	B	B	A
HCM 95th %tile Q(veh)	1.2	0.3	0	0.2	-	-	0.1	-	-	0.2	0.2	0.1

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	0	58	0	0	0	140	0	0	0	32	42
Future Vol, veh/h	15	0	58	0	0	0	140	0	0	0	32	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	-	-	-	150	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	63	0	0	0	152	0	0	0	35	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	-	-	0	74	33	0	65	96	1
Stage 1	-	-	-	-	-	-	32	32	-	1	1	-
Stage 2	-	-	-	-	-	-	42	1	-	64	95	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	0	-	0	916	860	-	929	794	1084
Stage 1	-	-	-	0	-	0	984	868	-	1022	895	-
Stage 2	-	-	-	0	-	0	972	895	-	947	816	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1622	-	-	-	-	-	842	851	-	-	786	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	842	851	-	-	786	-
Stage 1	-	-	-	-	-	-	974	859	-	1012	895	-
Stage 2	-	-	-	-	-	-	895	895	-	938	808	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	10.2	9.1
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	842	-	-	1622	-	-	-	-	786	1084
HCM Lane V/C Ratio	0.181	-	-	0.01	-	-	-	-	0.044	0.042
HCM Control Delay (s)	10.2	0	0	7.2	-	-	-	0	9.8	8.5
HCM Lane LOS	B	A	A	A	-	-	-	A	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	8	0	0	0	22	0	0	0	0	0
Future Vol, veh/h	0	0	8	0	0	0	22	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	9	0	0	0	24	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	97	406	54	167	274
Future Vol, veh/h	46	97	406	54	167	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	105	441	59	182	298

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	954	221	0	0	500	0
Stage 1	441	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	257	783	-	-	1060	-
Stage 1	616	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	213	783	-	-	1060	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	3.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	783	1060	-
HCM Lane V/C Ratio	-	-	0.235	0.135	0.171	-
HCM Control Delay (s)	-	-	27	10.3	9.1	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0.5	0.6	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	48	249	0	352	0	91
Future Vol, veh/h	48	249	0	352	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	271	0	383	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	52
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	1016
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	1016
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	1016	-	-	-
HCM Lane V/C Ratio	0.097	-	-	-
HCM Control Delay (s)	8.9	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	29	339	12	0	0
Future Vol, veh/h	0	29	339	12	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	368	13	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	184	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	827	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	827	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	827	-
HCM Lane V/C Ratio	-	-	0.038	-
HCM Control Delay (s)	-	-	9.5	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	541	0	0	0
Future Vol, veh/h	0	114	541	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	588	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	294	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	702	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	702	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	702	-
HCM Lane V/C Ratio	-	-	0.177	-
HCM Control Delay (s)	-	-	11.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	194	23	0	18
Future Vol, veh/h	0	0	194	23	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	211	25	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	211
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	829
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	829
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	829
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	9.4
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	0	0	0	0	30
Future Vol, veh/h	9	0	0	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.006	-	-	0.03
HCM Control Delay (s)	7.2	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

PHASE II, YEAR 2024

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	443	499	103	962	422	17
Future Volume (vph)	443	499	103	962	422	17
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.399		0.950	
Satd. Flow (perm)	1667	1417	587	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		542				18
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	482	542	112	1046	459	18
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	63.0	63.0	63.0	63.0	37.0	37.0
Total Split (%)	63.0%	63.0%	63.0%	63.0%	37.0%	37.0%
Maximum Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.32	0.32
v/c Ratio	0.49	0.51	0.33	1.07	1.01	0.04
Control Delay	14.3	2.8	10.1	68.5	80.2	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.3	2.8	10.1	68.5	80.2	10.4
LOS	B	A	B	E	F	B
Approach Delay	8.2			62.8	77.6	
Approach LOS	A			E	E	
Queue Length 50th (ft)	167	0	21	~750	~297	0
Queue Length 95th (ft)	249	42	36	#1000	#502	16
Internal Link Dist (ft)	2815			2430	1908	

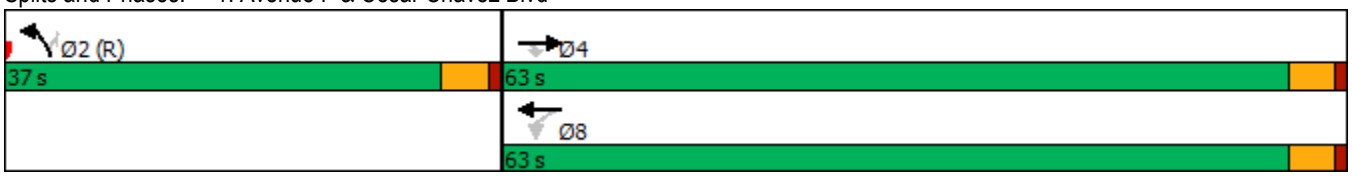
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	975	1053	343	975	454	472
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.51	0.33	1.07	1.01	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 44.4		Intersection LOS: D	
Intersection Capacity Utilization 93.7%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	404	95	509	924	76	301
Future Volume (vph)	404	95	509	924	76	301
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1583
Flt Permitted			0.480		0.950	
Satd. Flow (perm)	3167	1417	706	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		112				354
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	475	112	599	1087	89	354
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	23.0	23.0
Total Split (%)	77.0%	77.0%	77.0%	77.0%	23.0%	23.0%
Maximum Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.18	0.18
v/c Ratio	0.21	0.11	1.17	0.47	0.34	0.61
Control Delay	4.2	0.8	115.0	6.6	44.6	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	0.8	115.0	6.6	44.6	12.9
LOS	A	A	F	A	D	B
Approach Delay	3.5			45.1	19.3	
Approach LOS	A			D	B	
Queue Length 50th (ft)	36	0	~458	130	52	5
Queue Length 95th (ft)	45	7	#282	152	m87	m59
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2296	1058	511	2296	258	581
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.11	1.17	0.47	0.34	0.61

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay: 31.9		Intersection LOS: C	
Intersection Capacity Utilization 64.8%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	75.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	69	149	53	37	65	171	256	67	96	303	101
Future Vol, veh/h	35	69	149	53	37	65	171	256	67	96	303	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	250	-	250	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	92	73	92	92	92	73	73	92	92	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	75	204	58	40	71	234	351	73	104	415	138

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1287	1515	208	1272	1580	176	553	0	0	424	0	0
Stage 1	623	623	-	819	819	-	-	-	-	-	-	-
Stage 2	664	892	-	453	761	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	121	118	798	125	108	837	1013	-	-	1132	-	-
Stage 1	440	476	-	336	388	-	-	-	-	-	-	-
Stage 2	416	358	-	556	412	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	82	798	~ 15	75	837	1013	-	-	1132	-	-
Mov Cap-2 Maneuver	50	82	-	~ 15	75	-	-	-	-	-	-	-
Stage 1	338	432	-	258	298	-	-	-	-	-	-	-
Stage 2	253	275	-	311	374	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	80.7	$ 640.2	3.4	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1013	-	-	50	82	798	15	75	837	1132	-	-
HCM Lane V/C Ratio	0.231	-	-	0.959	0.915	0.256	3.841	0.536	0.084	0.092	-	-
HCM Control Delay (s)	9.6	-	-	244.3	165.5	11.$	1791.5	98.6	9.7	8.5	-	-
HCM Lane LOS	A	-	-	F	F	B	F	F	A	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	4.1	4.9	1	8	2.3	0.3	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	146	0	169	0	306	156	0
Future Vol, veh/h	0	0	0	0	0	146	0	169	0	306	156	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	159	0	214	0	333	197	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	970	1077	99	979	1077	107	197	0	0	214	0	0
Stage 1	863	863	-	214	214	-	-	-	-	-	-	-
Stage 2	107	214	-	765	863	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	208	218	937	204	218	926	1373	-	-	1353	-	-
Stage 1	316	370	-	768	724	-	-	-	-	-	-	-
Stage 2	887	724	-	362	370	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	164	937	165	164	926	1373	-	-	1353	-	-
Mov Cap-2 Maneuver	140	164	-	165	164	-	-	-	-	-	-	-
Stage 1	316	279	-	768	724	-	-	-	-	-	-	-
Stage 2	735	724	-	273	279	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	5.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1373	-	-	-	-	-	926	1353	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.171	0.246	-	-
HCM Control Delay (s)	0	-	-	0	0	0	9.7	8.5	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	0.6	1	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	38	0	139	8	52	125	0
Future Vol, veh/h	0	0	0	8	0	38	0	139	8	52	125	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	49	0	178	10	67	160	0

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	477	477	183	160	0	0	188	0	0
Stage 1	183	183	-	-	-	-	-	-	-
Stage 2	294	294	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	547	487	859	1419	-	-	1386	-	-
Stage 1	848	748	-	-	-	-	-	-	-
Stage 2	756	670	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	521	0	859	1419	-	-	1386	-	-
Mov Cap-2 Maneuver	521	0	-	-	-	-	-	-	-
Stage 1	848	0	-	-	-	-	-	-	-
Stage 2	720	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	2.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1419	-	-	521	-	859	1386	-	-
HCM Lane V/C Ratio	-	-	-	0.02	-	0.057	0.048	-	-
HCM Control Delay (s)	0	-	-	12	0	9.4	7.7	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	26	72	0	50	40	0
Future Vol, veh/h	26	72	0	50	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	78	0	54	43	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	82	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	54	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	920	1047
Stage 1	-	-	0	-	995	-
Stage 2	-	-	0	-	969	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	920	1047
Mov Cap-2 Maneuver	-	-	-	-	920	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	969	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	920	-	-	-
HCM Lane V/C Ratio	0.047	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	88	0	90	65	0
Future Vol, veh/h	98	88	0	90	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	107	96	0	98	71	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	205	107
Stage 1	-	-	-	-	107	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	783	947
Stage 1	-	-	0	-	917	-
Stage 2	-	-	0	-	926	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	783	947
Mov Cap-2 Maneuver	-	-	-	-	783	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	926	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	783	-	-	-
HCM Lane V/C Ratio	0.09	-	-	-
HCM Control Delay (s)	10.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	107	485	164	0	0
Future Vol, veh/h	0	107	485	164	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	116	527	178	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	264	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	734	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	734	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	734	-
HCM Lane V/C Ratio	-	-	0.158	-
HCM Control Delay (s)	-	-	10.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	285	99	0	245
Future Vol, veh/h	0	0	285	99	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	310	108	0	266

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	310
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	730
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	730
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	730
HCM Lane V/C Ratio	-	-	-	0.365
HCM Control Delay (s)	-	-	-	12.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	1.7

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	186	46	0	0	0	24
Future Vol, veh/h	186	46	0	0	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	202	50	0	0	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	202
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	839
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	839
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	839	-	-	-
HCM Lane V/C Ratio	0.031	-	-	-
HCM Control Delay (s)	9.4	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	87	89	19	160	33	77	35	34	60	36	48
Future Vol, veh/h	70	87	89	19	160	33	77	35	34	60	36	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	95	97	21	174	36	84	38	37	65	39	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	210	0	0	192	0	0	527	499	95	549	560	174
Stage 1	-	-	-	-	-	-	247	247	-	216	216	-
Stage 2	-	-	-	-	-	-	280	252	-	333	344	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1361	-	-	1381	-	-	462	473	962	446	437	869
Stage 1	-	-	-	-	-	-	757	702	-	786	724	-
Stage 2	-	-	-	-	-	-	727	698	-	681	637	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1361	-	-	1381	-	-	381	440	962	379	406	869
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	440	-	379	406	-
Stage 1	-	-	-	-	-	-	715	663	-	742	713	-
Stage 2	-	-	-	-	-	-	636	688	-	583	601	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0.7	14.4	13.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	381	440	962	1361	-	-	1381	-	-	379	406	869
HCM Lane V/C Ratio	0.22	0.086	0.038	0.056	-	-	0.015	-	-	0.172	0.096	0.06
HCM Control Delay (s)	17.1	14	8.9	7.8	-	-	7.6	-	-	16.5	14.8	9.4
HCM Lane LOS	C	B	A	A	-	-	A	-	-	C	B	A
HCM 95th %tile Q(veh)	0.8	0.3	0.1	0.2	-	-	0	-	-	0.6	0.3	0.2

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	0	214	0	0	0	165	0	0	0	69	27
Future Vol, veh/h	48	0	214	0	0	0	165	0	0	0	69	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	-	-	-	150	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	0	233	0	0	0	179	0	0	0	75	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	-	-	0	157	105	0	222	338	1
Stage 1	-	-	-	-	-	-	104	104	-	1	1	-
Stage 2	-	-	-	-	-	-	53	1	-	221	337	-
Critical Hdwy	4.12	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	0	-	0	809	785	-	734	583	1084
Stage 1	-	-	-	0	-	0	902	809	-	1022	895	-
Stage 2	-	-	-	0	-	0	960	895	-	781	641	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	1622	-	-	-	-	-	690	760	-	-	564	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	690	760	-	-	564	-
Stage 1	-	-	-	-	-	-	873	783	-	989	895	-
Stage 2	-	-	-	-	-	-	856	895	-	756	620	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	12	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	690	-	-	1622	-	-	-	-	564	1084
HCM Lane V/C Ratio	0.26	-	-	0.032	-	-	-	-	0.133	0.027
HCM Control Delay (s)	12	0	0	7.3	-	-	-	0	12.4	8.4
HCM Lane LOS	B	A	A	A	-	-	-	A	B	A
HCM 95th %tile Q(veh)	1	-	-	0.1	-	-	-	-	0.5	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	25	0	0	0	14	0	0	0	0	0
Future Vol, veh/h	0	0	25	0	0	0	14	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	27	0	0	0	15	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	143	201	70	223	496
Future Vol, veh/h	70	143	201	70	223	496
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	155	218	76	242	539

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	972	109	0	0	294	0
Stage 1	218	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	250	924	-	-	1264	-
Stage 1	797	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	202	924	-	-	1264	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	344	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	2.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	202	924	1264	-
HCM Lane V/C Ratio	-	-	0.377	0.168	0.192	-
HCM Control Delay (s)	-	-	33.2	9.7	8.5	-
HCM Lane LOS	-	-	D	A	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.6	0.7	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	107	315	0	0	0	139
Future Vol, veh/h	107	315	0	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	116	342	0	0	0	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	116
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	936
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	936
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	936	-	-	-
HCM Lane V/C Ratio	0.161	-	-	-
HCM Control Delay (s)	9.6	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	251	29	0	0
Future Vol, veh/h	0	20	251	29	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	273	32	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	137	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	886	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	886	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	886	-
HCM Lane V/C Ratio	-	-	0.025	-
HCM Control Delay (s)	-	-	9.2	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	344	0	0	0
Future Vol, veh/h	0	114	344	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	374	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	187	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	823	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	823	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	823	-
HCM Lane V/C Ratio	-	-	0.151	-
HCM Control Delay (s)	-	-	10.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.5	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	136	23	0	24
Future Vol, veh/h	0	0	136	23	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	148	25	0	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	148
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	899
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	899
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	899
HCM Lane V/C Ratio	-	-	-	0.029
HCM Control Delay (s)	-	-	-	9.1
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	0	0	0	0	21
Future Vol, veh/h	24	0	0	0	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	0	0	0	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

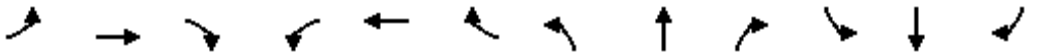
Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.016	-	-	0.021
HCM Control Delay (s)	7.3	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

PHASE II, YEAR 2024

TRAFFIC SIGNAL AT COUNTY 23 ½

AM & PM



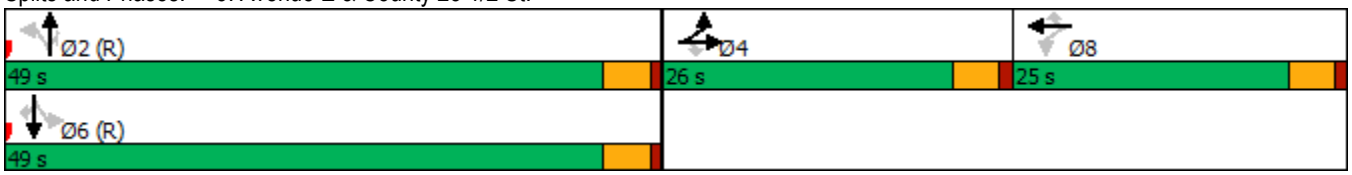
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	37	122	55	49	82	123	257	33	45	206	13
Future Volume (vph)	58	37	122	55	49	82	123	257	33	45	206	13
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.731			0.572			0.518		
Satd. Flow (perm)	1397	1863	1417	1362	1863	1583	841	3167	1583	965	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			167			89			65			65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1425			1091	
Travel Time (s)		34.5			7.9			32.4			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	40	167	60	53	89	168	352	36	49	282	18
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	26.0	26.0	26.0	25.0	25.0	25.0	49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	26.0%	26.0%	26.0%	25.0%	25.0%	25.0%	49.0%	49.0%	49.0%	49.0%	49.0%	49.0%
Maximum Green (s)	21.5	21.5	21.5	20.5	20.5	20.5	44.5	44.5	44.5	44.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	21.5	21.5	21.5	20.5	20.5	20.5	44.5	44.5	44.5	44.5	44.5	44.5
Actuated g/C Ratio	0.22	0.22	0.22	0.20	0.20	0.20	0.44	0.44	0.44	0.44	0.44	0.44
v/c Ratio	0.26	0.10	0.38	0.22	0.14	0.23	0.45	0.25	0.05	0.11	0.20	0.03
Control Delay	35.5	32.4	8.1	35.5	33.8	8.9	27.2	20.8	4.7	13.6	13.9	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	32.4	8.1	35.5	33.8	8.9	27.2	20.8	4.7	13.6	13.9	0.6
LOS	D	C	A	D	C	A	C	C	A	B	B	A
Approach Delay		19.1			23.4			21.7			13.2	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	42	21	0	32	28	0	77	77	0	15	46	0
Queue Length 95th (ft)	67	49	25	68	61	40	107	90	m4	m24	53	m1
Internal Link Dist (ft)		1439			269			1345			1011	

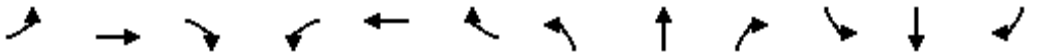
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	300	400	435	279	381	395	374	1409	740	429	1409	666
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.10	0.38	0.22	0.14	0.23	0.45	0.25	0.05	0.11	0.20	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 19.3		Intersection LOS: B	
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.





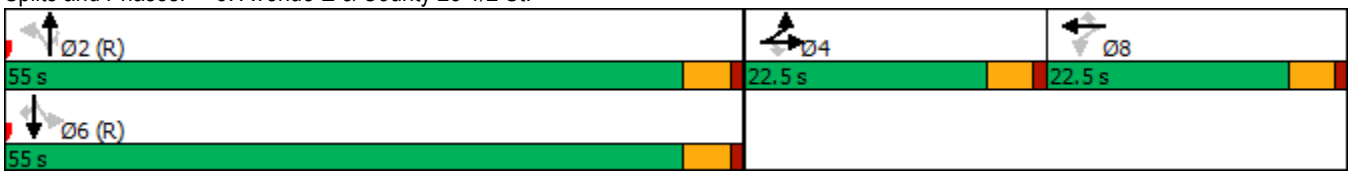
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	69	149	53	37	65	171	256	67	96	303	101
Future Volume (vph)	35	69	149	53	37	65	171	256	67	96	303	101
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.708			0.485			0.529		
Satd. Flow (perm)	1397	1863	1417	1319	1863	1583	713	3167	1583	985	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			204			71			73			138
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1425			1091	
Travel Time (s)		34.5			7.9			32.4			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	75	204	58	40	71	234	351	73	104	415	138
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18	0.50	0.50	0.50	0.50	0.50	0.50
v/c Ratio	0.19	0.22	0.48	0.24	0.12	0.21	0.65	0.22	0.09	0.21	0.26	0.18
Control Delay	37.2	37.1	9.4	38.4	35.5	10.4	32.1	17.7	7.0	6.7	6.7	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.2	37.1	9.4	38.4	35.5	10.4	32.1	17.7	7.0	6.7	6.7	0.8
LOS	D	D	A	D	D	B	C	B	A	A	A	A
Approach Delay		19.9			26.0			21.6			5.4	
Approach LOS		B			C			C			A	
Queue Length 50th (ft)	26	41	0	32	22	0	108	69	0	19	41	2
Queue Length 95th (ft)	48	82	26	70	51	38	m130	m78	m22	m19	m36	m2
Internal Link Dist (ft)		1439			269			1345			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	251	335	422	237	335	343	360	1599	835	497	1599	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.22	0.48	0.24	0.12	0.21	0.65	0.22	0.09	0.21	0.26	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 42.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



PHASE III, YEAR 2025

AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	701	365	17	319	540	65
Future Volume (vph)	701	365	17	319	540	65
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.086		0.950	
Satd. Flow (perm)	1667	1417	126	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		386				77
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	835	435	20	380	643	77
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	51.0	51.0	51.0	51.0	49.0	49.0
Total Split (%)	51.0%	51.0%	51.0%	51.0%	49.0%	49.0%
Maximum Green (s)	46.5	46.5	46.5	46.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	46.5	46.5	46.5	46.5	44.5	44.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.44	0.44
v/c Ratio	1.08	0.50	0.34	0.49	1.04	0.11
Control Delay	83.0	5.0	38.3	22.2	74.6	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.0	5.0	38.3	22.2	74.6	4.3
LOS	F	A	D	C	E	A
Approach Delay	56.3			23.0	67.1	
Approach LOS	E			C	E	
Queue Length 50th (ft)	~597	17	10	198	~443	0
Queue Length 95th (ft)	#738	56	m30	263	#586	22
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	775	865	58	775	621	673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.50	0.34	0.49	1.04	0.11

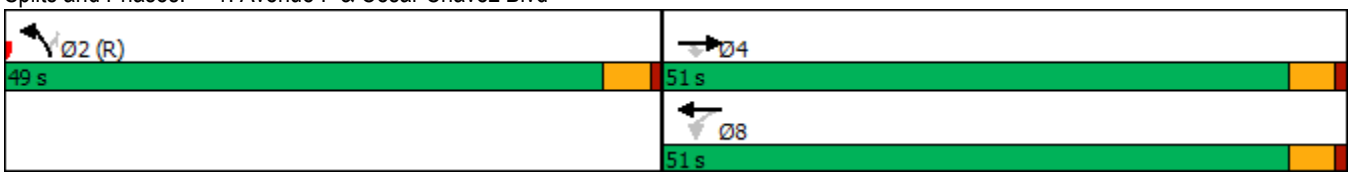
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 54.0		Intersection LOS: D	
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	654	138	321	266	109	460
Future Volume (vph)	654	138	321	266	109	460
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1583
Flt Permitted			0.339		0.950	
Satd. Flow (perm)	3167	1417	499	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		162				264
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	162	378	313	128	541
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	75.0	75.0	75.0	75.0	25.0	25.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%
Maximum Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	70.5	70.5	70.5	70.5	20.5	20.5
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.20	0.20
v/c Ratio	0.34	0.15	1.08	0.14	0.45	1.01
Control Delay	10.1	4.3	89.0	5.0	36.6	65.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	4.3	89.0	5.0	36.6	65.7
LOS	B	A	F	A	D	E
Approach Delay	9.1			51.0	60.1	
Approach LOS	A			D	E	
Queue Length 50th (ft)	121	19	~270	30	72	~263
Queue Length 95th (ft)	m118	m18	#412	41	125	#371
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2232	1046	351	2232	286	534
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.15	1.08	0.14	0.45	1.01

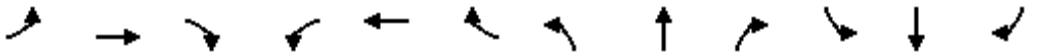
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 36.6		Intersection LOS: D	
Intersection Capacity Utilization 61.6%		ICU Level of Service B	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



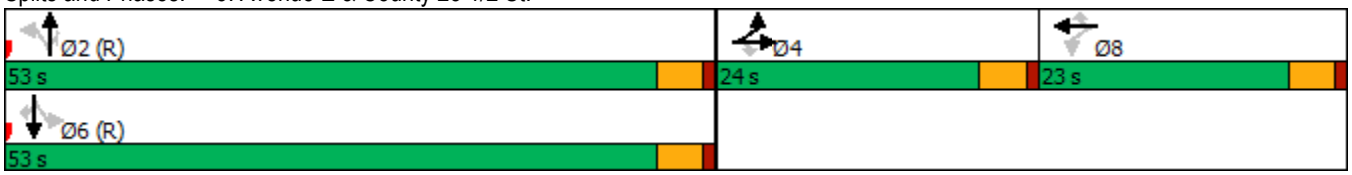
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	137	152	55	152	141	150	311	33	95	246	13
Future Volume (vph)	58	137	152	55	152	141	150	311	33	95	246	13
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.662			0.536			0.474		
Satd. Flow (perm)	1397	1863	1417	1233	1863	1583	788	3167	1583	883	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208			153			65			65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	149	208	60	165	153	205	426	36	103	337	18
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	23.0	23.0	23.0	53.0	53.0	53.0	53.0	53.0	53.0
Total Split (%)	24.0%	24.0%	24.0%	23.0%	23.0%	23.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Maximum Green (s)	19.5	19.5	19.5	18.5	18.5	18.5	48.5	48.5	48.5	48.5	48.5	48.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	19.5	19.5	19.5	18.5	18.5	18.5	48.5	48.5	48.5	48.5	48.5	48.5
Actuated g/C Ratio	0.20	0.20	0.20	0.18	0.18	0.18	0.48	0.48	0.48	0.48	0.48	0.48
v/c Ratio	0.29	0.41	0.47	0.26	0.48	0.37	0.54	0.28	0.04	0.24	0.22	0.03
Control Delay	37.8	39.2	8.8	38.5	41.8	8.6	28.5	19.8	4.1	11.6	10.6	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	39.2	8.8	38.5	41.8	8.6	28.5	19.8	4.1	11.6	10.6	0.5
LOS	D	D	A	D	D	A	C	B	A	B	B	A
Approach Delay		24.4			27.9			21.6			10.4	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	43	84	0	33	95	0	94	94	1	27	46	0
Queue Length 95th (ft)	69	144	26	71	160	53	m124	m100	m5	m33	m45	m0
Internal Link Dist (ft)		1439			269			1233			1011	

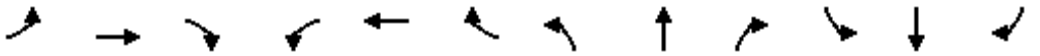
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	272	363	443	228	344	417	382	1535	801	428	1535	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.41	0.47	0.26	0.48	0.37	0.54	0.28	0.04	0.24	0.22	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	265	176	35	347	107	313	332	0	181	286	89
Future Volume (vph)	183	265	176	35	347	107	313	332	0	181	286	89
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	3167	1667	1397	3167	1417
Flt Permitted	0.341			0.446			0.518			0.478		
Satd. Flow (perm)	501	1667	1417	656	1667	1417	762	3167	1667	703	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			223			135						113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	335	223	44	439	135	396	420	0	229	362	113
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.1	47.1	47.1	47.1	47.1	47.1	52.9	52.9	52.9	52.9	52.9	52.9
Total Split (%)	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%
Maximum Green (s)	42.6	42.6	42.6	42.6	42.6	42.6	48.4	48.4	48.4	48.4	48.4	48.4
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	42.6	42.6	42.6	42.6	42.6	42.6	48.4	48.4		48.4	48.4	48.4
Actuated g/C Ratio	0.43	0.43	0.43	0.43	0.43	0.43	0.48	0.48		0.48	0.48	0.48
v/c Ratio	1.09	0.47	0.31	0.16	0.62	0.20	1.08	0.27		0.67	0.24	0.15
Control Delay	118.3	23.4	3.7	19.7	27.1	3.9	96.4	16.0		31.8	15.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	118.3	23.4	3.7	19.7	27.1	3.9	96.4	16.0		31.8	15.5	3.3
LOS	F	C	A	B	C	A	F	B		C	B	A
Approach Delay		45.7			21.5			55.0			18.9	
Approach LOS		D			C			E			B	
Queue Length 50th (ft)	~167	150	0	17	213	0	~282	80		108	67	0
Queue Length 95th (ft)	#261	193	26	35	263	24	#378	96		165	84	19
Internal Link Dist (ft)		2529			250			362			273	

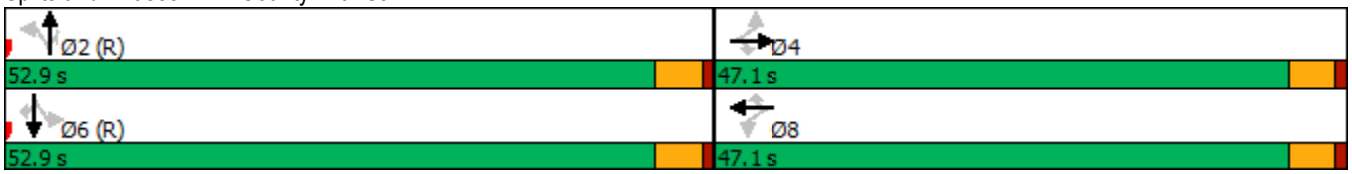
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	213	710	731	279	710	681	368	1532		340	1532	744
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.09	0.47	0.31	0.16	0.62	0.20	1.08	0.27		0.67	0.24	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 36.7		Intersection LOS: D	
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	0	0	233	0	145	0	100	150	0
Future Vol, veh/h	0	0	2	0	0	233	0	145	0	100	150	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	295	0	184	0	127	190	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	536	628	95	533	628	92	190	0	0	184	0	0
Stage 1	444	444	-	184	184	-	-	-	-	-	-	-
Stage 2	92	184	-	349	444	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	428	398	943	430	398	947	1381	-	-	1388	-	-
Stage 1	563	574	-	800	746	-	-	-	-	-	-	-
Stage 2	905	746	-	640	574	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	362	943	399	362	947	1381	-	-	1388	-	-
Mov Cap-2 Maneuver	274	362	-	399	362	-	-	-	-	-	-	-
Stage 1	563	522	-	800	746	-	-	-	-	-	-	-
Stage 2	623	746	-	580	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	10.5	0	3.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	943	-	-	947	1388	-	-
HCM Lane V/C Ratio	-	-	-	0.003	-	-	0.311	0.091	-	-
HCM Control Delay (s)	0	-	-	8.8	0	0	10.5	7.9	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	1.3	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	5	48	0	100	2	47	113	11
Future Vol, veh/h	0	0	0	2	5	48	0	100	2	47	113	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	6	62	0	128	3	60	145	14

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	402	409	130	159	0	0	131	0	0
Stage 1	130	130	-	-	-	-	-	-	-
Stage 2	272	279	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	604	532	920	1420	-	-	1454	-	-
Stage 1	896	789	-	-	-	-	-	-	-
Stage 2	774	680	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	579	0	920	1420	-	-	1454	-	-
Mov Cap-2 Maneuver	579	0	-	-	-	-	-	-	-
Stage 1	896	0	-	-	-	-	-	-	-
Stage 2	742	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	2.1
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1420	-	-	579	-	920	1454	-	-
HCM Lane V/C Ratio	-	-	-	0.004	-	0.067	0.041	-	-
HCM Control Delay (s)	0	-	-	11.2	-	9.2	7.6	-	-
HCM Lane LOS	A	-	-	B	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	22	0	212	63	0
Future Vol, veh/h	128	22	0	212	63	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	24	0	230	68	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	369	139
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	631	909
Stage 1	-	-	0	-	888	-
Stage 2	-	-	0	-	808	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	631	909
Mov Cap-2 Maneuver	-	-	-	-	631	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	631	-	-	-
HCM Lane V/C Ratio	0.109	-	-	-
HCM Control Delay (s)	11.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	150	39	0	275	73	0
Future Vol, veh/h	150	39	0	275	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	42	0	299	79	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	462	163
Stage 1	-	-	-	-	163	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	558	882
Stage 1	-	-	0	-	866	-
Stage 2	-	-	0	-	752	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	558	882
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	866	-
Stage 2	-	-	-	-	752	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	558	-	-	-
HCM Lane V/C Ratio	0.142	-	-	-
HCM Control Delay (s)	12.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	108	531	165	0	0
Future Vol, veh/h	0	108	531	165	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	117	577	179	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	289	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	708	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	708	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	708	-
HCM Lane V/C Ratio	-	-	0.166	-
HCM Control Delay (s)	-	-	11.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	411	182	0	163
Future Vol, veh/h	0	0	411	182	0	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	447	198	0	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	447
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	612
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	612
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	612
HCM Lane V/C Ratio	-	-	-	0.289
HCM Control Delay (s)	-	-	-	13.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	1.2

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	189	76	0	0	0	85
Future Vol, veh/h	189	76	0	0	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	205	83	0	0	0	92

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	205
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	836
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	836
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	836	-	-	-
HCM Lane V/C Ratio	0.111	-	-	-
HCM Control Delay (s)	9.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	176	43	61	453	94	105	34	22	21	27	35
Future Vol, veh/h	69	176	43	61	453	94	105	34	22	21	27	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	191	47	66	492	102	114	37	24	23	29	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	594	0	0	238	0	0	1050	1067	191	1019	1012	492
Stage 1	-	-	-	-	-	-	341	341	-	624	624	-
Stage 2	-	-	-	-	-	-	709	726	-	395	388	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	982	-	-	1329	-	-	205	222	851	215	239	577
Stage 1	-	-	-	-	-	-	674	639	-	473	478	-
Stage 2	-	-	-	-	-	-	425	430	-	630	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	1329	-	-	155	195	851	162	210	577
Mov Cap-2 Maneuver	-	-	-	-	-	-	155	195	-	162	210	-
Stage 1	-	-	-	-	-	-	623	590	-	437	454	-
Stage 2	-	-	-	-	-	-	353	409	-	530	563	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.8	55.9	20.8
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	155	195	851	982	-	-	1329	-	-	162	210	577
HCM Lane V/C Ratio	0.736	0.19	0.028	0.076	-	-	0.05	-	-	0.141	0.14	0.066
HCM Control Delay (s)	74.8	27.7	9.4	9	-	-	7.9	-	-	30.8	24.9	11.7
HCM Lane LOS	F	D	A	A	-	-	A	-	-	D	C	B
HCM 95th %tile Q(veh)	4.5	0.7	0.1	0.2	-	-	0.2	-	-	0.5	0.5	0.2

Intersection	
Int Delay, s/veh	17.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	15	63	0	162	0	174	0	41	14	119	85
Future Vol, veh/h	141	15	63	0	162	0	174	0	41	14	119	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	200	-	200	150	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	153	16	68	0	176	0	189	0	45	15	129	92

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	176	0	0	84	0	0	609	498	16	555	566	176
Stage 1	-	-	-	-	-	-	322	322	-	176	176	-
Stage 2	-	-	-	-	-	-	287	176	-	379	390	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1400	-	-	1513	-	-	407	474	1063	442	434	867
Stage 1	-	-	-	-	-	-	690	651	-	826	753	-
Stage 2	-	-	-	-	-	-	720	753	-	643	608	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1400	-	-	1513	-	-	248	422	1063	388	387	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	248	422	-	388	387	-
Stage 1	-	-	-	-	-	-	615	580	-	736	753	-
Stage 2	-	-	-	-	-	-	533	753	-	549	542	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.1	0	45.8	15
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	248	-	1063	1400	-	-	1513	-	-	388	387	867
HCM Lane V/C Ratio	0.763	-	0.042	0.109	-	-	-	-	-	0.039	0.334	0.107
HCM Control Delay (s)	54.6	0	8.5	7.9	-	-	0	-	-	14.7	18.9	9.6
HCM Lane LOS	F	A	A	A	-	-	A	-	-	B	C	A
HCM 95th %tile Q(veh)	5.5	-	0.1	0.4	-	-	0	-	-	0.1	1.4	0.4

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	167	0	0	0	158	0	0	0	0	0
Future Vol, veh/h	0	0	167	0	0	0	158	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	182	0	0	0	172	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	190	406	54	190	278
Future Vol, veh/h	46	190	406	54	190	278
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	207	441	59	207	302

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1006	221	0	0	500	0
Stage 1	441	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	238	783	-	-	1060	-
Stage 1	616	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	192	783	-	-	1060	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	428	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	3.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	192	783	1060	-
HCM Lane V/C Ratio	-	-	0.26	0.264	0.195	-
HCM Control Delay (s)	-	-	30.2	11.2	9.2	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1	1.1	0.7	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	27	485	46	61	476
Future Vol, veh/h	80	27	485	46	61	476
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	87	29	527	50	66	517

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	918	264	0	0	577	0
Stage 1	527	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	271	734	-	-	993	-
Stage 1	557	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	253	734	-	-	993	-
Mov Cap-2 Maneuver	253	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	253	734	993	-
HCM Lane V/C Ratio	-	-	0.344	0.04	0.067	-
HCM Control Delay (s)	-	-	26.5	10.1	8.9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.1	0.2	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	197	249	0	0	0	91
Future Vol, veh/h	197	249	0	0	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	214	271	0	0	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	214
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	826
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	826
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	826	-	-	-
HCM Lane V/C Ratio	0.12	-	-	-
HCM Control Delay (s)	10	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	29	339	12	0	0
Future Vol, veh/h	0	29	339	12	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	368	13	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	184	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	827	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	827	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	827	-
HCM Lane V/C Ratio	-	-	0.038	-
HCM Control Delay (s)	-	-	9.5	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	541	0	0	0
Future Vol, veh/h	0	114	541	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	588	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	294	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	702	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	702	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	702	-
HCM Lane V/C Ratio	-	-	0.177	-
HCM Control Delay (s)	-	-	11.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	435	23	0	18
Future Vol, veh/h	0	0	435	23	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	473	25	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	473
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	591
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	591
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	591
HCM Lane V/C Ratio	-	-	-	0.033
HCM Control Delay (s)	-	-	-	11.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	0	0	0	0	30
Future Vol, veh/h	9	0	0	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.006	-	-	0.03
HCM Control Delay (s)	7.2	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱	↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	0	13	23	0	0	0	76	0	0	0	0	86
Future Vol, veh/h	0	13	23	0	0	0	76	0	0	0	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	25	0	0	0	83	0	0	0	0	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	62	15	14	28	40	1
Stage 1	-	-	-	-	-	-	14	14	-	1	1	-
Stage 2	-	-	-	-	-	-	48	1	-	27	39	-
Critical Hdwy	-	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	933	879	1066	981	852	1084
Stage 1	0	-	-	0	-	-	1006	884	-	1022	895	-
Stage 2	0	-	-	0	-	-	965	895	-	990	862	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	853	879	1066	981	852	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	853	879	-	981	852	-
Stage 1	-	-	-	-	-	-	1006	884	-	1022	895	-
Stage 2	-	-	-	-	-	-	882	895	-	990	862	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.7	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBT	EBR	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	853	-	-	-	-	-	-	-	-	1084
HCM Lane V/C Ratio	0.097	-	-	-	-	-	-	-	-	0.086
HCM Control Delay (s)	9.7	0	0	-	-	-	-	0	0	8.6
HCM Lane LOS	A	A	A	-	-	-	-	A	A	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-	-	-	-	-	0.3

PHASE III, YEAR 2025

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	480	524	108	1026	443	18
Future Volume (vph)	480	524	108	1026	443	18
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.370		0.950	
Satd. Flow (perm)	1667	1417	544	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		570				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	570	117	1115	482	20
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	63.0	63.0	63.0	63.0	37.0	37.0
Total Split (%)	63.0%	63.0%	63.0%	63.0%	37.0%	37.0%
Maximum Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.32	0.32
v/c Ratio	0.54	0.54	0.37	1.14	1.06	0.04
Control Delay	15.1	2.9	11.0	95.8	93.9	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.1	2.9	11.0	95.8	93.9	9.9
LOS	B	A	B	F	F	A
Approach Delay	8.7			87.8	90.5	
Approach LOS	A			F	F	
Queue Length 50th (ft)	188	0	23	~845	~340	0
Queue Length 95th (ft)	278	43	39	#1099	#536	17
Internal Link Dist (ft)	2815			2430	1908	

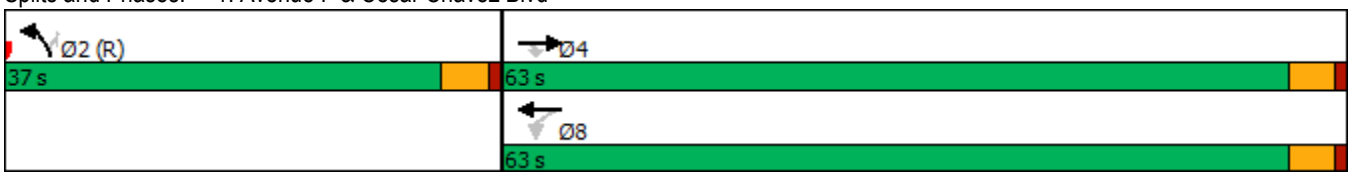
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	975	1065	318	975	454	474
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.54	0.37	1.14	1.06	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay: 57.7		Intersection LOS: E	
Intersection Capacity Utilization 98.9%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



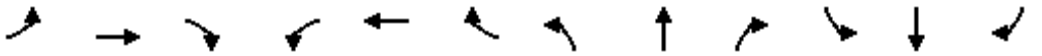
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	424	130	660	970	95	433
Future Volume (vph)	424	130	660	970	95	433
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1583
Flt Permitted			0.468		0.950	
Satd. Flow (perm)	3167	1417	688	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		153				450
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	499	153	776	1141	112	509
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	23.0	23.0
Total Split (%)	77.0%	77.0%	77.0%	77.0%	23.0%	23.0%
Maximum Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	18.5	18.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.18	0.18
v/c Ratio	0.22	0.14	1.56	0.50	0.43	0.77
Control Delay	4.2	0.8	280.3	6.8	38.2	24.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	0.8	280.3	6.8	38.2	24.9
LOS	A	A	F	A	D	C
Approach Delay	3.4			117.5	27.3	
Approach LOS	A			F	C	
Queue Length 50th (ft)	38	0	~383	140	65	151
Queue Length 95th (ft)	48	8	#542	163	117	202
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2296	1069	498	2296	258	659
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.14	1.56	0.50	0.43	0.77

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.56			
Intersection Signal Delay: 76.6		Intersection LOS: E	
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



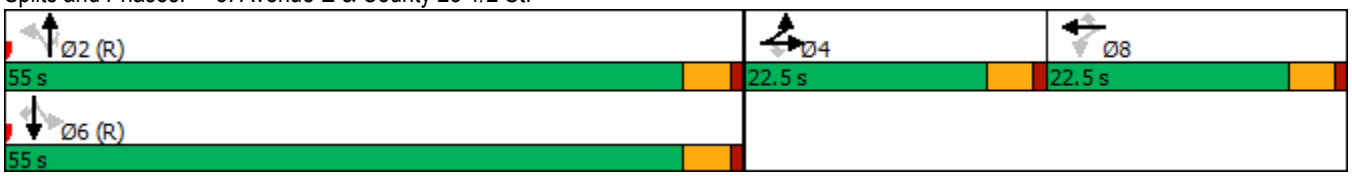
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	207	180	53	163	133	202	305	67	171	363	101
Future Volume (vph)	35	207	180	53	163	133	202	305	67	171	363	101
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.618			0.434			0.483		
Satd. Flow (perm)	1397	1863	1417	1151	1863	1583	638	3167	1583	900	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247			145			73			138
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	225	247	58	177	145	277	418	73	186	497	138
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18	0.50	0.50	0.50	0.50	0.50	0.50
v/c Ratio	0.19	0.67	0.54	0.28	0.53	0.36	0.86	0.26	0.09	0.41	0.31	0.18
Control Delay	37.2	49.3	9.6	39.7	43.7	8.9	52.9	19.0	7.3	7.8	6.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.2	49.3	9.6	39.7	43.7	8.9	52.9	19.0	7.3	7.8	6.9	0.7
LOS	D	D	A	D	D	A	D	B	A	A	A	A
Approach Delay		29.3			29.8			30.1			6.1	
Approach LOS		C			C			C			A	
Queue Length 50th (ft)	26	135	0	32	103	0	157	90	4	40	52	2
Queue Length 95th (ft)	48	#217	25	71	172	52	m179	m90	m23	m30	m34	m1
Internal Link Dist (ft)		1439			269			1233			1011	

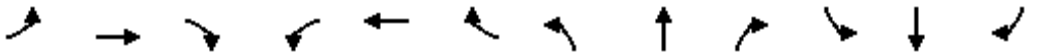
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	251	335	457	207	335	403	322	1599	835	454	1599	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.67	0.54	0.28	0.53	0.36	0.86	0.26	0.09	0.41	0.31	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 22.0		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.





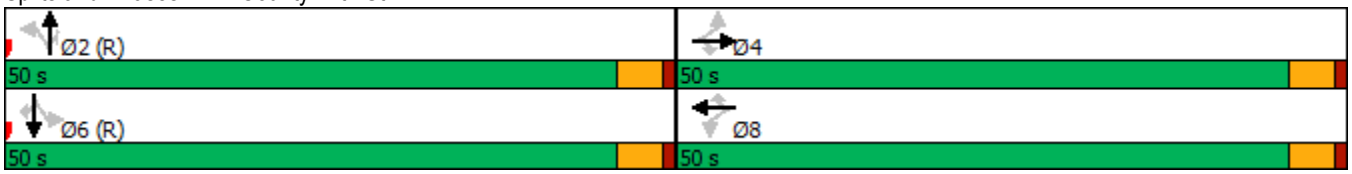
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	394	340	109	417	74	313	350	9	243	381	130
Future Volume (vph)	223	394	340	109	417	74	313	350	9	243	381	130
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	3167	1417	1397	3167	1417
Flt Permitted	0.282			0.307			0.430			0.456		
Satd. Flow (perm)	415	1667	1417	451	1667	1417	632	3167	1417	671	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			275			94			16			165
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	282	499	430	138	528	94	396	443	11	308	482	165
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	1.50	0.66	0.54	0.67	0.70	0.14	1.38	0.31	0.02	1.01	0.33	0.22
Control Delay	276.4	26.4	9.4	40.8	27.8	3.9	217.8	18.0	5.7	83.8	18.3	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	276.4	26.4	9.4	40.8	27.8	3.9	217.8	18.0	5.7	83.8	18.3	3.4
LOS	F	C	A	D	C	A	F	B	A	F	B	A
Approach Delay		78.6			27.2			110.9			36.9	
Approach LOS		E			C			F			D	
Queue Length 50th (ft)	~250	240	59	67	260	0	~336	91	0	~195	100	0
Queue Length 95th (ft)	#346	290	101	122	313	20	#433	108	7	#303	118	23
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	188	758	794	205	758	695	287	1440	653	305	1440	734
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.50	0.66	0.54	0.67	0.70	0.14	1.38	0.31	0.02	1.01	0.33	0.22

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 1.50
Intersection Signal Delay: 65.0 Intersection LOS: E
Intersection Capacity Utilization 88.9% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	146	0	169	0	306	156	0
Future Vol, veh/h	0	0	0	0	0	146	0	169	0	306	156	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	159	0	214	0	333	197	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	970	1077	99	979	1077	107	197	0	0	214	0	0
Stage 1	863	863	-	214	214	-	-	-	-	-	-	-
Stage 2	107	214	-	765	863	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	208	218	937	204	218	926	1373	-	-	1353	-	-
Stage 1	316	370	-	768	724	-	-	-	-	-	-	-
Stage 2	887	724	-	362	370	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	164	937	165	164	926	1373	-	-	1353	-	-
Mov Cap-2 Maneuver	140	164	-	165	164	-	-	-	-	-	-	-
Stage 1	316	279	-	768	724	-	-	-	-	-	-	-
Stage 2	735	724	-	273	279	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	5.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1373	-	-	-	-	-	926	1353	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.171	0.246	-	-
HCM Control Delay (s)	0	-	-	0	0	0	9.7	8.5	-	-
HCM Lane LOS	A	-	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	0.6	1	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	40	0	145	8	54	131	0
Future Vol, veh/h	0	0	0	8	0	40	0	145	8	54	131	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	10	0	51	0	186	10	69	168	0

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	497	497	191	168	0	0	196	0	0
Stage 1	191	191	-	-	-	-	-	-	-
Stage 2	306	306	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	532	475	851	1410	-	-	1377	-	-
Stage 1	841	742	-	-	-	-	-	-	-
Stage 2	747	662	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	505	0	851	1410	-	-	1377	-	-
Mov Cap-2 Maneuver	505	0	-	-	-	-	-	-	-
Stage 1	841	0	-	-	-	-	-	-	-
Stage 2	710	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	2.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1410	-	-	505	-	851	1377	-	-
HCM Lane V/C Ratio	-	-	-	0.02	-	0.06	0.05	-	-
HCM Control Delay (s)	0	-	-	12.3	0	9.5	7.8	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	207	72	0	244	40	0
Future Vol, veh/h	207	72	0	244	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	78	0	265	43	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	490	225
Stage 1	-	-	-	-	225	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	537	814
Stage 1	-	-	0	-	812	-
Stage 2	-	-	0	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	537	814
Mov Cap-2 Maneuver	-	-	-	-	537	-
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	779	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	537	-	-	-
HCM Lane V/C Ratio	0.081	-	-	-
HCM Control Delay (s)	12.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	279	88	0	284	65	0
Future Vol, veh/h	279	88	0	284	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	303	96	0	309	71	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	612	303
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	309	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	456	737
Stage 1	-	-	0	-	749	-
Stage 2	-	-	0	-	745	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	456	737
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	456	-	-	-
HCM Lane V/C Ratio	0.155	-	-	-
HCM Control Delay (s)	14.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	107	597	164	0	0
Future Vol, veh/h	0	107	597	164	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	116	649	178	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	325	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	671	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	671	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	671	-
HCM Lane V/C Ratio	-	-	0.173	-
HCM Control Delay (s)	-	-	11.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	486	163	0	245
Future Vol, veh/h	0	0	486	163	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	528	177	0	266

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	528
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	550
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	550
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	550
HCM Lane V/C Ratio	-	-	-	0.484
HCM Control Delay (s)	-	-	-	17.5
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	2.6

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	367	78	0	0	0	101
Future Vol, veh/h	367	78	0	0	0	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	399	85	0	0	0	110

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	399
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	651
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	651
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	651	-	-	-
HCM Lane V/C Ratio	0.169	-	-	-
HCM Control Delay (s)	11.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	172	89	39	361	60	77	35	69	60	36	48
Future Vol, veh/h	70	172	89	39	361	60	77	35	69	60	36	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	187	97	42	392	65	84	38	75	65	39	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	457	0	0	284	0	0	893	880	187	920	912	392
Stage 1	-	-	-	-	-	-	339	339	-	476	476	-
Stage 2	-	-	-	-	-	-	554	541	-	444	436	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1104	-	-	1278	-	-	262	286	855	251	274	657
Stage 1	-	-	-	-	-	-	676	640	-	570	557	-
Stage 2	-	-	-	-	-	-	517	521	-	593	580	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1104	-	-	1278	-	-	196	257	855	188	247	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	196	257	-	188	247	-
Stage 1	-	-	-	-	-	-	629	596	-	531	539	-
Stage 2	-	-	-	-	-	-	427	504	-	472	540	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.7	23.3	23.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	196	257	855	1104	-	-	1278	-	-	188	247	657
HCM Lane V/C Ratio	0.427	0.148	0.088	0.069	-	-	0.033	-	-	0.347	0.158	0.079
HCM Control Delay (s)	36.4	21.4	9.6	8.5	-	-	7.9	-	-	34	22.3	11
HCM Lane LOS	E	C	A	A	-	-	A	-	-	D	C	B
HCM 95th %tile Q(veh)	2	0.5	0.3	0.2	-	-	0.1	-	-	1.5	0.6	0.3

Intersection	
Int Delay, s/veh	29.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	229	65	230	0	181	0	186	0	53	54	206	34
Future Vol, veh/h	229	65	230	0	181	0	186	0	53	54	206	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	200	-	200	150	-	0	0	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	249	71	250	0	197	0	202	0	58	59	224	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	197	0	0	321	0	0	897	766	71	920	1016	197
Stage 1	-	-	-	-	-	-	569	569	-	197	197	-
Stage 2	-	-	-	-	-	-	328	197	-	723	819	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1376	-	-	1239	-	-	261	333	991	251	238	844
Stage 1	-	-	-	-	-	-	507	506	-	805	738	-
Stage 2	-	-	-	-	-	-	685	738	-	417	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1376	-	-	1239	-	-	-	273	991	204	~ 195	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	273	-	204	~ 195	-
Stage 1	-	-	-	-	-	-	415	414	-	659	738	-
Stage 2	-	-	-	-	-	-	456	738	-	322	319	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	0		118.6
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	-	991	1376	-	-	1239	-	-	204	195	844
HCM Lane V/C Ratio	-	-	0.058	0.181	-	-	-	-	-	0.288	1.148	0.044
HCM Control Delay (s)	-	0	8.9	8.2	-	-	0	-	-	29.6	160	9.5
HCM Lane LOS	-	A	A	A	-	-	A	-	-	D	F	A
HCM 95th %tile Q(veh)	-	-	0.2	0.7	-	-	0	-	-	1.1	11.1	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱				↰		↱			
Traffic Vol, veh/h	0	0	260	0	0	0	177	0	0	0	0	0
Future Vol, veh/h	0	0	260	0	0	0	177	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	283	0	0	0	192	0	0	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	-	0	0	0	-	0
Stage 1	-	-	-	0	-	-
Stage 2	-	-	-	0	-	-
Critical Hdwy	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	0	-
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	8.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	215	396	70	288	527
Future Vol, veh/h	70	215	396	70	288	527
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	234	430	76	313	573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1343	215	0	0	506	0
Stage 1	430	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	143	790	-	-	1055	-
Stage 1	624	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	101	790	-	-	1055	-
Mov Cap-2 Maneuver	101	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	247	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.3	0	3.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	101	790	1055	-
HCM Lane V/C Ratio	-	-	0.753	0.296	0.297	-
HCM Control Delay (s)	-	-	108.3	11.5	9.8	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	4	1.2	1.2	-

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	93	31	550	47	62	706
Future Vol, veh/h	93	31	550	47	62	706
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	101	34	598	51	67	767

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1116	299	0	0	649	0
Stage 1	598	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	202	697	-	-	933	-
Stage 1	512	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	697	-	-	933	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	512	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36.3	0	0.7
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	187	697	933	-
HCM Lane V/C Ratio	-	-	0.541	0.048	0.072	-
HCM Control Delay (s)	-	-	44.9	10.4	9.2	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	2.8	0.2	0.2	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	331	315	0	0	0	139
Future Vol, veh/h	331	315	0	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	360	342	0	0	0	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	360
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	684
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	684
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	684	-	-	-
HCM Lane V/C Ratio	0.221	-	-	-
HCM Control Delay (s)	11.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	251	29	0	0
Future Vol, veh/h	0	20	251	29	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	273	32	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	137	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	886	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	886	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	886	-
HCM Lane V/C Ratio	-	-	0.025	-
HCM Control Delay (s)	-	-	9.2	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	344	0	0	0
Future Vol, veh/h	0	114	344	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	374	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	187	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	823	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	823	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	823	-
HCM Lane V/C Ratio	-	-	0.151	-
HCM Control Delay (s)	-	-	10.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.5	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	337	23	0	24
Future Vol, veh/h	0	0	337	23	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	366	25	0	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	366
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	679
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	679
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	679
HCM Lane V/C Ratio	-	-	-	0.038
HCM Control Delay (s)	-	-	-	10.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	0	0	0	0	21
Future Vol, veh/h	24	0	0	0	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	0	0	0	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.016	-	-	0.021
HCM Control Delay (s)	7.3	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱	↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	0	34	65	0	0	0	49	0	0	0	0	132
Future Vol, veh/h	0	34	65	0	0	0	49	0	0	0	0	132
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	37	71	0	0	0	53	0	0	0	0	143

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	110	38	37	74	109	1
Stage 1	-	-	-	-	-	-	37	37	-	1	1	-
Stage 2	-	-	-	-	-	-	73	1	-	73	108	-
Critical Hdwy	-	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	868	854	1035	916	781	1084
Stage 1	0	-	-	0	-	-	978	864	-	1022	895	-
Stage 2	0	-	-	0	-	-	937	895	-	937	806	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	753	854	1035	916	781	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	854	-	916	781	-
Stage 1	-	-	-	-	-	-	978	864	-	1022	895	-
Stage 2	-	-	-	-	-	-	813	895	-	937	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.1	8.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBT	EBR	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	753	-	-	-	-	-	-	-	-	1084
HCM Lane V/C Ratio	0.071	-	-	-	-	-	-	-	-	0.132
HCM Control Delay (s)	10.1	0	0	-	-	-	-	0	0	8.8
HCM Lane LOS	B	A	A	-	-	-	-	A	A	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	-	-	-	-	0.5

PHASE III, YEAR 2025

Remedial Actions (AM)

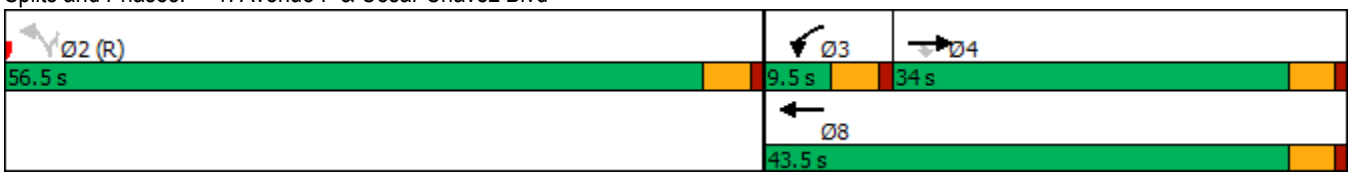
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	701	365	17	319	540	65
Future Volume (vph)	701	365	17	319	540	65
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1275	1397	3167	1397	1417
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3167	1275	1397	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		435				77
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Parking (#/hr)		0				
Shared Lane Traffic (%)						
Lane Group Flow (vph)	835	435	20	380	643	77
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	9.5	43.5	56.5	56.5
Total Split (%)	34.0%	34.0%	9.5%	43.5%	56.5%	56.5%
Maximum Green (s)	29.5	29.5	5.0	39.0	52.0	52.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	29.5	29.5	5.0	39.0	52.0	52.0
Actuated g/C Ratio	0.30	0.30	0.05	0.39	0.52	0.52
v/c Ratio	0.89	0.64	0.29	0.31	0.89	0.10
Control Delay	47.3	7.6	56.8	22.0	37.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	7.6	56.8	22.0	37.8	3.2
LOS	D	A	E	C	D	A
Approach Delay	33.7			23.8	34.1	
Approach LOS	C			C	C	
Queue Length 50th (ft)	267	0	13	86	348	0
Queue Length 95th (ft)	#319	50	35	113	#516	19

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	2815			2430	1908	
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	934	682	69	1235	726	773
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.64	0.29	0.31	0.89	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 32.1		Intersection LOS: C	
Intersection Capacity Utilization 67.1%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

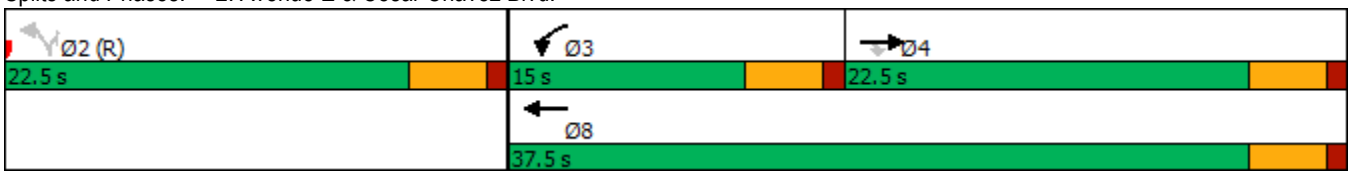


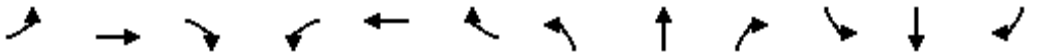
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	654	138	321	266	109	460
Future Volume (vph)	654	138	321	266	109	460
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3167	1417	2710	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		162				424
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	162	378	313	128	541
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	15.0	37.5	22.5	22.5
Total Split (%)	37.5%	37.5%	25.0%	62.5%	37.5%	37.5%
Maximum Green (s)	18.0	18.0	10.5	33.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	18.0	18.0	10.5	33.0	18.0	18.0
Actuated g/C Ratio	0.30	0.30	0.18	0.55	0.30	0.30
v/c Ratio	0.81	0.30	0.80	0.18	0.31	0.70
Control Delay	28.0	5.0	38.8	7.1	18.7	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	5.0	38.8	7.1	18.7	10.2
LOS	C	A	D	A	B	B
Approach Delay	24.0			24.4	11.9	
Approach LOS	C			C	B	
Queue Length 50th (ft)	133	0	68	26	35	32
Queue Length 95th (ft)	#181	31	#118	41	69	99
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	950	538	474	1741	419	771
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.30	0.80	0.18	0.31	0.70

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



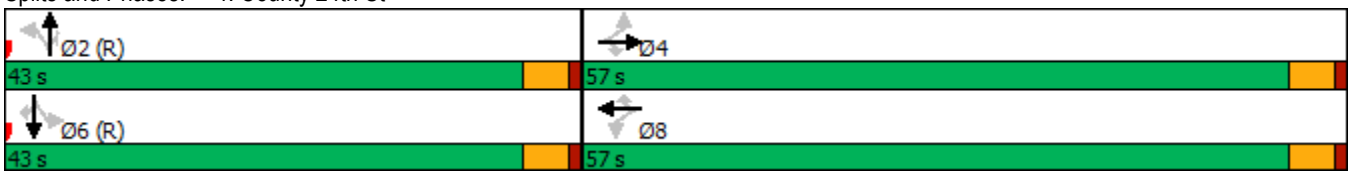


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	265	176	35	347	107	313	332	0	181	286	89
Future Volume (vph)	183	265	176	35	347	107	313	332	0	181	286	89
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1667	2710	3167	1417
Flt Permitted	0.403			0.491			0.497			0.452		
Satd. Flow (perm)	593	1667	1417	722	1667	1417	1418	3167	1667	1290	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			223			135						113
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	335	223	44	439	135	396	420	0	229	362	113
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	57.0	57.0	57.0	57.0	57.0	57.0	43.0	43.0	43.0	43.0	43.0	43.0
Total Split (%)	57.0%	57.0%	57.0%	57.0%	57.0%	57.0%	43.0%	43.0%	43.0%	43.0%	43.0%	43.0%
Maximum Green (s)	52.5	52.5	52.5	52.5	52.5	52.5	38.5	38.5	38.5	38.5	38.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	52.5	52.5	52.5	52.5	52.5	52.5	38.5	38.5		38.5	38.5	38.5
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52	0.38	0.38		0.38	0.38	0.38
v/c Ratio	0.75	0.38	0.26	0.12	0.50	0.17	0.73	0.34		0.46	0.30	0.18
Control Delay	36.2	15.7	2.5	13.1	17.8	2.7	35.5	22.8		26.8	22.2	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.2	15.7	2.5	13.1	17.8	2.7	35.5	22.8		26.8	22.2	4.7
LOS	D	B	A	B	B	A	D	C		C	C	A
Approach Delay		18.0			14.2			29.0			20.9	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	110	121	0	14	172	0	109	98		55	83	0
Queue Length 95th (ft)	178	156	21	28	212	19	138	117		77	102	24
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	311	875	849	379	875	808	545	1219		496	1219	615
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.75	0.38	0.26	0.12	0.50	0.17	0.73	0.34		0.46	0.30	0.18

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 4: County 24th St



Intersection	
Intersection Delay, s/veh	21.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	176	43	61	453	94	105	34	22	21	27	35
Future Vol, veh/h	69	176	43	61	453	94	105	34	22	21	27	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	191	47	66	492	102	114	37	24	23	29	38
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	12.7	30.1	12.5	10.9
HCM LOS	B	D	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	34	22	69	176	43	61	453	94	21	27
LT Vol	105	0	0	69	0	0	61	0	0	21	0
Through Vol	0	34	0	0	176	0	0	453	0	0	27
RT Vol	0	0	22	0	0	43	0	0	94	0	0
Lane Flow Rate	114	37	24	75	191	47	66	492	102	23	29
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.254	0.077	0.045	0.156	0.37	0.081	0.126	0.864	0.159	0.053	0.064
Departure Headway (Hd)	8.003	7.503	6.803	7.466	6.966	6.266	6.816	6.316	5.616	8.362	7.862
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	446	474	522	478	513	567	524	571	635	431	458
Service Time	5.803	5.303	4.603	5.259	4.759	4.059	4.59	4.09	3.39	6.062	5.562
HCM Lane V/C Ratio	0.256	0.078	0.046	0.157	0.372	0.083	0.126	0.862	0.161	0.053	0.063
HCM Control Delay	13.5	10.9	9.9	11.7	13.8	9.6	10.6	37	9.5	11.5	11.1
HCM Lane LOS	B	B	A	B	B	A	B	E	A	B	B
HCM 95th-tile Q	1	0.2	0.1	0.5	1.7	0.3	0.4	9.5	0.6	0.2	0.2

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	15	63	0	162	0	174	0	41	14	119	85
Future Vol, veh/h	141	15	63	0	162	0	174	0	41	14	119	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	153	16	68	0	176	0	189	0	45	15	129	92
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	11.7	12.8	13.1	10.8
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	100%	100%	100%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	174	0	41	141	15	63	0	162	0	14	119
LT Vol	174	0	0	141	0	0	0	0	0	14	0
Through Vol	0	0	0	0	15	0	0	162	0	0	119
RT Vol	0	0	41	0	0	63	0	0	0	0	0
Lane Flow Rate	189	0	45	153	16	68	0	176	0	15	129
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.373	0	0.073	0.303	0.03	0.112	0	0.329	0	0.03	0.239
Departure Headway (Hd)	7.109	6.602	5.892	7.126	6.621	5.913	6.734	6.734	6.734	7.17	6.663
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	503	0	604	503	538	602	0	532	0	497	537
Service Time	4.884	4.376	3.666	4.904	4.398	3.691	4.512	4.512	4.512	4.946	4.438
HCM Lane V/C Ratio	0.376	0	0.075	0.304	0.03	0.113	0	0.331	0	0.03	0.24
HCM Control Delay	14.1	9.4	9.1	13	9.6	9.4	9.5	12.8	9.5	10.2	11.5
HCM Lane LOS	B	N	A	B	A	A	N	B	N	B	B
HCM 95th-tile Q	1.7	0	0.2	1.3	0.1	0.4	0	1.4	0	0.1	0.9

PHASE III, YEAR 2025

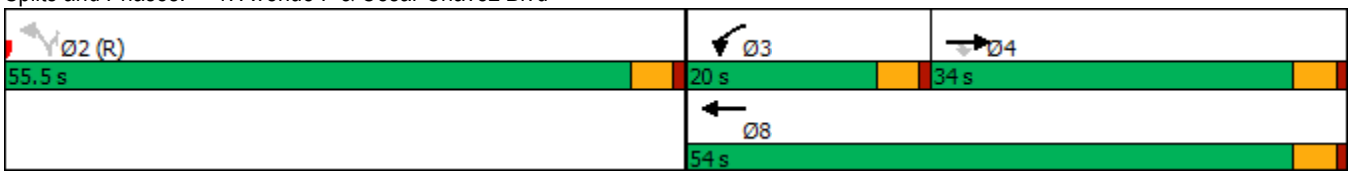
Remedial Actions (PM)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	480	524	108	1026	443	18
Future Volume (vph)	480	524	108	1026	443	18
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3167	1417	1397	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		570				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	522	570	117	1115	482	20
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	20.0	54.0	55.5	55.5
Total Split (%)	31.1%	31.1%	18.3%	49.3%	50.7%	50.7%
Maximum Green (s)	29.5	29.5	15.5	49.5	51.0	51.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	29.5	29.5	15.5	49.5	51.0	51.0
Actuated g/C Ratio	0.27	0.27	0.14	0.45	0.47	0.47
v/c Ratio	0.61	0.71	0.59	0.78	0.74	0.03
Control Delay	38.6	8.5	57.5	30.1	32.3	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	8.5	57.5	30.1	32.3	6.6
LOS	D	A	E	C	C	A
Approach Delay	22.9			32.7	31.3	
Approach LOS	C			C	C	
Queue Length 50th (ft)	168	0	78	340	269	0
Queue Length 95th (ft)	226	104	140	427	406	13
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	853	798	197	1431	650	670
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.71	0.59	0.78	0.74	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 109.5			
Actuated Cycle Length: 109.5			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 28.7		Intersection LOS: C	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

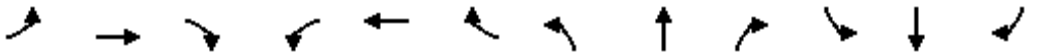


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	424	130	660	970	95	433
Future Volume (vph)	424	130	660	970	95	433
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	3167	1417	2710	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		153				509
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	499	153	776	1141	112	509
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	26.0	26.0	42.0	68.0	32.0	32.0
Total Split (%)	26.0%	26.0%	42.0%	68.0%	32.0%	32.0%
Maximum Green (s)	21.5	21.5	37.5	63.5	27.5	27.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	21.5	21.5	37.5	63.5	27.5	27.5
Actuated g/C Ratio	0.22	0.22	0.38	0.64	0.28	0.28
v/c Ratio	0.73	0.36	0.76	0.57	0.29	0.63
Control Delay	43.9	8.1	33.4	11.8	32.2	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	8.1	33.4	11.8	32.2	18.6
LOS	D	A	C	B	C	B
Approach Delay	35.5			20.5	21.0	
Approach LOS	D			C	C	
Queue Length 50th (ft)	156	0	220	198	63	155
Queue Length 95th (ft)	200	43	269	231	110	202
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	680	424	1016	2011	384	804
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.36	0.76	0.57	0.29	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 23.7		Intersection LOS: C	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



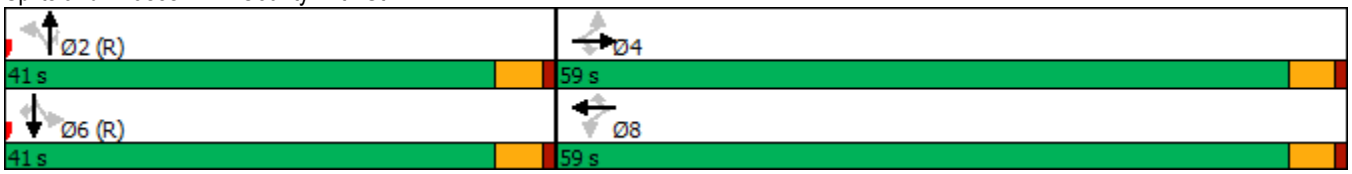
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	394	340	109	417	74	313	350	9	243	381	130
Future Volume (vph)	223	394	340	109	417	74	313	350	9	243	381	130
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.344			0.366			0.400			0.428		
Satd. Flow (perm)	506	1667	1417	538	1667	1417	1141	3167	1417	1221	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			193			94			16			165
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	282	499	430	138	528	94	396	443	11	308	482	165
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	59.0	59.0	59.0	59.0	59.0	59.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (%)	59.0%	59.0%	59.0%	59.0%	59.0%	59.0%	41.0%	41.0%	41.0%	41.0%	41.0%	41.0%
Maximum Green (s)	54.5	54.5	54.5	54.5	54.5	54.5	36.5	36.5	36.5	36.5	36.5	36.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	54.5	54.5	54.5	54.5	54.5	54.5	36.5	36.5	36.5	36.5	36.5	36.5
Actuated g/C Ratio	0.54	0.54	0.54	0.54	0.54	0.54	0.36	0.36	0.36	0.36	0.36	0.36
v/c Ratio	1.03	0.55	0.50	0.47	0.58	0.12	0.95	0.38	0.02	0.69	0.42	0.27
Control Delay	86.9	17.7	9.6	20.6	18.4	2.7	66.3	24.7	7.7	36.6	25.2	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.9	17.7	9.6	20.6	18.4	2.7	66.3	24.7	7.7	36.6	25.2	4.7
LOS	F	B	A	C	B	A	E	C	A	D	C	A
Approach Delay		30.9			16.9			43.9			25.3	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	~192	196	82	51	212	0	124	108	0	85	119	0
Queue Length 95th (ft)	#288	236	119	88	255	16	#178	128	8	113	140	28
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	275	908	860	293	908	815	416	1155	527	445	1155	621
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.55	0.50	0.47	0.58	0.12	0.95	0.38	0.02	0.69	0.42	0.27

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 29.6 Intersection LOS: C
Intersection Capacity Utilization 78.3% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Intersection Delay, s/veh	16.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	172	89	39	361	60	77	35	69	60	36	48
Future Vol, veh/h	70	172	89	39	361	60	77	35	69	60	36	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	187	97	42	392	65	84	38	75	65	39	52
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	12.4	22.5	11.6	11.4
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	35	69	70	172	89	39	361	60	60	36
LT Vol	77	0	0	70	0	0	39	0	0	60	0
Through Vol	0	35	0	0	172	0	0	361	0	0	36
RT Vol	0	0	69	0	0	89	0	0	60	0	0
Lane Flow Rate	84	38	75	76	187	97	42	392	65	65	39
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.188	0.08	0.144	0.16	0.367	0.171	0.085	0.736	0.11	0.149	0.084
Departure Headway (Hd)	8.093	7.593	6.893	7.576	7.076	6.376	7.253	6.753	6.053	8.198	7.698
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	444	472	521	476	510	565	496	538	594	438	466
Service Time	5.834	5.334	4.634	5.293	4.793	4.093	4.966	4.466	3.766	5.939	5.439
HCM Lane V/C Ratio	0.189	0.081	0.144	0.16	0.367	0.172	0.085	0.729	0.109	0.148	0.084
HCM Control Delay	12.7	11	10.8	11.7	13.8	10.4	10.6	26	9.5	12.4	11.1
HCM Lane LOS	B	B	B	B	B	B	B	D	A	B	B
HCM 95th-tile Q	0.7	0.3	0.5	0.6	1.7	0.6	0.3	6.2	0.4	0.5	0.3

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	229	65	230	0	181	0	186	0	53	54	206	34
Future Vol, veh/h	229	65	230	0	181	0	186	0	53	54	206	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	249	71	250	0	197	0	202	0	58	59	224	37
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	18.1	18.7	18.7	17.6
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	100%	100%	100%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	0	53	229	65	230	0	181	0	54	206
LT Vol	186	0	0	229	0	0	0	0	0	54	0
Through Vol	0	0	0	0	65	0	0	181	0	0	206
RT Vol	0	0	53	0	0	230	0	0	0	0	0
Lane Flow Rate	202	0	58	249	71	250	0	197	0	59	224
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.507	0	0.125	0.574	0.153	0.491	0	0.469	0	0.145	0.522
Departure Headway (Hd)	9.025	8.508	7.785	8.3	7.79	7.075	8.582	8.582	8.582	8.907	8.392
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	0	460	436	462	513	0	421	0	404	432
Service Time	6.774	6.257	5.533	6.016	5.505	4.791	6.331	6.331	6.331	6.628	6.113
HCM Lane V/C Ratio	0.505	0	0.126	0.571	0.154	0.487	0	0.468	0	0.146	0.519
HCM Control Delay	20.7	11.3	11.6	21.6	11.9	16.4	11.3	18.7	11.3	13.1	19.9
HCM Lane LOS	C	N	B	C	B	C	N	C	N	B	C
HCM 95th-tile Q	2.8	0	0.4	3.5	0.5	2.7	0	2.4	0	0.5	2.9

PHASE IV, YEAR 2026

AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	743	383	17	354	567	68
Future Volume (vph)	743	383	17	354	567	68
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.133		0.950	
Satd. Flow (perm)	3167	1417	196	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		456				27
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	885	456	20	421	675	81
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	37.0	63.0	63.0
Total Split (%)	37.0%	37.0%	37.0%	37.0%	63.0%	63.0%
Maximum Green (s)	32.5	32.5	32.5	32.5	58.5	58.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	32.5	32.5	32.5	32.5	58.5	58.5
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.58	0.58
v/c Ratio	0.86	0.59	0.32	0.41	0.83	0.10
Control Delay	41.6	6.1	39.4	25.9	27.4	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	6.1	39.4	25.9	27.4	6.7
LOS	D	A	D	C	C	A
Approach Delay	29.5			26.5	25.2	
Approach LOS	C			C	C	
Queue Length 50th (ft)	276	0	11	125	322	14
Queue Length 95th (ft)	323	48	30	159	439	31
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	1029	768	63	1029	817	840
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.59	0.32	0.41	0.83	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

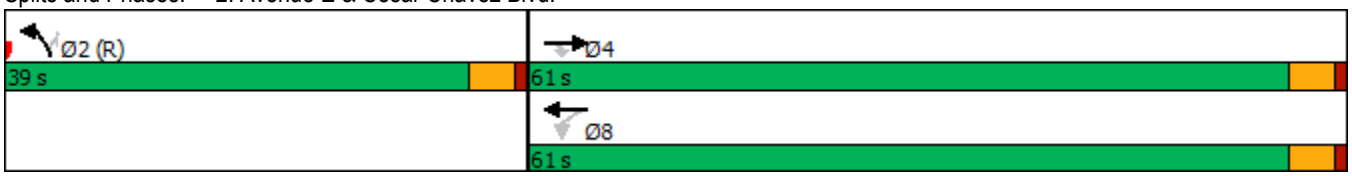
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	687	151	381	280	133	543
Future Volume (vph)	687	151	381	280	133	543
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.292		0.950	
Satd. Flow (perm)	3167	1417	833	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		178				167
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	808	178	448	329	156	639
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	61.0	61.0	61.0	61.0	39.0	39.0
Total Split (%)	61.0%	61.0%	61.0%	61.0%	39.0%	39.0%
Maximum Green (s)	56.5	56.5	56.5	56.5	34.5	34.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	56.5	56.5	56.5	56.5	34.5	34.5
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.34	0.34
v/c Ratio	0.45	0.20	0.95	0.18	0.32	0.98
Control Delay	23.6	11.1	54.3	10.9	30.2	58.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.6	11.1	54.3	10.9	30.2	58.9
LOS	C	B	D	B	C	E
Approach Delay	21.3			35.9	53.3	
Approach LOS	C			D	D	
Queue Length 50th (ft)	170	32	129	50	83	356
Queue Length 95th (ft)	215	m60	#222	68	138	#513
Internal Link Dist (ft)	2672			2836	1464	

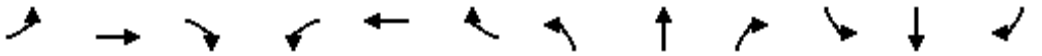
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	1789	878	470	1789	481	655
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.20	0.95	0.18	0.32	0.98

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 35.7		Intersection LOS: D	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.





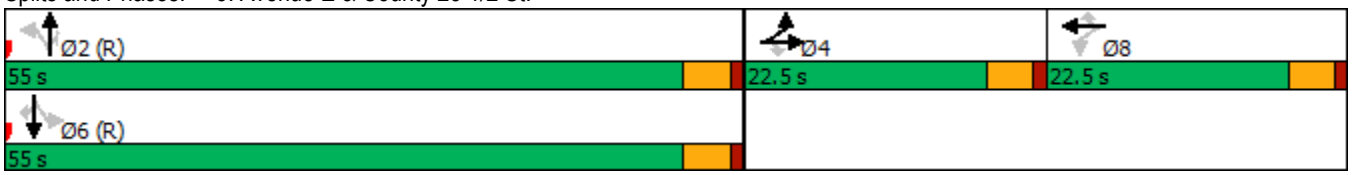
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	137	156	86	152	173	232	358	44	106	282	13
Future Volume (vph)	58	137	156	86	152	173	232	358	44	106	282	13
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.662			0.505			0.438		
Satd. Flow (perm)	1397	1863	1417	1233	1863	1583	743	3167	1583	816	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214			188			65			65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	149	214	93	165	188	318	490	48	115	386	18
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18	0.50	0.50	0.50	0.50	0.50	0.50
v/c Ratio	0.31	0.44	0.50	0.42	0.49	0.43	0.85	0.31	0.06	0.28	0.24	0.02
Control Delay	39.7	41.4	9.5	43.1	42.6	8.7	50.8	20.9	6.8	9.0	8.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.7	41.4	9.5	43.1	42.6	8.7	50.8	20.9	6.8	9.0	8.0	0.2
LOS	D	D	A	D	D	A	D	C	A	A	A	A
Approach Delay		25.6			28.4			31.2			7.9	
Approach LOS		C			C			C			A	
Queue Length 50th (ft)	44	86	0	53	96	0	188	113	3	16	27	0
Queue Length 95th (ft)	71	147	26	104	162	58	m227	121	m17	m18	m26	m0
Internal Link Dist (ft)		1439			269			1233			1011	

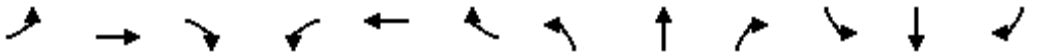
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	251	335	430	221	335	439	375	1599	831	412	1599	747
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.44	0.50	0.42	0.49	0.43	0.85	0.31	0.06	0.28	0.24	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 52.2%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	333	203	35	433	107	422	374	0	192	313	120
Future Volume (vph)	194	333	203	35	433	107	422	374	0	192	313	120
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1667	2710	3167	1417
Flt Permitted	0.313			0.414			0.472			0.416		
Satd. Flow (perm)	460	1667	1417	609	1667	1417	1347	3167	1667	1187	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			257			135						152
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	422	257	44	548	135	534	473	0	243	396	152
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	56.4	56.4	56.4	56.4	56.4	56.4	43.6	43.6	43.6	43.6	43.6	43.6
Total Split (%)	56.4%	56.4%	56.4%	56.4%	56.4%	56.4%	43.6%	43.6%	43.6%	43.6%	43.6%	43.6%
Maximum Green (s)	51.9	51.9	51.9	51.9	51.9	51.9	39.1	39.1	39.1	39.1	39.1	39.1
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	51.9	51.9	51.9	51.9	51.9	51.9	39.1	39.1		39.1	39.1	39.1
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52	0.39	0.39		0.39	0.39	0.39
v/c Ratio	1.03	0.49	0.30	0.14	0.63	0.17	1.02	0.38		0.52	0.32	0.24
Control Delay	94.7	17.9	2.6	14.0	21.4	2.7	75.0	22.9		28.4	22.1	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	94.7	17.9	2.6	14.0	21.4	2.7	75.0	22.9		28.4	22.1	4.3
LOS	F	B	A	B	C	A	E	C		C	C	A
Approach Delay		34.1			17.5			50.6			20.6	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	~169	165	0	14	239	0	~177	111		60	91	0
Queue Length 95th (ft)	#264	205	22	29	285	19	#232	132		84	110	26
Internal Link Dist (ft)		2529			250			362			273	

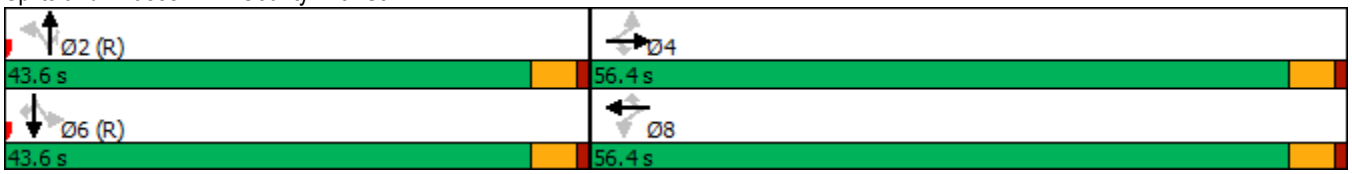
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	238	865	859	316	865	800	526	1238		464	1238	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.03	0.49	0.30	0.14	0.63	0.17	1.02	0.38		0.52	0.32	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 32.3		Intersection LOS: C	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	0	0	338	0	145	0	154	150	0
Future Vol, veh/h	0	0	2	0	0	338	0	145	0	154	150	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	428	0	184	0	195	190	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	672	764	95	669	764	92	190	0	0	184	0	0
Stage 1	580	580	-	184	184	-	-	-	-	-	-	-
Stage 2	92	184	-	485	580	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	342	332	943	343	332	947	1381	-	-	1388	-	-
Stage 1	467	498	-	800	746	-	-	-	-	-	-	-
Stage 2	905	746	-	532	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	167	286	943	305	286	947	1381	-	-	1388	-	-
Mov Cap-2 Maneuver	167	286	-	305	286	-	-	-	-	-	-	-
Stage 1	467	428	-	800	746	-	-	-	-	-	-	-
Stage 2	496	746	-	456	428	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	11.9	0	4.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	943	-	-	947	1388	-	-
HCM Lane V/C Ratio	-	-	-	0.003	-	-	0.452	0.14	-	-
HCM Control Delay (s)	0	-	-	8.8	0	0	11.9	8	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	2.4	0.5	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	2	6	50	0	105	2	49	119	11
Future Vol, veh/h	0	0	0	2	6	50	0	105	2	49	119	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	3	8	64	0	135	3	63	153	14

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	423	430	137	167	0	0	138	0	0
Stage 1	137	137	-	-	-	-	-	-	-
Stage 2	286	293	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	588	518	911	1411	-	-	1446	-	-
Stage 1	890	783	-	-	-	-	-	-	-
Stage 2	763	670	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	562	0	911	1411	-	-	1446	-	-
Mov Cap-2 Maneuver	562	0	-	-	-	-	-	-	-
Stage 1	890	0	-	-	-	-	-	-	-
Stage 2	729	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	2.1
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1411	-	-	562	-	911	1446	-	-
HCM Lane V/C Ratio	-	-	-	0.005	-	0.07	0.043	-	-
HCM Control Delay (s)	0	-	-	11.4	-	9.3	7.6	-	-
HCM Lane LOS	A	-	-	B	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	235	22	0	275	63	0
Future Vol, veh/h	235	22	0	275	63	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	24	0	299	68	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	554	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	493	784
Stage 1	-	-	0	-	788	-
Stage 2	-	-	0	-	752	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	493	784
Mov Cap-2 Maneuver	-	-	-	-	493	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	752	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	493	-	-	-
HCM Lane V/C Ratio	0.139	-	-	-
HCM Control Delay (s)	13.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	257	39	0	338	73	0
Future Vol, veh/h	257	39	0	338	73	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	279	42	0	367	79	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	646	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	436	760
Stage 1	-	-	0	-	768	-
Stage 2	-	-	0	-	701	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	436	760
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	436	-	-	-
HCM Lane V/C Ratio	0.182	-	-	-
HCM Control Delay (s)	15.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	115	584	165	0	0
Future Vol, veh/h	0	115	584	165	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	125	635	179	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	318	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	678	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	678	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	678	-
HCM Lane V/C Ratio	-	-	0.184	-
HCM Control Delay (s)	-	-	11.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	497	194	0	163
Future Vol, veh/h	0	0	497	194	0	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	540	211	0	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	540
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	542
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	542
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	542
HCM Lane V/C Ratio	-	-	-	0.327
HCM Control Delay (s)	-	-	-	14.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	1.4

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	211	76	0	0	0	85
Future Vol, veh/h	211	76	0	0	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	229	83	0	0	0	92

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	229
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	810
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	810
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	810	-	-	-
HCM Lane V/C Ratio	0.114	-	-	-
HCM Control Delay (s)	10	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑		↰		↱			
Traffic Vol, veh/h	0	62	173	0	64	0	158	0	0	0	0	0
Future Vol, veh/h	0	62	173	0	64	0	158	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	67	188	0	70	0	172	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	137	-	67
Stage 1	-	-	-	-	-	-	67	-	-
Stage 2	-	-	-	-	-	-	70	-	-
Critical Hdwy	-	-	-	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	0	856	0	997
Stage 1	0	-	-	0	-	0	956	0	-
Stage 2	0	-	-	0	-	0	953	0	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	-	-	-	856	0	997
Mov Cap-2 Maneuver	-	-	-	-	-	-	856	0	-
Stage 1	-	-	-	-	-	-	956	0	-
Stage 2	-	-	-	-	-	-	953	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	856	-	-	-	-
HCM Lane V/C Ratio	0.201	-	-	-	-
HCM Control Delay (s)	10.3	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	190	390	54	190	355
Future Vol, veh/h	0	190	390	54	190	355
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	207	424	59	207	386

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1031	212	0	0	483	0
Stage 1	424	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	229	793	-	-	1076	-
Stage 1	628	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	793	-	-	1076	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	3.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	793	1076	-
HCM Lane V/C Ratio	-	-	-	0.26	0.192	-
HCM Control Delay (s)	-	-	0	11.1	9.1	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	1	0.7	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	27	653	46	61	546
Future Vol, veh/h	0	27	653	46	61	546
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	29	710	50	66	593

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1139	355	0	0	760	0
Stage 1	710	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	195	641	-	-	848	-
Stage 1	448	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	180	641	-	-	848	-
Mov Cap-2 Maneuver	180	-	-	-	-	-
Stage 1	448	-	-	-	-	-
Stage 2	575	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	641	848	-
HCM Lane V/C Ratio	-	-	-	0.046	0.078	-
HCM Control Delay (s)	-	-	0	10.9	9.6	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	0.1	0.3	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	276	249	0	0	0	91
Future Vol, veh/h	276	249	0	0	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	300	271	0	0	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	300
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	740
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	740
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	740	-	-	-
HCM Lane V/C Ratio	0.134	-	-	-
HCM Control Delay (s)	10.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.5	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	29	444	12	0	0
Future Vol, veh/h	0	29	444	12	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	483	13	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	242	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	759	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	759	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	759	-
HCM Lane V/C Ratio	-	-	0.042	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	580	0	0	0
Future Vol, veh/h	0	114	580	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	630	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	315	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	681	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	681	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	681	-
HCM Lane V/C Ratio	-	-	0.182	-
HCM Control Delay (s)	-	-	11.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.7	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	329	23	0	18
Future Vol, veh/h	0	0	329	23	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	358	25	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	358
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	686
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	686
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	686
HCM Lane V/C Ratio	-	-	-	0.029
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	0	0	0	0	30
Future Vol, veh/h	9	0	0	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	0	0	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.006	-	-	0.03
HCM Control Delay (s)	7.2	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱	↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	0	13	23	0	0	0	76	0	0	0	0	86
Future Vol, veh/h	0	13	23	0	0	0	76	0	0	0	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	25	0	0	0	83	0	0	0	0	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	62	15	14	28	40	1
Stage 1	-	-	-	-	-	-	14	14	-	1	1	-
Stage 2	-	-	-	-	-	-	48	1	-	27	39	-
Critical Hdwy	-	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	933	879	1066	981	852	1084
Stage 1	0	-	-	0	-	-	1006	884	-	1022	895	-
Stage 2	0	-	-	0	-	-	965	895	-	990	862	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	853	879	1066	981	852	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	853	879	-	981	852	-
Stage 1	-	-	-	-	-	-	1006	884	-	1022	895	-
Stage 2	-	-	-	-	-	-	882	895	-	990	862	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.7	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBT	EBR	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	853	-	-	-	-	-	-	-	-	1084
HCM Lane V/C Ratio	0.097	-	-	-	-	-	-	-	-	0.086
HCM Control Delay (s)	9.7	0	0	-	-	-	-	0	0	8.6
HCM Lane LOS	A	A	A	-	-	-	-	A	A	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-	-	-	-	-	0.3

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	9	0	32	32	0
Future Vol, veh/h	0	9	0	32	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	0	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	35	35	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	35	0
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	978	-
Stage 1	-	-	0	-	-	-
Stage 2	-	-	0	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	978	-
Mov Cap-2 Maneuver	-	-	-	-	978	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	978	-	-	-	-
HCM Lane V/C Ratio	0.036	-	-	-	-
HCM Control Delay (s)	8.8	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	9	0	0	32	0
Future Vol, veh/h	0	9	0	0	32	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	0	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	0	35	0

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		0	0
Stage 1	-	-		0	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.42	6.22
Critical Hdwy Stg 1	-	-		5.42	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.518	3.318
Pot Cap-1 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	321	27	0	8
Future Vol, veh/h	0	0	321	27	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	349	29	0	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	349
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	694
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	694
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	694
HCM Lane V/C Ratio	-	-	-	0.013
HCM Control Delay (s)	-	-	-	10.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	175	43	80	347	140	105	42	29	36	47	45
Future Vol, veh/h	85	175	43	80	347	140	105	42	29	36	47	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	190	47	87	377	152	114	46	32	39	51	49
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	13	18.3	12.5	11.3
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	42	29	85	175	43	80	347	140	36	47
LT Vol	105	0	0	85	0	0	80	0	0	36	0
Through Vol	0	42	0	0	175	0	0	347	0	0	47
RT Vol	0	0	29	0	0	43	0	0	140	0	0
Lane Flow Rate	114	46	32	92	190	47	87	377	152	39	51
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.259	0.097	0.061	0.198	0.38	0.084	0.171	0.689	0.249	0.091	0.111
Departure Headway (Hd)	8.183	7.683	6.983	7.701	7.201	6.501	7.188	6.688	5.988	8.347	7.847
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	441	468	515	468	502	554	502	543	604	431	458
Service Time	5.9	5.4	4.7	5.401	4.901	4.201	4.888	4.388	3.688	6.065	5.565
HCM Lane V/C Ratio	0.259	0.098	0.062	0.197	0.378	0.085	0.173	0.694	0.252	0.09	0.111
HCM Control Delay	13.7	11.2	10.2	12.3	14.2	9.8	11.4	22.9	10.7	11.9	11.5
HCM Lane LOS	B	B	B	B	B	A	B	C	B	B	B
HCM 95th-tile Q	1	0.3	0.2	0.7	1.8	0.3	0.6	5.3	1	0.3	0.4

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	168	31	63	18	116	0	206	38	56	19	150	104
Future Vol, veh/h	168	31	63	18	116	0	206	38	56	19	150	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	183	34	68	20	126	0	224	41	61	21	163	113
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	13.2	12.4	14.4	12
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	100%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	206	38	56	168	31	63	18	116	0	19	150
LT Vol	206	0	0	168	0	0	18	0	0	19	0
Through Vol	0	38	0	0	31	0	0	116	0	0	150
RT Vol	0	0	56	0	0	63	0	0	0	0	0
Lane Flow Rate	224	41	61	183	34	68	20	126	0	21	163
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.462	0.079	0.105	0.383	0.066	0.121	0.042	0.256	0	0.043	0.319
Departure Headway (Hd)	7.432	6.926	6.218	7.553	7.051	6.347	7.812	7.312	7.312	7.55	7.051
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	486	519	578	478	509	566	459	492	0	475	512
Service Time	5.155	4.65	3.941	5.279	4.777	4.073	5.547	5.047	5.047	5.282	4.776
HCM Lane V/C Ratio	0.461	0.079	0.106	0.383	0.067	0.12	0.044	0.256	0	0.044	0.318
HCM Control Delay	16.4	10.2	9.7	14.9	10.3	9.9	10.9	12.6	10	10.6	13.1
HCM Lane LOS	C	B	A	B	B	A	B	B	N	B	B
HCM 95th-tile Q	2.4	0.3	0.4	1.8	0.2	0.4	0.1	1	0	0.1	1.4

PHASE IV, YEAR 2026

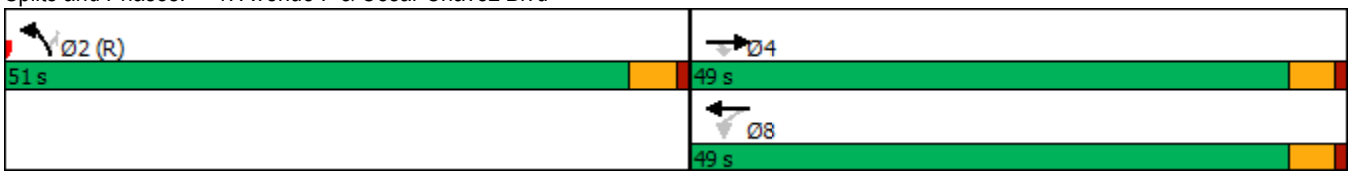
PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	526	550	113	1089	465	19
Future Volume (vph)	526	550	113	1089	465	19
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	1397	1417
Flt Permitted			0.372		0.950	
Satd. Flow (perm)	3167	1417	547	3167	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		598				21
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	572	598	123	1184	505	21
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	49.0	49.0	49.0	49.0	51.0	51.0
Total Split (%)	49.0%	49.0%	49.0%	49.0%	51.0%	51.0%
Maximum Green (s)	44.5	44.5	44.5	44.5	46.5	46.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	44.5	44.5	44.5	44.5	46.5	46.5
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.46	0.46
v/c Ratio	0.41	0.62	0.51	0.84	0.78	0.03
Control Delay	19.9	4.7	23.4	26.5	32.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	4.7	23.4	26.5	32.6	6.1
LOS	B	A	C	C	C	A
Approach Delay	12.1			26.2	31.5	
Approach LOS	B			C	C	
Queue Length 50th (ft)	126	0	54	355	261	0
Queue Length 95th (ft)	170	62	121	449	#411	13
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	1409	962	243	1409	649	670
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.62	0.51	0.84	0.78	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 73.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd

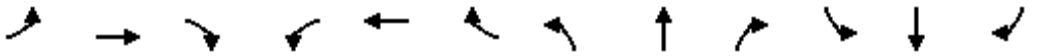


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	445	159	769	1018	112	500
Future Volume (vph)	445	159	769	1018	112	500
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.454		0.950	
Satd. Flow (perm)	3167	1417	1295	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		187				424
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	524	187	905	1198	132	588
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	76.0	76.0	76.0	76.0	24.0	24.0
Total Split (%)	76.0%	76.0%	76.0%	76.0%	24.0%	24.0%
Maximum Green (s)	71.5	71.5	71.5	71.5	19.5	19.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	71.5	71.5	71.5	71.5	19.5	19.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72	0.20	0.20
v/c Ratio	0.23	0.18	0.98	0.53	0.49	0.90
Control Delay	4.5	0.8	40.3	7.6	38.4	37.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	0.8	40.3	7.6	38.4	37.7
LOS	A	A	D	A	D	D
Approach Delay	3.5			21.7	37.8	
Approach LOS	A			C	D	
Queue Length 50th (ft)	41	0	242	158	77	209
Queue Length 95th (ft)	52	9	#384	183	133	#268
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2264	1066	925	2264	272	650
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.18	0.98	0.53	0.49	0.90

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 21.3		Intersection LOS: C	
Intersection Capacity Utilization 60.6%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	207	183	73	163	154	299	342	103	213	410	101
Future Volume (vph)	35	207	183	73	163	154	299	342	103	213	410	101
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.618			0.395			0.451		
Satd. Flow (perm)	1397	1863	1417	1151	1863	1583	581	3167	1583	840	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			251			167			112			138
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	225	251	79	177	167	410	468	112	232	562	138
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	50.5	50.5	50.5	50.5	50.5	50.5
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18	0.18	0.50	0.50	0.50	0.50	0.50	0.50
v/c Ratio	0.19	0.67	0.55	0.38	0.53	0.40	1.40	0.29	0.13	0.55	0.35	0.18
Control Delay	37.2	49.3	9.6	42.4	43.7	8.8	225.0	19.8	7.1	10.5	7.0	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.2	49.3	9.6	42.4	43.7	8.8	225.0	19.8	7.1	10.5	7.0	0.9
LOS	D	D	A	D	D	A	F	B	A	B	A	A
Approach Delay		29.2			29.6			103.4			6.9	
Approach LOS		C			C			F			A	
Queue Length 50th (ft)	26	135	0	45	103	0	~357	103	9	51	55	2
Queue Length 95th (ft)	48	#217	25	91	172	56	m#350	m100	m28	m63	m60	m4
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	251	335	460	207	335	421	293	1599	854	424	1599	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.67	0.55	0.38	0.53	0.40	1.40	0.29	0.13	0.55	0.35	0.18

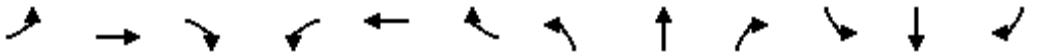
Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.40	
Intersection Signal Delay: 47.6	Intersection LOS: D
Intersection Capacity Utilization 63.7%	ICU Level of Service B
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.

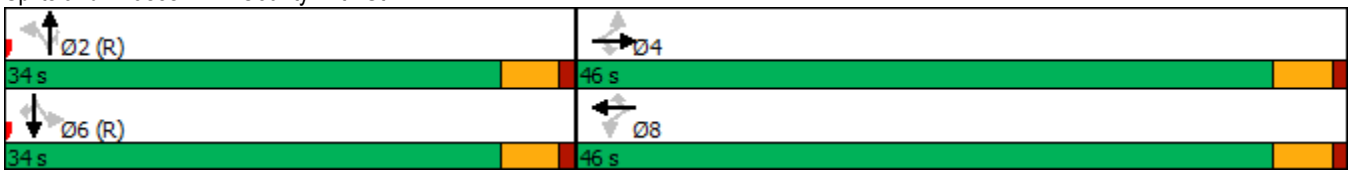


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	547	351	109	495	74	427	379	9	253	420	150
Future Volume (vph)	259	547	351	109	495	74	427	379	9	253	420	150
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.262			0.213			0.380			0.417		
Satd. Flow (perm)	385	1667	1417	313	1667	1417	1084	3167	1417	1190	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			94			20			190
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	328	692	444	138	627	94	541	480	11	320	532	190
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	46.0	46.0	46.0	46.0	46.0	46.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	57.5%	57.5%	57.5%	57.5%	57.5%	57.5%	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%
Maximum Green (s)	41.5	41.5	41.5	41.5	41.5	41.5	29.5	29.5	29.5	29.5	29.5	29.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	41.5	41.5	41.5	41.5	41.5	41.5	29.5	29.5	29.5	29.5	29.5	29.5
Actuated g/C Ratio	0.52	0.52	0.52	0.52	0.52	0.52	0.37	0.37	0.37	0.37	0.37	0.37
v/c Ratio	1.65	0.80	0.55	0.85	0.73	0.12	1.36	0.41	0.02	0.73	0.46	0.30
Control Delay	334.8	24.8	10.7	62.9	20.9	2.7	201.5	20.1	5.1	33.7	20.7	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	334.8	24.8	10.7	62.9	20.9	2.7	201.5	20.1	5.1	33.7	20.7	4.2
LOS	F	C	B	E	C	A	F	C	A	C	C	A
Approach Delay		90.0			25.7			115.0			21.7	
Approach LOS		F			C			F			C	
Queue Length 50th (ft)	~241	267	82	56	227	0	~185	92	0	69	103	0
Queue Length 95th (ft)	#241	328	124	#138	282	15	#234	113	6	98	126	26
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	199	864	813	162	864	780	399	1167	535	438	1167	642
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.65	0.80	0.55	0.85	0.73	0.12	1.36	0.41	0.02	0.73	0.46	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 1.65			
Intersection Signal Delay: 67.1		Intersection LOS: E	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	219	0	169	0	357	156	0
Future Vol, veh/h	0	0	0	0	0	219	0	169	0	357	156	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	238	0	214	0	388	197	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1080	1187	99	1089	1187	107	197	0	0	214	0	0
Stage 1	973	973	-	214	214	-	-	-	-	-	-	-
Stage 2	107	214	-	875	973	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	172	187	937	170	187	926	1373	-	-	1353	-	-
Stage 1	271	329	-	768	724	-	-	-	-	-	-	-
Stage 2	887	724	-	310	329	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	133	937	132	133	926	1373	-	-	1353	-	-
Mov Cap-2 Maneuver	99	133	-	132	133	-	-	-	-	-	-	-
Stage 1	271	235	-	768	724	-	-	-	-	-	-	-
Stage 2	659	724	-	221	235	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.2	0	5.8
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1373	-	-	-	-	-	926	1353	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.257	0.287	-	-
HCM Control Delay (s)	0	-	-	0	0	0	10.2	8.7	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	1	1.2	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	9	0	42	0	153	9	57	137	0
Future Vol, veh/h	0	0	0	9	0	42	0	153	9	57	137	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	54	0	196	12	73	176	0

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	524	524	202	176	0	0	208	0	0
Stage 1	202	202	-	-	-	-	-	-	-
Stage 2	322	322	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	514	458	839	1400	-	-	1363	-	-
Stage 1	832	734	-	-	-	-	-	-	-
Stage 2	735	651	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	486	0	839	1400	-	-	1363	-	-
Mov Cap-2 Maneuver	486	0	-	-	-	-	-	-	-
Stage 1	832	0	-	-	-	-	-	-	-
Stage 2	695	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	2.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1400	-	-	486	-	839	1363	-	-
HCM Lane V/C Ratio	-	-	-	0.024	-	0.064	0.054	-	-
HCM Control Delay (s)	0	-	-	12.6	0	9.6	7.8	-	-
HCM Lane LOS	A	-	-	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	386	72	0	285	40	0
Future Vol, veh/h	386	72	0	285	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	420	78	0	310	43	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	730	420
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	310	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	389	633
Stage 1	-	-	0	-	663	-
Stage 2	-	-	0	-	744	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	389	633
Mov Cap-2 Maneuver	-	-	-	-	389	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	389	-	-	-
HCM Lane V/C Ratio	0.112	-	-	-
HCM Control Delay (s)	15.4	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	458	88	0	325	65	0
Future Vol, veh/h	458	88	0	325	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	498	96	0	353	71	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	851	498
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	353	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	330	572
Stage 1	-	-	0	-	611	-
Stage 2	-	-	0	-	711	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	330	572
Mov Cap-2 Maneuver	-	-	-	-	330	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	330	-	-	-
HCM Lane V/C Ratio	0.214	-	-	-
HCM Control Delay (s)	18.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	119	662	164	0	0
Future Vol, veh/h	0	119	662	164	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	100	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	129	720	178	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	360	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	637	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	637	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	637	-
HCM Lane V/C Ratio	-	-	0.203	-
HCM Control Delay (s)	-	-	12.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	564	173	0	245
Future Vol, veh/h	0	0	564	173	0	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	613	188	0	266

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	613
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	492
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	492
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	492
HCM Lane V/C Ratio	-	-	-	0.541
HCM Control Delay (s)	-	-	-	20.6
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	3.2

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	445	78	0	0	0	101
Future Vol, veh/h	445	78	0	0	0	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	484	85	0	0	0	110

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	484
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	583
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	583
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	583	-	-	-
HCM Lane V/C Ratio	0.188	-	-	-
HCM Control Delay (s)	12.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑		↰		↱			
Traffic Vol, veh/h	0	58	281	0	40	0	177	0	0	0	0	0
Future Vol, veh/h	0	58	281	0	40	0	177	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	-	150	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	63	305	0	43	0	192	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	-	-	0	106	-	63
Stage 1	-	-	-	-	-	-	63	-	-
Stage 2	-	-	-	-	-	-	43	-	-
Critical Hdwy	-	-	-	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	0	892	0	1002
Stage 1	0	-	-	0	-	0	960	0	-
Stage 2	0	-	-	0	-	0	979	0	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	-	-	-	892	0	1002
Mov Cap-2 Maneuver	-	-	-	-	-	-	892	0	-
Stage 1	-	-	-	-	-	-	960	0	-
Stage 2	-	-	-	-	-	-	979	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	892	-	-	-	-
HCM Lane V/C Ratio	0.216	-	-	-	-
HCM Control Delay (s)	10.1	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	215	254	70	288	577
Future Vol, veh/h	0	215	254	70	288	577
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	250	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	234	276	76	313	627

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1216	138	0	0	352	0
Stage 1	276	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	173	885	-	-	1203	-
Stage 1	746	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	128	885	-	-	1203	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	252	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	885	1203	-
HCM Lane V/C Ratio	-	-	-	0.264	0.26	-
HCM Control Delay (s)	-	-	0	10.5	9	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	1.1	1	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	31	734	47	62	714
Future Vol, veh/h	0	31	734	47	62	714
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	34	798	51	67	776

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1320	399	0	0	849	0
Stage 1	798	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	148	601	-	-	785	-
Stage 1	404	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	135	601	-	-	785	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	512	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	601	785	-
HCM Lane V/C Ratio	-	-	-	0.056	0.086	-
HCM Control Delay (s)	-	-	0	11.3	10	-
HCM Lane LOS	-	-	A	B	B	-
HCM 95th %tile Q(veh)	-	-	-	0.2	0.3	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↱		↑		↱
Traffic Vol, veh/h	494	315	0	0	0	139
Future Vol, veh/h	494	315	0	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	537	342	0	0	0	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	537
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	544
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	544
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	544	-	-	-
HCM Lane V/C Ratio	0.278	-	-	-
HCM Control Delay (s)	14.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	20	324	29	0	0
Future Vol, veh/h	0	20	324	29	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	352	32	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	176	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	837	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	837	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	837	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Control Delay (s)	-	-	9.4	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	114	469	0	0	0
Future Vol, veh/h	0	114	469	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	510	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	255	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	744	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	744	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	744	-
HCM Lane V/C Ratio	-	-	0.167	-
HCM Control Delay (s)	-	-	10.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	399	23	0	24
Future Vol, veh/h	0	0	399	23	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	434	25	0	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	434
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	622
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	622
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	622
HCM Lane V/C Ratio	-	-	-	0.042
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	0	0	0	0	21
Future Vol, veh/h	24	0	0	0	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	0	0	0	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	1622	-	-	0	0	1084
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	0	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1622	-	-	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	SBLn1
Capacity (veh/h)	1622	-	-	1084
HCM Lane V/C Ratio	0.016	-	-	0.021
HCM Control Delay (s)	7.3	-	-	8.4
HCM Lane LOS	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱	↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	0	34	65	0	0	0	49	0	0	0	0	132
Future Vol, veh/h	0	34	65	0	0	0	49	0	0	0	0	132
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	150	-	-	150	150	-	150	150	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	37	71	0	0	0	53	0	0	0	0	143

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	110	38	37	74	109	1
Stage 1	-	-	-	-	-	-	37	37	-	1	1	-
Stage 2	-	-	-	-	-	-	73	1	-	73	108	-
Critical Hdwy	-	-	-	-	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	-	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	868	854	1035	916	781	1084
Stage 1	0	-	-	0	-	-	978	864	-	1022	895	-
Stage 2	0	-	-	0	-	-	937	895	-	937	806	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	753	854	1035	916	781	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	854	-	916	781	-
Stage 1	-	-	-	-	-	-	978	864	-	1022	895	-
Stage 2	-	-	-	-	-	-	813	895	-	937	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.1	8.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBT	EBR	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	753	-	-	-	-	-	-	-	-	1084
HCM Lane V/C Ratio	0.071	-	-	-	-	-	-	-	-	0.132
HCM Control Delay (s)	10.1	0	0	-	-	-	-	0	0	8.8
HCM Lane LOS	B	A	A	-	-	-	-	A	A	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	-	-	-	-	0.5

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	29	0	20	20	0
Future Vol, veh/h	29	29	0	20	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	0	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	32	0	22	22	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	54	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	954	1042
Stage 1	-	-	0	-	991	-
Stage 2	-	-	0	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	954	1042
Mov Cap-2 Maneuver	-	-	-	-	954	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBT
Capacity (veh/h)	954	-	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-	-
HCM Control Delay (s)	8.9	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	29	0	0	20	0
Future Vol, veh/h	0	29	0	0	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	0	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	32	0	0	22	0

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		0	0
Stage 1	-	-		0	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.42	6.22
Critical Hdwy Stg 1	-	-		5.42	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.518	3.318
Pot Cap-1 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	0	387	24	0	12
Future Vol, veh/h	0	0	387	24	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	421	26	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	632
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	632
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	632
HCM Lane V/C Ratio	-	-	-	0.021
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	65.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	470	89	51	423	93	77	42	91	98	54	64
Future Vol, veh/h	74	470	89	51	423	93	77	42	91	98	54	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	511	97	55	460	101	84	46	99	107	59	70
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	96.7	69.6	14.9	15.3
HCM LOS	F	F	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	42	91	74	470	89	51	423	93	98	54
LT Vol	77	0	0	74	0	0	51	0	0	98	0
Through Vol	0	42	0	0	470	0	0	423	0	0	54
RT Vol	0	0	91	0	0	89	0	0	93	0	0
Lane Flow Rate	84	46	99	80	511	97	55	460	101	107	59
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.233	0.121	0.243	0.195	1.17	0.203	0.135	1.057	0.213	0.296	0.155
Departure Headway (Hd)	10.205	9.705	9.005	8.736	8.244	7.555	9.012	8.512	7.812	10.169	9.669
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	354	372	402	409	439	473	400	428	462	356	373
Service Time	7.905	7.405	6.705	6.536	6.036	5.336	6.712	6.212	5.512	7.869	7.369
HCM Lane V/C Ratio	0.237	0.124	0.246	0.196	1.164	0.205	0.138	1.075	0.219	0.301	0.158
HCM Control Delay	16	13.7	14.6	13.7	125.8	12.3	13.1	88.9	12.6	17.1	14.1
HCM Lane LOS	C	B	B	B	F	B	B	F	B	C	B
HCM 95th-tile Q	0.9	0.4	0.9	0.7	19.1	0.8	0.5	14.5	0.8	1.2	0.5

Intersection	
Intersection Delay, s/veh	24.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	268	134	230	8	181	0	207	43	63	52	264	66
Future Vol, veh/h	268	134	230	8	181	0	207	43	63	52	264	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	291	146	250	9	197	0	225	47	68	57	287	72
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

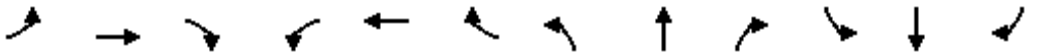
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	24.5	21.7	22.7	27.2
HCM LOS	C	C	C	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	100%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	207	43	63	268	134	230	8	181	0	52	264
LT Vol	207	0	0	268	0	0	8	0	0	52	0
Through Vol	0	43	0	0	134	0	0	181	0	0	264
RT Vol	0	0	63	0	0	230	0	0	0	0	0
Lane Flow Rate	225	47	68	291	146	250	9	197	0	57	287
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.619	0.122	0.165	0.732	0.346	0.544	0.024	0.519	0	0.152	0.731
Departure Headway (Hd)	9.898	9.384	8.664	9.05	8.542	7.831	9.993	9.493	9.493	9.684	9.171
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	365	381	414	399	421	460	358	380	0	370	393
Service Time	7.667	7.152	6.432	6.81	6.302	5.591	7.762	7.262	7.262	7.45	6.937
HCM Lane V/C Ratio	0.616	0.123	0.164	0.729	0.347	0.543	0.025	0.518	0	0.154	0.73
HCM Control Delay	27.6	13.5	13.1	33	15.8	19.6	13	22.1	12.3	14.2	33.3
HCM Lane LOS	D	B	B	D	C	C	B	C	N	B	D
HCM 95th-tile Q	4	0.4	0.6	5.7	1.5	3.2	0.1	2.9	0	0.5	5.7

PHASE IV, YEAR 2026

REMEDIAL ACTIONS

AM & PM

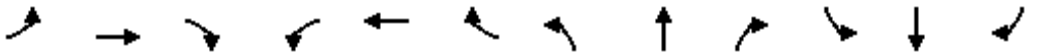


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	175	43	80	347	140	105	42	29	36	47	45
Future Volume (vph)	85	175	43	80	347	140	105	42	29	36	47	45
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	150		150	150		150	150		150	150		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	1667	1417	1397	1667	1417
Flt Permitted	0.280			0.590			0.950			0.727		
Satd. Flow (perm)	412	1667	1417	868	1667	1417	1397	1667	1417	1069	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			97			152			97			97
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		640			620			976			347	
Travel Time (s)		14.5			14.1			22.2			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	190	47	87	377	152	114	46	32	39	51	49
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Split	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		2	2			6	
Permitted Phases	4		4	8		8			2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.84	0.43	0.10	0.38	0.85	0.31	0.31	0.10	0.07	0.14	0.11	0.11
Control Delay	82.6	24.1	1.5	26.0	43.9	5.8	22.6	19.5	0.3	20.4	19.6	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.6	24.1	1.5	26.0	43.9	5.8	22.6	19.5	0.3	20.4	19.6	1.8
LOS	F	C	A	C	D	A	C	B	A	C	B	A
Approach Delay		37.2			32.0			18.1			13.6	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	36	65	0	29	147	0	38	14	0	12	16	0
Queue Length 95th (ft)	#116	120	6	68	#288	39	78	37	0	34	40	7
Internal Link Dist (ft)		560			540			896			267	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	109	444	449	231	444	489	372	444	449	285	444	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.43	0.10	0.38	0.85	0.31	0.31	0.10	0.07	0.14	0.11	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 67.5			
Actuated Cycle Length: 67.5			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 29.2		Intersection LOS: C	
Intersection Capacity Utilization 51.7%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Access O



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	470	89	51	423	93	77	42	91	98	54	64
Future Volume (vph)	74	470	89	51	423	93	77	42	91	98	54	64
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	150		150	150		150	150		150	150		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	1667	1417	1397	1667	1417
Flt Permitted	0.254			0.193			0.950			0.727		
Satd. Flow (perm)	374	1667	1417	284	1667	1417	1397	1667	1417	1069	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			97			101			99			87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		640			620			976			347	
Travel Time (s)		14.5			14.1			22.2			7.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	511	97	55	460	101	84	46	99	107	59	70
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Split	NA	Perm	Perm	NA	Perm
Protected Phases		4			8		2	2			6	
Permitted Phases	4		4	8		8			2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Maximum Green (s)	25.5	25.5	25.5	25.5	25.5	25.5	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	25.5	25.5	25.5	25.5	25.5	25.5	18.0	18.0	18.0	18.0	18.0	18.0
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.24	0.24	0.24	0.24	0.24	0.24
v/c Ratio	0.63	0.90	0.18	0.57	0.81	0.18	0.25	0.12	0.24	0.42	0.15	0.17
Control Delay	47.0	46.1	5.1	48.3	36.3	5.1	25.5	23.3	7.1	30.1	23.7	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	46.1	5.1	48.3	36.3	5.1	25.5	23.3	7.1	30.1	23.7	5.4
LOS	D	D	A	D	D	A	C	C	A	C	C	A
Approach Delay		40.4			32.2			17.1			21.1	
Approach LOS		D			C			B			C	
Queue Length 50th (ft)	31	223	0	21	192	0	32	17	0	42	22	0
Queue Length 95th (ft)	#99	#403	29	#77	#346	30	68	42	35	89	51	23
Internal Link Dist (ft)		560			540			896			267	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	150		150	150		150	150		150	150		150
Base Capacity (vph)	127	566	545	96	566	548	335	400	415	256	400	406
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.90	0.18	0.57	0.81	0.18	0.25	0.12	0.24	0.42	0.15	0.17

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 32.0		Intersection LOS: C	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 12: Access O

YEAR 2031

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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	948	489	22	451	724	87
Future Volume (vph)	948	489	22	451	724	87
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.070		0.950	
Satd. Flow (perm)	1667	1417	103	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		327				46
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1129	582	26	537	862	104
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	58.0	58.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%
Maximum Green (s)	57.5	57.5	57.5	57.5	53.5	53.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	53.5	53.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.45	0.45
v/c Ratio	1.41	0.69	0.53	0.67	1.39	0.16
Control Delay	222.1	14.6	70.1	35.5	212.8	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	222.1	14.6	70.1	35.5	212.8	12.1
LOS	F	B	E	D	F	B
Approach Delay	151.5			37.1	191.2	
Approach LOS	F			D	F	
Queue Length 50th (ft)	~1176	147	17	368	~888	25
Queue Length 95th (ft)	#1295	231	m#58	450	#1024	55
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	798	849	49	798	622	657
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.41	0.69	0.53	0.67	1.39	0.16

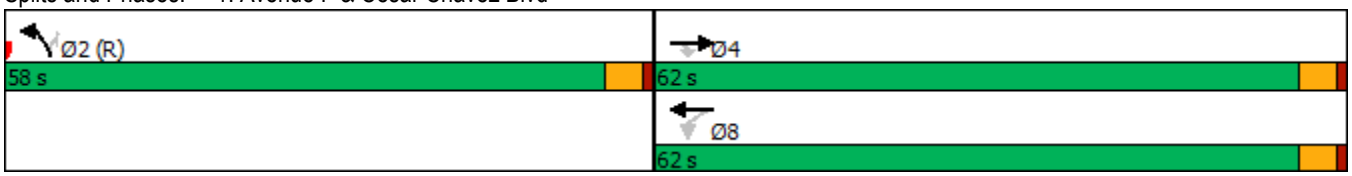
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay: 143.4		Intersection LOS: F	
Intersection Capacity Utilization 114.1%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	876	193	486	357	170	693
Future Volume (vph)	876	193	486	357	170	693
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.217		0.950	
Satd. Flow (perm)	3167	1417	619	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		227				114
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1031	227	572	420	200	815
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	43.0	43.0
Total Split (%)	64.2%	64.2%	64.2%	64.2%	35.8%	35.8%
Maximum Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Actuated g/C Ratio	0.60	0.60	0.60	0.60	0.32	0.32
v/c Ratio	0.54	0.24	1.53	0.22	0.45	1.39
Control Delay	2.5	0.1	276.9	11.2	40.0	218.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.5	0.1	276.9	11.2	40.0	218.1
LOS	A	A	F	B	D	F
Approach Delay	2.0			164.4	183.0	
Approach LOS	A			F	F	
Queue Length 50th (ft)	32	1	~320	73	137	~802
Queue Length 95th (ft)	m26	m0	#252	93	195	#947
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	1913	945	373	1913	448	585
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.24	1.53	0.22	0.45	1.39

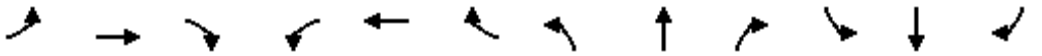
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.53			
Intersection Signal Delay: 107.6		Intersection LOS: F	
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



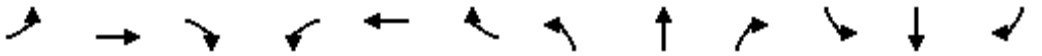
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	175	199	110	194	220	194	457	56	135	360	17
Future Volume (vph)	75	175	199	110	194	220	194	457	56	135	360	17
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.638			0.443			0.372		
Satd. Flow (perm)	1397	1863	1417	1188	1863	1583	651	3167	1583	693	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			273			239			61			55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	190	273	120	211	239	266	626	61	147	493	23
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	24.0	24.0	24.0	73.0	73.0	73.0	73.0	73.0	73.0
Total Split (%)	19.2%	19.2%	19.2%	20.0%	20.0%	20.0%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%
Maximum Green (s)	18.5	18.5	18.5	19.5	19.5	19.5	68.5	68.5	68.5	68.5	68.5	68.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.5	18.5	18.5	19.5	19.5	19.5	68.5	68.5	68.5	68.5	68.5	68.5
Actuated g/C Ratio	0.15	0.15	0.15	0.16	0.16	0.16	0.57	0.57	0.57	0.57	0.57	0.57
v/c Ratio	0.48	0.66	0.61	0.62	0.70	0.52	0.72	0.35	0.07	0.37	0.27	0.03
Control Delay	54.7	59.9	11.6	62.1	60.8	10.0	34.1	17.8	6.2	3.0	2.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	59.9	11.6	62.1	60.8	10.0	34.1	17.8	6.2	3.0	2.3	0.2
LOS	D	E	B	E	E	B	C	B	A	A	A	A
Approach Delay		35.7			39.8			21.6			2.4	
Approach LOS		D			D			C			A	
Queue Length 50th (ft)	74	140	0	88	156	0	137	136	2	20	32	0
Queue Length 95th (ft)	105	221	24	#162	#247	72	m157	m133	m20	m18	m23	m0
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	215	287	449	193	302	457	371	1807	929	395	1807	832
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.66	0.61	0.62	0.70	0.52	0.72	0.35	0.07	0.37	0.27	0.03

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 23.6 Intersection LOS: C
Intersection Capacity Utilization 55.2% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.

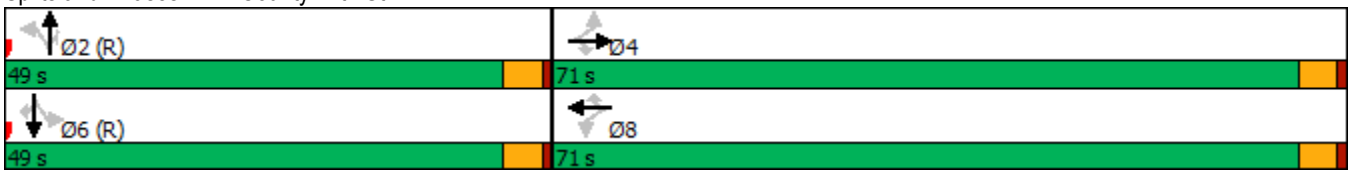


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	425	259	44	552	136	480	477	0	246	400	154
Future Volume (vph)	247	425	259	44	552	136	480	477	0	246	400	154
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1667	2710	3167	1417
Flt Permitted	0.222			0.336			0.376			0.312		
Satd. Flow (perm)	326	1667	1417	494	1667	1417	1073	3167	1667	890	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			127						195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	313	538	328	56	699	172	608	604	0	311	506	195
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	71.0	71.0	71.0	71.0	71.0	71.0	49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5	44.5	44.5	44.5	44.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	66.5	66.5	66.5	66.5	66.5	66.5	44.5	44.5		44.5	44.5	44.5
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.37	0.37		0.37	0.37	0.37
v/c Ratio	1.74	0.58	0.38	0.21	0.76	0.20	1.53	0.51		0.94	0.43	0.30
Control Delay	378.0	20.8	7.6	16.0	27.2	4.6	281.3	31.3		74.7	29.7	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	378.0	20.8	7.6	16.0	27.2	4.6	281.3	31.3		74.7	29.7	4.8
LOS	F	C	A	B	C	A	F	C		E	C	A
Approach Delay		112.0			22.3			156.7			38.7	
Approach LOS		F			C			F			D	
Queue Length 50th (ft)	~359	262	54	21	397	15	~339	189		119	153	0
Queue Length 95th (ft)	#319	302	83	40	440	36	#379	208		#171	172	30
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	180	923	866	273	923	841	397	1174		330	1174	648
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.74	0.58	0.38	0.21	0.76	0.20	1.53	0.51		0.94	0.43	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 1.74			
Intersection Signal Delay: 88.2		Intersection LOS: F	
Intersection Capacity Utilization 94.5%		ICU Level of Service F	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	2	0	0	431	0	185	0	197	191	0
Future Vol, veh/h	0	0	2	0	0	431	0	185	0	197	191	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	546	0	234	0	249	242	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	857	974	121	853	974	117	242	0	0	234	0	0
Stage 1	740	740	-	234	234	-	-	-	-	-	-	-
Stage 2	117	234	-	619	740	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	251	250	908	253	250	913	1322	-	-	1331	-	-
Stage 1	375	421	-	748	710	-	-	-	-	-	-	-
Stage 2	875	710	-	443	421	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	87	203	908	216	203	913	1322	-	-	1331	-	-
Mov Cap-2 Maneuver	87	203	-	216	203	-	-	-	-	-	-	-
Stage 1	375	342	-	748	710	-	-	-	-	-	-	-
Stage 2	352	710	-	359	342	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	14.6	0	4.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1322	-	-	908	-	-	913	1331	-	-
HCM Lane V/C Ratio	-	-	-	0.003	-	-	0.598	0.187	-	-
HCM Control Delay (s)	0	-	-	9	0	0	14.6	8.3	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	4.1	0.7	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	7	67	0	141	3	66	159	15
Future Vol, veh/h	0	0	0	3	7	67	0	141	3	66	159	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	9	86	0	181	4	85	204	19

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	567	576	183	223	0	0	185	0	0
Stage 1	183	183	-	-	-	-	-	-	-
Stage 2	384	393	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	485	428	859	1346	-	-	1390	-	-
Stage 1	848	748	-	-	-	-	-	-	-
Stage 2	688	606	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	455	0	859	1346	-	-	1390	-	-
Mov Cap-2 Maneuver	455	0	-	-	-	-	-	-	-
Stage 1	848	0	-	-	-	-	-	-	-
Stage 2	646	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	2.1
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	455	-	859	1390	-	-
HCM Lane V/C Ratio	-	-	-	0.008	-	0.1	0.061	-	-
HCM Control Delay (s)	0	-	-	13	-	9.7	7.8	-	-
HCM Lane LOS	A	-	-	B	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.3	0.2	-	-

YEAR 2031

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	671	702	145	1390	594	24
Future Volume (vph)	671	702	145	1390	594	24
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.228		0.950	
Satd. Flow (perm)	1667	1417	335	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		763				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	729	763	158	1511	646	26
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	75.0	75.0	75.0	75.0	45.0	45.0
Total Split (%)	62.5%	62.5%	62.5%	62.5%	37.5%	37.5%
Maximum Green (s)	70.5	70.5	70.5	70.5	40.5	40.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	70.5	70.5	70.5	70.5	40.5	40.5
Actuated g/C Ratio	0.59	0.59	0.59	0.59	0.34	0.34
v/c Ratio	0.74	0.67	0.81	1.54	1.37	0.05
Control Delay	24.1	4.0	37.9	269.4	213.2	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	4.0	37.9	269.4	213.2	13.5
LOS	C	A	D	F	F	B
Approach Delay	13.8			247.5	205.5	
Approach LOS	B			F	F	
Queue Length 50th (ft)	392	0	97	~1665	~661	3
Queue Length 95th (ft)	557	50	m#101	#1934	#890	24
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	979	1147	196	979	471	491
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.67	0.81	1.54	1.37	0.05

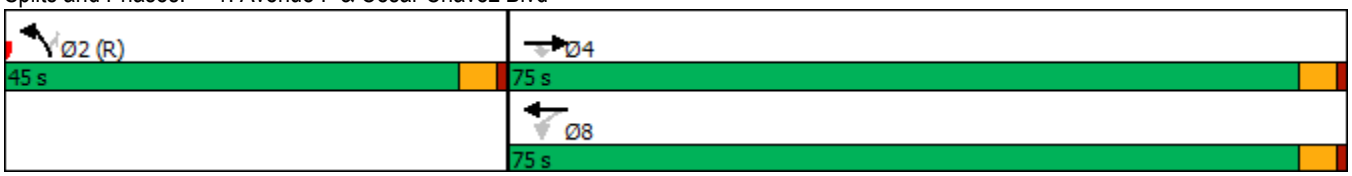
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.54			
Intersection Signal Delay: 149.2		Intersection LOS: F	
Intersection Capacity Utilization 130.9%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	568	202	982	1300	143	639
Future Volume (vph)	568	202	982	1300	143	639
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.377		0.950	
Satd. Flow (perm)	3167	1417	1076	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		238				314
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	668	238	1155	1529	168	752
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	88.0	88.0	88.0	88.0	32.0	32.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	26.7%	26.7%
Maximum Green (s)	83.5	83.5	83.5	83.5	27.5	27.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	83.5	83.5	83.5	83.5	27.5	27.5
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.23	0.23
v/c Ratio	0.30	0.22	1.54	0.69	0.53	1.25
Control Delay	1.8	0.4	272.8	12.9	46.2	149.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.8	0.4	272.8	12.9	46.2	149.7
LOS	A	A	F	B	D	F
Approach Delay	1.4			124.7	130.8	
Approach LOS	A			F	F	
Queue Length 50th (ft)	17	0	~648	329	117	~542
Queue Length 95th (ft)	23	m0	#720	360	184	#701
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2203	1058	748	2203	320	604
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.22	1.54	0.69	0.53	1.25

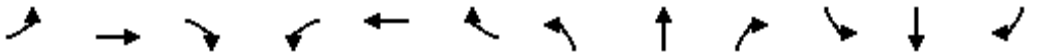
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.54			
Intersection Signal Delay: 101.2		Intersection LOS: F	
Intersection Capacity Utilization 74.3%		ICU Level of Service D	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	264	234	93	208	196	263	437	131	271	523	129
Future Volume (vph)	45	264	234	93	208	196	263	437	131	271	523	129
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.584			0.333			0.389		
Satd. Flow (perm)	1397	1863	1417	1088	1863	1583	490	3167	1583	725	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			270			213			142			177
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	287	321	101	226	213	360	599	142	295	716	177
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.59	0.59	0.59	0.59	0.59	0.59
v/c Ratio	0.30	1.03	0.73	0.62	0.81	0.51	1.25	0.32	0.14	0.69	0.38	0.20
Control Delay	49.8	111.6	20.1	65.4	71.9	10.6	149.7	13.9	3.4	14.7	7.0	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	111.6	20.1	65.4	71.9	10.6	149.7	13.9	3.4	14.7	7.0	1.5
LOS	D	F	C	E	E	B	F	B	A	B	A	A
Approach Delay		62.1			46.5			57.0			8.1	
Approach LOS		E			D			E			A	
Queue Length 50th (ft)	43	~237	35	74	172	0	~340	112	2	165	122	10
Queue Length 95th (ft)	70	#413	58	#147	#299	70	m#286	m100	m17	m89	m72	m1
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	209	279	442	163	279	418	287	1860	988	425	1860	905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	1.03	0.73	0.62	0.81	0.51	1.25	0.32	0.14	0.69	0.38	0.20

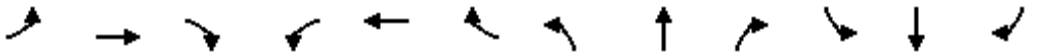
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.25			
Intersection Signal Delay: 39.7		Intersection LOS: D	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



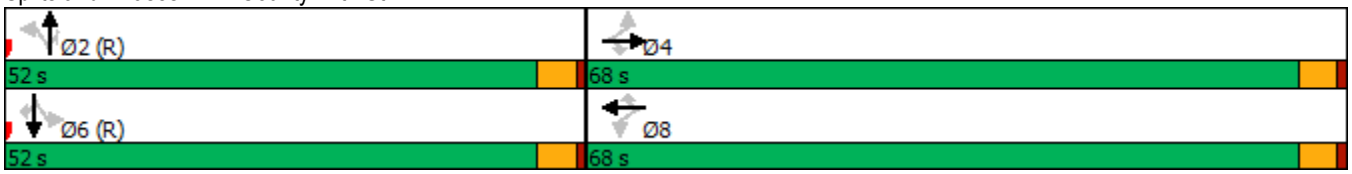
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	698	448	139	631	94	455	484	12	323	537	192
Future Volume (vph)	330	698	448	139	631	94	455	484	12	323	537	192
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.131			0.071			0.281			0.320		
Satd. Flow (perm)	193	1667	1417	104	1667	1417	802	3167	1417	913	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			112			85			15			150
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	884	567	176	799	119	576	613	15	409	680	243
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	68.0	68.0	68.0	68.0	68.0	68.0	52.0	52.0	52.0	52.0	52.0	52.0
Total Split (%)	56.7%	56.7%	56.7%	56.7%	56.7%	56.7%	43.3%	43.3%	43.3%	43.3%	43.3%	43.3%
Maximum Green (s)	63.5	63.5	63.5	63.5	63.5	63.5	47.5	47.5	47.5	47.5	47.5	47.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	63.5	63.5	63.5	63.5	63.5	63.5	47.5	47.5	47.5	47.5	47.5	47.5
Actuated g/C Ratio	0.53	0.53	0.53	0.53	0.53	0.53	0.40	0.40	0.40	0.40	0.40	0.40
v/c Ratio	4.10	1.00	0.71	3.20	0.91	0.15	1.82	0.49	0.03	1.13	0.54	0.37
Control Delay	1429.8	59.8	22.5	1051.2	41.2	5.5	405.7	28.8	9.8	123.3	29.9	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1429.8	59.8	22.5	1051.2	41.2	5.5	405.7	28.8	9.8	123.3	29.9	11.5
LOS	F	E	C	F	D	A	F	C	A	F	C	B
Approach Delay		354.9			199.8			208.9			55.2	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	~520	~664	259	~200	539	12	~346	184	0	~189	210	46
Queue Length 95th (ft)	#615	#756	307	#295	585	32	#388	202	12	#237	227	82
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	102	882	802	55	882	789	317	1253	569	361	1253	651
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	4.10	1.00	0.71	3.20	0.91	0.15	1.82	0.49	0.03	1.13	0.54	0.37

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Pretimed
Maximum v/c Ratio: 4.10
Intersection Signal Delay: 219.5 Intersection LOS: F
Intersection Capacity Utilization 108.3% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	280	0	216	0	456	200	0
Future Vol, veh/h	0	0	0	0	0	280	0	216	0	456	200	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	304	0	273	0	496	253	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1382	1518	127	1392	1518	137	253	0	0	273	0	0
Stage 1	1245	1245	-	273	273	-	-	-	-	-	-	-
Stage 2	137	273	-	1119	1245	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	103	118	900	101	118	886	1309	-	-	1287	-	-
Stage 1	184	244	-	710	683	-	-	-	-	-	-	-
Stage 2	852	683	-	220	244	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	47	73	900	71	73	886	1309	-	-	1287	-	-
Mov Cap-2 Maneuver	47	73	-	71	73	-	-	-	-	-	-	-
Stage 1	184	150	-	710	683	-	-	-	-	-	-	-
Stage 2	559	683	-	135	150	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	11.2	0	6.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	-	-	-	886	1287	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.344	0.385	-	-
HCM Control Delay (s)	0	-	-	0	0	0	11.2	9.5	-	-
HCM Lane LOS	A	-	-	A	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	1.5	1.8	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	12	0	56	0	205	12	77	184	0
Future Vol, veh/h	0	0	0	12	0	56	0	205	12	77	184	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	15	0	72	0	263	15	99	236	0

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	705	705	271	236	0	0	278	0	0
Stage 1	271	271	-	-	-	-	-	-	-
Stage 2	434	434	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	403	361	768	1331	-	-	1285	-	-
Stage 1	775	685	-	-	-	-	-	-	-
Stage 2	653	581	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	372	0	768	1331	-	-	1285	-	-
Mov Cap-2 Maneuver	372	0	-	-	-	-	-	-	-
Stage 1	775	0	-	-	-	-	-	-	-
Stage 2	603	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	2.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1331	-	-	372	-	768	1285	-	-
HCM Lane V/C Ratio	-	-	-	0.041	-	0.093	0.077	-	-
HCM Control Delay (s)	0	-	-	15.1	0	10.2	8	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0.3	0.2	-	-

YEAR 2036

AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1210	624	28	576	924	111
Future Volume (vph)	1210	624	28	576	924	111
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.070		0.950	
Satd. Flow (perm)	1667	1417	103	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		327				18
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1440	743	33	686	1100	132
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	58.0	58.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%
Maximum Green (s)	57.5	57.5	57.5	57.5	53.5	53.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	53.5	53.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.45	0.45
v/c Ratio	1.80	0.88	0.67	0.86	1.77	0.21
Control Delay	391.4	28.3	87.9	42.9	377.7	18.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	391.4	28.3	87.9	42.9	377.7	18.4
LOS	F	C	F	D	F	B
Approach Delay	267.8			45.0	339.2	
Approach LOS	F			D	F	
Queue Length 50th (ft)	~1677	314	20	509	~1271	52
Queue Length 95th (ft)	#1769	445	m#69	604	#1392	87
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	798	849	49	798	622	641
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.80	0.88	0.67	0.86	1.77	0.21

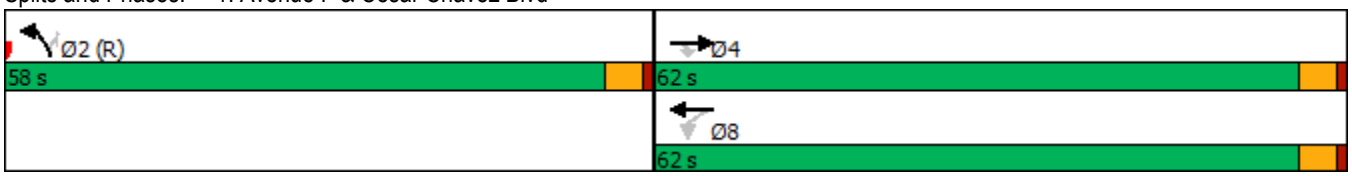
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.80			
Intersection Signal Delay: 250.3		Intersection LOS: F	
Intersection Capacity Utilization 143.5%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1118	247	621	455	217	885
Future Volume (vph)	1118	247	621	455	217	885
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.118		0.950	
Satd. Flow (perm)	3167	1417	337	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		291				45
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1315	291	731	535	255	1041
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	71.0	71.0	71.0	71.0	49.0	49.0
Total Split (%)	59.2%	59.2%	59.2%	59.2%	40.8%	40.8%
Maximum Green (s)	66.5	66.5	66.5	66.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	66.5	66.5	66.5	66.5	44.5	44.5
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.37	0.37
v/c Ratio	0.75	0.32	3.93	0.30	0.49	1.69
Control Delay	3.8	0.1	1344.5	14.9	39.0	347.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	0.1	1344.5	14.9	39.0	347.1
LOS	A	A	F	B	D	F
Approach Delay	3.1			782.6	286.5	
Approach LOS	A			F	F	
Queue Length 50th (ft)	52	0	~461	111	165	~1167
Queue Length 95th (ft)	m32	m0	#544	137	236	#1323
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	1755	914	186	1755	518	615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.32	3.93	0.30	0.49	1.69

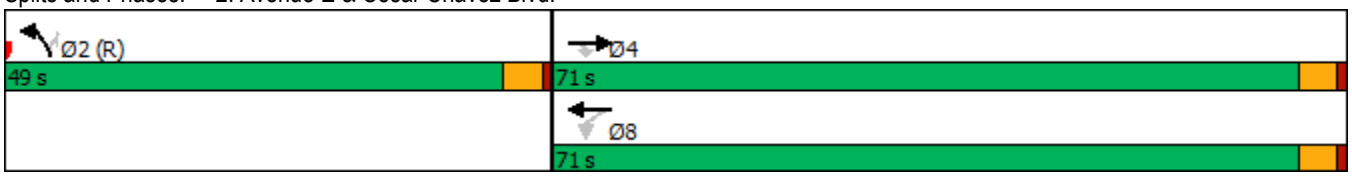
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 3.93			
Intersection Signal Delay: 328.0		Intersection LOS: F	
Intersection Capacity Utilization 96.8%		ICU Level of Service F	
Analysis Period (min) 15			

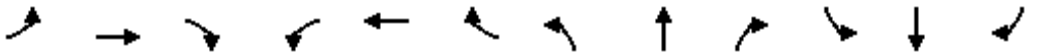
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	223	254	141	248	281	248	583	71	172	459	22
Future Volume (vph)	95	223	254	141	248	281	248	583	71	172	459	22
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.608			0.374			0.297		
Satd. Flow (perm)	1397	1863	1417	1133	1863	1583	550	3167	1583	553	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274			218			77			55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	242	348	153	270	305	340	799	77	187	629	30
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.59	0.59	0.59	0.59	0.59	0.59
v/c Ratio	0.62	0.87	0.78	0.91	0.97	0.72	1.05	0.43	0.08	0.58	0.34	0.04
Control Delay	61.9	79.0	25.1	98.9	97.4	25.4	58.7	15.7	4.0	4.4	1.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	79.0	25.1	98.9	97.4	25.4	58.7	15.7	4.0	4.4	1.4	0.1
LOS	E	E	C	F	F	C	E	B	A	A	A	A
Approach Delay		49.8			67.5			27.0			2.0	
Approach LOS		D			E			C			A	
Queue Length 50th (ft)	96	186	52	118	211	61	~283	175	2	20	24	0
Queue Length 95th (ft)	129	#329	78	#247	#381	167	m#228	m148	m15	m8	m10	m0
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	209	279	445	169	279	422	323	1860	961	324	1860	855
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.87	0.78	0.91	0.97	0.72	1.05	0.43	0.08	0.58	0.34	0.04

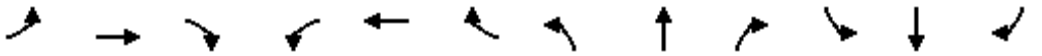
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.

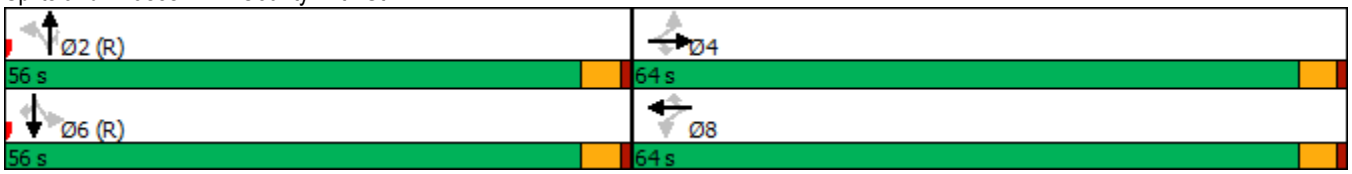


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	542	330	56	705	174	613	609	0	313	510	196
Future Volume (vph)	316	542	330	56	705	174	613	609	0	313	510	196
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1667	2710	3167	1417
Flt Permitted	0.067			0.182			0.316			0.252		
Satd. Flow (perm)	99	1667	1417	268	1667	1417	902	3167	1667	719	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			101						100
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	400	686	418	71	892	220	776	771	0	396	646	248
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	64.0	64.0	64.0	64.0	64.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0
Total Split (%)	53.3%	53.3%	53.3%	53.3%	53.3%	53.3%	46.7%	46.7%	46.7%	46.7%	46.7%	46.7%
Maximum Green (s)	59.5	59.5	59.5	59.5	59.5	59.5	51.5	51.5	51.5	51.5	51.5	51.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	59.5	59.5	59.5	59.5	59.5	59.5	51.5	51.5		51.5	51.5	51.5
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.50	0.50	0.43	0.43		0.43	0.43	0.43
v/c Ratio	8.16	0.83	0.54	0.54	1.08	0.29	2.01	0.57		1.29	0.48	0.37
Control Delay	3271.7	36.4	15.6	39.1	85.5	10.4	484.9	27.9		182.2	26.0	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	3271.7	36.4	15.6	39.1	85.5	10.4	484.9	27.9		182.2	26.0	15.2
LOS	F	D	B	D	F	B	F	C		F	C	B
Approach Delay		891.1			68.7			257.1			71.9	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~577	442	134	37	~772	49	~484	233		~201	185	73
Queue Length 95th (ft)	#672	490	176	77	#812	79	#512	247		#248	202	110
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250			250		250
Base Capacity (vph)	49	826	778	132	826	753	387	1359		308	1359	665
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	8.16	0.83	0.54	0.54	1.08	0.29	2.01	0.57		1.29	0.48	0.37

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 8.16			
Intersection Signal Delay: 346.1		Intersection LOS: F	
Intersection Capacity Utilization 116.6%		ICU Level of Service H	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	0	0	551	0	236	0	251	244	0
Future Vol, veh/h	0	0	3	0	0	551	0	236	0	251	244	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	0	697	0	299	0	318	309	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1095	1244	155	1090	1244	150	309	0	0	299	0	0
Stage 1	945	945	-	299	299	-	-	-	-	-	-	-
Stage 2	150	299	-	791	945	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	168	173	863	170	173	870	1248	-	-	1259	-	-
Stage 1	282	339	-	685	665	-	-	-	-	-	-	-
Stage 2	837	665	-	349	339	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	27	129	863	136	129	870	1248	-	-	1259	-	-
Mov Cap-2 Maneuver	27	129	-	136	129	-	-	-	-	-	-	-
Stage 1	282	253	-	685	665	-	-	-	-	-	-	-
Stage 2	166	665	-	260	253	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	23.5	0	4.5
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1248	-	-	863	-	-	870	1259	-	-
HCM Lane V/C Ratio	-	-	-	0.004	-	-	0.802	0.252	-	-
HCM Control Delay (s)	0	-	-	9.2	0	0	23.5	8.8	-	-
HCM Lane LOS	A	-	-	A	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-	8.7	1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	4	9	86	0	180	4	84	203	19
Future Vol, veh/h	0	0	0	4	9	86	0	180	4	84	203	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	5	12	110	0	231	5	108	260	24

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	722	734	234	284	0	0	236	0	0
Stage 1	234	234	-	-	-	-	-	-	-
Stage 2	488	500	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	394	347	805	1278	-	-	1331	-	-
Stage 1	805	711	-	-	-	-	-	-	-
Stage 2	617	543	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	362	0	805	1278	-	-	1331	-	-
Mov Cap-2 Maneuver	362	0	-	-	-	-	-	-	-
Stage 1	805	0	-	-	-	-	-	-	-
Stage 2	567	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	2.2
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1278	-	-	362	-	805	1331	-	-
HCM Lane V/C Ratio	-	-	-	0.014	-	0.137	0.081	-	-
HCM Control Delay (s)	0	-	-	15.1	-	10.2	7.9	-	-
HCM Lane LOS	A	-	-	C	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0.5	0.3	-	-

YEAR 2036

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	857	896	185	1774	758	30
Future Volume (vph)	857	896	185	1774	758	30
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	250		250	0
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.083		0.950	
Satd. Flow (perm)	1667	1417	122	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		804				20
Link Speed (mph)	30			30	30	
Link Distance (ft)	2895			2510	1988	
Travel Time (s)	65.8			57.0	45.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	932	974	201	1928	824	33
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	47.0	47.0
Total Split (%)	60.8%	60.8%	60.8%	60.8%	39.2%	39.2%
Maximum Green (s)	68.5	68.5	68.5	68.5	42.5	42.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	42.5	42.5
Actuated g/C Ratio	0.57	0.57	0.57	0.57	0.35	0.35
v/c Ratio	0.98	0.84	2.91	2.03	1.67	0.06
Control Delay	50.7	11.8	885.0	480.4	337.8	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.7	11.8	885.0	480.4	337.8	14.6
LOS	D	B	F	F	F	B
Approach Delay	30.8			518.6	325.3	
Approach LOS	C			F	F	
Queue Length 50th (ft)	668	66	~214	~2341	~929	7
Queue Length 95th (ft)	#984	345	m#216	m#2237	#1173	30
Internal Link Dist (ft)	2815			2430	1908	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	250		250	
Base Capacity (vph)	951	1153	69	951	494	514
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.84	2.91	2.03	1.67	0.06

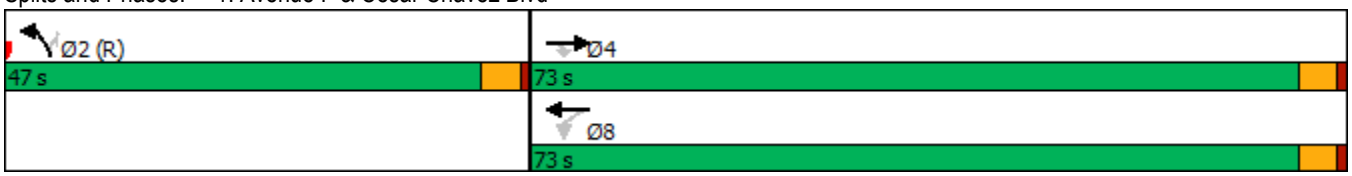
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.91			
Intersection Signal Delay: 294.7		Intersection LOS: F	
Intersection Capacity Utilization 165.0%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	726	258	1253	1659	182	815
Future Volume (vph)	726	258	1253	1659	182	815
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.280		0.950	
Satd. Flow (perm)	3167	1417	799	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		304				170
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	854	304	1474	1952	214	959
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	43.0	43.0
Total Split (%)	64.2%	64.2%	64.2%	64.2%	35.8%	35.8%
Maximum Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Actuated g/C Ratio	0.60	0.60	0.60	0.60	0.32	0.32
v/c Ratio	0.45	0.31	3.06	1.02	0.48	1.54
Control Delay	3.0	0.5	947.4	50.2	43.3	279.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	0.5	947.4	50.2	43.3	279.3
LOS	A	A	F	D	D	F
Approach Delay	2.3			436.2	236.2	
Approach LOS	A			F	F	
Queue Length 50th (ft)	31	1	~842	~844	155	~976
Queue Length 95th (ft)	m35	m1	#903	#883	223	#1127
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	1913	976	482	1913	448	623
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.31	3.06	1.02	0.48	1.54

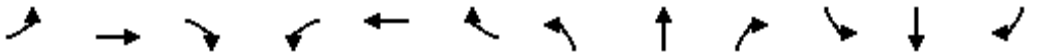
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 3.06			
Intersection Signal Delay: 308.2		Intersection LOS: F	
Intersection Capacity Utilization 91.7%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	337	298	119	266	250	335	557	167	346	668	165
Future Volume (vph)	57	337	298	119	266	250	335	557	167	346	668	165
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.543			0.248			0.309		
Satd. Flow (perm)	1397	1863	1417	1011	1863	1583	365	3167	1583	576	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			180			272			182			226
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	366	408	129	289	272	459	763	182	376	915	226
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	22.5	22.5	22.5	73.5	73.5	73.5	73.5	73.5	73.5
Total Split (%)	20.0%	20.0%	20.0%	18.8%	18.8%	18.8%	61.3%	61.3%	61.3%	61.3%	61.3%	61.3%
Maximum Green (s)	19.5	19.5	19.5	18.0	18.0	18.0	69.0	69.0	69.0	69.0	69.0	69.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	19.5	19.5	19.5	18.0	18.0	18.0	69.0	69.0	69.0	69.0	69.0	69.0
Actuated g/C Ratio	0.16	0.16	0.16	0.15	0.15	0.15	0.58	0.58	0.58	0.58	0.58	0.58
v/c Ratio	0.34	1.21	1.07	0.85	1.04	0.58	2.20	0.42	0.18	1.14	0.50	0.25
Control Delay	49.5	164.9	93.4	93.2	113.3	10.8	559.9	15.7	2.9	84.4	4.3	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	164.9	93.4	93.2	113.3	10.8	559.9	15.7	2.9	84.4	4.3	0.9
LOS	D	F	F	F	F	B	F	B	A	F	A	A
Approach Delay		120.1			69.1			192.0			23.7	
Approach LOS		F			E			F			C	
Queue Length 50th (ft)	54	~346	~226	99	~241	0	~433	163	5	~130	117	11
Queue Length 95th (ft)	82	#536	#263	#213	#416	79	m#338	m128	m18	m51	m33	m0
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	227	302	381	151	279	468	209	1821	987	331	1821	910
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	1.21	1.07	0.85	1.04	0.58	2.20	0.42	0.18	1.14	0.50	0.25

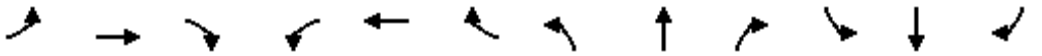
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 2.20			
Intersection Signal Delay: 102.0		Intersection LOS: F	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



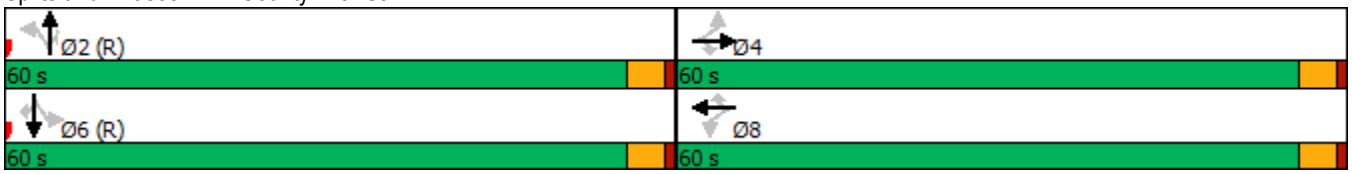
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	422	891	572	178	806	120	581	617	15	413	685	245
Future Volume (vph)	422	891	572	178	806	120	581	617	15	413	685	245
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.072			0.072			0.224			0.262		
Satd. Flow (perm)	106	1667	1417	106	1667	1417	639	3167	1417	747	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90			75			19			57
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	534	1128	724	225	1020	152	735	781	19	523	867	310
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	10.90	1.46	1.03	4.59	1.32	0.22	2.49	0.53	0.03	1.52	0.59	0.45
Control Delay	4499.4	244.3	70.6	1673.7	184.5	10.6	700.8	24.7	7.3	274.1	26.0	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4499.4	244.3	70.6	1673.7	184.5	10.6	700.8	24.7	7.3	274.1	26.0	20.1
LOS	F	F	E	F	F	B	F	C	A	F	C	C
Approach Delay		1143.9			405.5			348.2			101.2	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~797	~1197	~560	~290	~1023	33	~376	221	0	~291	255	129
Queue Length 95th (ft)	#882	#1200	#624	#387	#1044	60	#408	235	11	#335	266	170
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	49	770	703	49	770	695	295	1464	665	345	1464	686
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	10.90	1.46	1.03	4.59	1.32	0.22	2.49	0.53	0.03	1.52	0.59	0.45

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Pretimed
Maximum v/c Ratio: 10.90
Intersection Signal Delay: 570.3 Intersection LOS: F
Intersection Capacity Utilization 134.2% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	357	0	276	0	582	255	0
Future Vol, veh/h	0	0	0	0	0	357	0	276	0	582	255	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	250	250	-	200	250	-	250
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	92	79	92	92	92	79	79	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	388	0	349	0	633	323	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1764	1938	162	1777	1938	175	323	0	0	349	0	0
Stage 1	1589	1589	-	349	349	-	-	-	-	-	-	-
Stage 2	175	349	-	1428	1589	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	53	65	854	52	65	838	1234	-	-	1207	-	-
Stage 1	112	166	-	640	632	-	-	-	-	-	-	-
Stage 2	810	632	-	142	166	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	17	31	854	30	31	838	1234	-	-	1207	-	-
Mov Cap-2 Maneuver	17	31	-	30	31	-	-	-	-	-	-	-
Stage 1	112	79	-	640	632	-	-	-	-	-	-	-
Stage 2	435	632	-	68	79	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	12.9	0	7.4
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1234	-	-	-	-	-	838	1207	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	0.463	0.524	-	-
HCM Control Delay (s)	0	-	-	0	0	0	12.9	11.2	-	-
HCM Lane LOS	A	-	-	A	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	-	2.5	3.2	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	15	0	71	0	261	15	98	235	0
Future Vol, veh/h	0	0	0	15	0	71	0	261	15	98	235	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	150	250	-	-	250	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	19	0	91	0	335	19	126	301	0

Major/Minor	Minor1		Major1				Major2		
Conflicting Flow All	898	898	345	301	0	0	354	0	0
Stage 1	345	345	-	-	-	-	-	-	-
Stage 2	553	553	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	310	279	698	1260	-	-	1205	-	-
Stage 1	717	636	-	-	-	-	-	-	-
Stage 2	576	514	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	277	0	698	1260	-	-	1205	-	-
Mov Cap-2 Maneuver	277	0	-	-	-	-	-	-	-
Stage 1	717	0	-	-	-	-	-	-	-
Stage 2	516	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	2.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1260	-	-	277	-	698	1205	-	-
HCM Lane V/C Ratio	-	-	-	0.069	-	0.13	0.104	-	-
HCM Control Delay (s)	0	-	-	19	0	10.9	8.3	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0.4	0.3	-	-

YEAR 2031

AM

(with Avenue D connecting to Cesar Chavez;

or County 24th connecting to Avenue B)

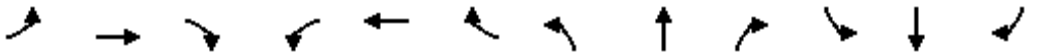
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	572	116	292	214	102	416
Future Volume (vph)	572	116	292	214	102	416
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.364		0.950	
Satd. Flow (perm)	3167	1417	1038	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		136				276
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	673	136	344	252	120	489
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	81.0	81.0	81.0	81.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%
Maximum Green (s)	76.5	76.5	76.5	76.5	34.5	34.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	76.5	76.5	76.5	76.5	34.5	34.5
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.29	0.29
v/c Ratio	0.33	0.14	0.52	0.12	0.30	0.75
Control Delay	2.0	0.0	15.3	8.8	38.5	31.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.0	0.0	15.3	8.8	38.5	31.4
LOS	A	A	B	A	D	C
Approach Delay	1.6			12.5	32.8	
Approach LOS	A			B	C	
Queue Length 50th (ft)	17	1	69	37	75	216
Queue Length 95th (ft)	m15	m0	100	51	131	272
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2018	952	661	2018	401	651
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.52	0.12	0.30	0.75

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



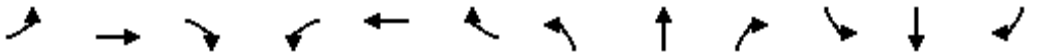
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	175	199	110	194	132	145	342	56	81	216	17
Future Volume (vph)	75	175	199	110	194	132	145	342	56	81	216	17
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.638			0.568			0.458		
Satd. Flow (perm)	1397	1863	1417	1188	1863	1583	835	3167	1583	853	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			273			143			61			55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	190	273	120	211	143	199	468	61	88	296	23
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	24.0	24.0	24.0	73.0	73.0	73.0	73.0	73.0	73.0
Total Split (%)	19.2%	19.2%	19.2%	20.0%	20.0%	20.0%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%
Maximum Green (s)	18.5	18.5	18.5	19.5	19.5	19.5	68.5	68.5	68.5	68.5	68.5	68.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (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
Minimum Gap (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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.5	18.5	18.5	19.5	19.5	19.5	68.5	68.5	68.5	68.5	68.5	68.5
Actuated g/C Ratio	0.15	0.15	0.15	0.16	0.16	0.16	0.57	0.57	0.57	0.57	0.57	0.57
v/c Ratio	0.48	0.66	0.61	0.62	0.70	0.38	0.42	0.26	0.07	0.18	0.16	0.03
Control Delay	54.7	59.9	11.6	62.1	60.8	10.2	13.5	10.0	1.8	6.0	5.2	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	59.9	11.6	62.1	60.8	10.2	13.5	10.0	1.8	6.0	5.2	0.9
LOS	D	E	B	E	E	B	B	A	A	A	A	A
Approach Delay		35.7			45.9			10.3			5.1	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	74	140	0	88	156	0	56	62	0	27	46	0
Queue Length 95th (ft)	105	221	24	#162	#247	57	m78	m75	m7	40	35	m2
Internal Link Dist (ft)		1439			269			1233			1011	
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	215	287	449	193	302	377	476	1807	929	486	1807	832
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.66	0.61	0.62	0.70	0.38	0.42	0.26	0.07	0.18	0.16	0.03

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.70
Intersection Signal Delay: 23.7 Intersection LOS: C
Intersection Capacity Utilization 47.3% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



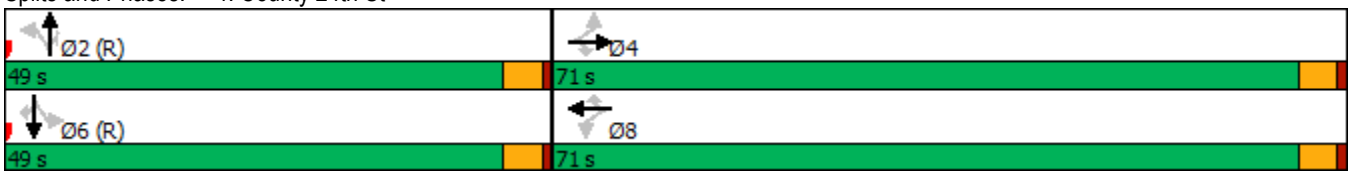
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	425	259	44	414	102	480	238	238	148	240	100
Future Volume (vph)	247	425	259	44	414	102	480	238	238	148	240	100
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.346			0.336			0.530			0.533		
Satd. Flow (perm)	509	1667	1417	494	1667	1417	1512	3167	1417	1521	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			328			129			301			127
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	313	538	328	56	524	129	608	301	301	187	304	127
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	71.0	71.0	71.0	71.0	71.0	71.0	49.0	49.0	49.0	49.0	49.0	49.0
Total Split (%)	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	40.8%	40.8%	40.8%	40.8%	40.8%	40.8%
Maximum Green (s)	66.5	66.5	66.5	66.5	66.5	66.5	44.5	44.5	44.5	44.5	44.5	44.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (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
Minimum Gap (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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	66.5	66.5	66.5	66.5	66.5	66.5	44.5	44.5	44.5	44.5	44.5	44.5
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55	0.55	0.37	0.37	0.37	0.37	0.37	0.37
v/c Ratio	1.11	0.58	0.35	0.21	0.57	0.15	1.09	0.26	0.42	0.33	0.26	0.21
Control Delay	114.4	20.8	2.5	16.0	20.4	2.6	100.0	27.0	4.8	29.2	27.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.4	20.8	2.5	16.0	20.4	2.6	100.0	27.0	4.8	29.2	27.0	5.2
LOS	F	C	A	B	C	A	F	C	A	C	C	A
Approach Delay		40.6			16.8			58.2			23.2	
Approach LOS		D			B			E			C	
Queue Length 50th (ft)	~277	262	0	21	252	0	~272	84	0	53	85	0
Queue Length 95th (ft)	#374	302	21	40	292	18	#312	103	30	72	104	27
Internal Link Dist (ft)		2529			250			362			273	
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	282	923	931	273	923	842	560	1174	714	564	1174	605
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.58	0.35	0.21	0.57	0.15	1.09	0.26	0.42	0.33	0.26	0.21

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 1.11
Intersection Signal Delay: 38.9 Intersection LOS: D
Intersection Capacity Utilization 81.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



YEAR 2031

PM

(with Avenue D connecting to Cesar Chavez;

or County 24th connecting to Avenue B)

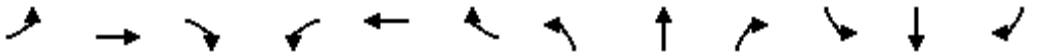
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	568	121	589	1300	86	383
Future Volume (vph)	568	121	589	1300	86	383
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.386		0.950	
Satd. Flow (perm)	3167	1417	1101	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		142				346
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
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%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	668	142	693	1529	101	451
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	95.0	95.0	95.0	95.0	25.0	25.0
Total Split (%)	79.2%	79.2%	79.2%	79.2%	20.8%	20.8%
Maximum Green (s)	90.5	90.5	90.5	90.5	20.5	20.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	90.5	90.5	90.5	90.5	20.5	20.5
Actuated g/C Ratio	0.75	0.75	0.75	0.75	0.17	0.17
v/c Ratio	0.28	0.13	0.83	0.64	0.42	0.81
Control Delay	0.9	0.2	21.1	8.5	43.5	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.9	0.2	21.1	8.5	43.5	28.5
LOS	A	A	C	A	D	C
Approach Delay	0.8			12.5	31.2	
Approach LOS	A			B	C	
Queue Length 50th (ft)	8	0	157	254	59	100
Queue Length 95th (ft)	13	m0	236	277	119	201
Internal Link Dist (ft)	2672			2836	1464	
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2388	1103	830	2388	238	557
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.13	0.83	0.64	0.42	0.81

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 56.1%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



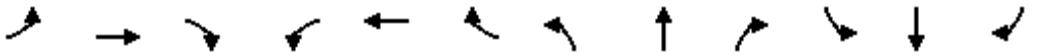
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	264	234	93	208	118	197	327	79	162	340	129
Future Volume (vph)	45	264	234	93	208	118	197	327	79	162	340	129
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.584			0.462			0.472		
Satd. Flow (perm)	1397	1863	1417	1088	1863	1583	679	3167	1583	879	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			321			128			86			177
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	287	321	101	226	128	270	448	86	176	466	177
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (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
Minimum Gap (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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.59	0.59	0.59	0.59	0.59	0.59
v/c Ratio	0.30	1.03	0.66	0.62	0.81	0.37	0.68	0.24	0.09	0.34	0.25	0.20
Control Delay	49.8	111.6	12.3	65.4	71.9	11.0	15.4	7.7	0.9	14.3	11.4	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	111.6	12.3	65.4	71.9	11.0	15.4	7.7	0.9	14.3	11.4	4.2
LOS	D	F	B	E	E	B	B	A	A	B	B	A
Approach Delay		58.3			53.3			9.6			10.5	
Approach LOS		E			D			A			B	
Queue Length 50th (ft)	43	~237	0	74	172	0	96	51	1	84	107	29
Queue Length 95th (ft)	70	#413	21	#147	#299	55	m73	m44	m1	144	96	30
Internal Link Dist (ft)		1439			269			1233			1011	
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	209	279	485	163	279	346	398	1860	965	516	1860	905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	1.03	0.66	0.62	0.81	0.37	0.68	0.24	0.09	0.34	0.25	0.20

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 29.0 Intersection LOS: C
Intersection Capacity Utilization 58.4% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



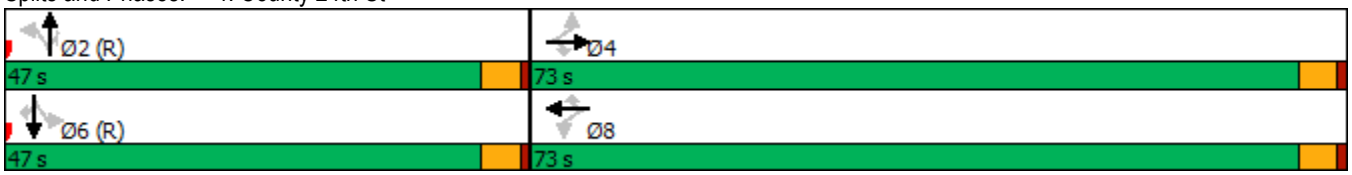
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	698	448	111	380	94	341	290	186	193	322	115
Future Volume (vph)	330	698	448	111	380	94	341	290	186	193	322	115
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.387			0.114			0.440			0.473		
Satd. Flow (perm)	569	1667	1417	168	1667	1417	1255	3167	1417	1349	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243			119			142			146
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	418	884	567	141	481	119	432	367	235	244	408	146
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	73.0	73.0	47.0	47.0	47.0	47.0	47.0	47.0
Total Split (%)	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	39.2%	39.2%	39.2%	39.2%	39.2%	39.2%
Maximum Green (s)	68.5	68.5	68.5	68.5	68.5	68.5	42.5	42.5	42.5	42.5	42.5	42.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (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
Minimum Gap (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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	68.5	68.5	42.5	42.5	42.5	42.5	42.5	42.5
Actuated g/C Ratio	0.57	0.57	0.57	0.57	0.57	0.57	0.35	0.35	0.35	0.35	0.35	0.35
v/c Ratio	1.29	0.93	0.62	1.48	0.51	0.14	0.97	0.33	0.40	0.51	0.36	0.24
Control Delay	177.9	41.1	12.5	291.0	17.9	2.4	75.5	29.3	13.5	35.2	29.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	177.9	41.1	12.5	291.0	17.9	2.4	75.5	29.3	13.5	35.2	29.9	5.3
LOS	F	D	B	F	B	A	E	C	B	D	C	A
Approach Delay		63.0			67.4			45.0			27.0	
Approach LOS		E			E			D			C	
Queue Length 50th (ft)	~412	595	154	~150	214	0	168	108	49	76	122	0
Queue Length 95th (ft)	#506	634	192	#166	250	17	#221	128	89	100	142	28
Internal Link Dist (ft)		2529			250			362			273	
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	324	951	913	95	951	859	444	1121	593	477	1121	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.29	0.93	0.62	1.48	0.51	0.14	0.97	0.33	0.40	0.51	0.36	0.24

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 53.1 Intersection LOS: D
Intersection Capacity Utilization 86.1% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



YEAR 2036

AM

(with Avenue D connecting to Cesar Chavez;

or County 24th connecting to Avenue B)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	838	148	310	341	130	531
Future Volume (vph)	838	148	310	341	130	531
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.241		0.950	
Satd. Flow (perm)	3167	1417	688	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		174				142
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	986	174	365	401	153	625
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	81.0	81.0	81.0	81.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%
Maximum Green (s)	76.5	76.5	76.5	76.5	34.5	34.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	76.5	76.5	76.5	76.5	34.5	34.5
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.29	0.29
v/c Ratio	0.49	0.18	0.83	0.20	0.38	1.12
Control Delay	2.5	0.0	35.9	9.3	41.6	109.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	2.5	0.0	35.9	9.3	41.6	109.6
LOS	A	A	D	A	D	F
Approach Delay	2.1			22.0	96.2	
Approach LOS	A			C	F	
Queue Length 50th (ft)	32	1	104	63	102	~492
Queue Length 95th (ft)	m20	m0	#196	80	m160	#647
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	2018	966	438	2018	401	556
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.18	0.83	0.20	0.38	1.12

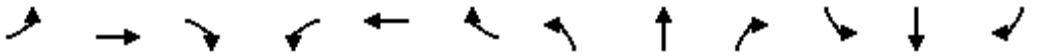
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 110			
Control Type: Pretimed			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 34.8		Intersection LOS: C	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



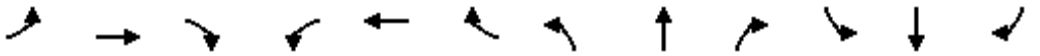
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	223	254	85	149	168	186	531	53	103	275	22
Future Volume (vph)	95	223	254	85	149	168	186	531	53	103	275	22
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.608			0.516			0.328		
Satd. Flow (perm)	1397	1863	1417	1133	1863	1583	759	3167	1583	611	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			348			183			58			55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	242	348	92	162	183	255	727	58	112	377	30
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	18.0	18.0	18.0	18.0	18.0	18.0	70.5	70.5	70.5	70.5	70.5	70.5
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15	0.59	0.59	0.59	0.59	0.59	0.59
v/c Ratio	0.62	0.87	0.69	0.54	0.58	0.47	0.57	0.39	0.06	0.31	0.20	0.04
Control Delay	61.9	79.0	12.5	60.3	56.7	10.7	15.4	10.3	1.5	1.7	1.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	79.0	12.5	60.3	56.7	10.7	15.4	10.3	1.5	1.7	1.2	0.1
LOS	E	E	B	E	E	B	B	B	A	A	A	A
Approach Delay		43.7			38.2			11.1			1.2	
Approach LOS		D			D			B			A	
Queue Length 50th (ft)	96	186	0	67	118	0	86	110	0	8	13	0
Queue Length 95th (ft)	129	#329	20	124	192	65	m89	m97	m4	m5	m5	m0
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	209	279	508	169	279	393	445	1860	953	358	1860	855
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.87	0.69	0.54	0.58	0.47	0.57	0.39	0.06	0.31	0.20	0.04

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 22.2		Intersection LOS: C	
Intersection Capacity Utilization 53.6%		ICU Level of Service A	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



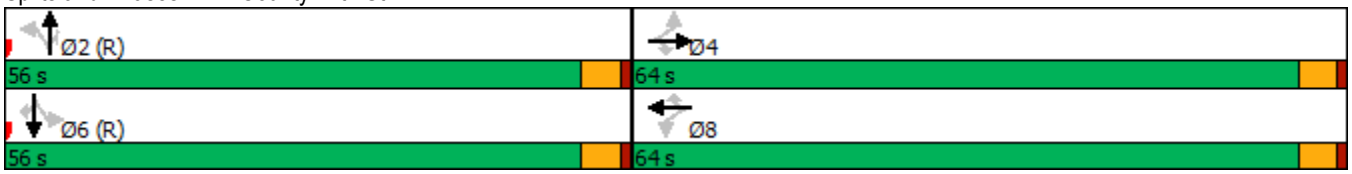
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	316	542	330	56	530	130	460	304	304	188	306	117
Future Volume (vph)	316	542	330	56	530	130	460	304	304	188	306	117
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.193			0.182			0.480			0.481		
Satd. Flow (perm)	284	1667	1417	268	1667	1417	1369	3167	1417	1372	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			339			132			178			148
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	400	686	418	71	671	165	582	385	385	238	387	148
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	64.0	64.0	64.0	64.0	64.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0
Total Split (%)	53.3%	53.3%	53.3%	53.3%	53.3%	53.3%	46.7%	46.7%	46.7%	46.7%	46.7%	46.7%
Maximum Green (s)	59.5	59.5	59.5	59.5	59.5	59.5	51.5	51.5	51.5	51.5	51.5	51.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	59.5	59.5	59.5	59.5	59.5	59.5	51.5	51.5	51.5	51.5	51.5	51.5
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.50	0.50	0.43	0.43	0.43	0.43	0.43	0.43
v/c Ratio	2.86	0.83	0.48	0.54	0.81	0.21	0.99	0.28	0.54	0.40	0.28	0.21
Control Delay	872.4	36.4	5.9	39.1	35.1	5.1	69.9	23.0	16.2	26.3	23.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	872.4	36.4	5.9	39.1	35.1	5.1	69.9	23.0	16.2	26.3	23.0	4.1
LOS	F	D	A	D	D	A	E	C	B	C	C	A
Approach Delay		250.3			30.0			41.3			20.4	
Approach LOS		F			C			D			C	
Queue Length 50th (ft)	~429	442	32	37	425	13	226	100	113	64	100	0
Queue Length 95th (ft)	#524	490	57	77	473	36	#280	117	158	85	118	25
Internal Link Dist (ft)		2529			250			362			273	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	140	826	873	132	826	769	587	1359	709	588	1359	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.86	0.83	0.48	0.54	0.81	0.21	0.99	0.28	0.54	0.40	0.28	0.21

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 2.86
Intersection Signal Delay: 104.7 Intersection LOS: F
Intersection Capacity Utilization 94.4% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



YEAR 2036

PM

(with Avenue D connecting to Cesar Chavez;

or County 24th connecting to Avenue B)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	544	155	626	1244	109	489
Future Volume (vph)	544	155	626	1244	109	489
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1900
Storage Length (ft)		580	560		0	0
Storage Lanes		1	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	0.97	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	2710	3167	1397	1583
Flt Permitted			0.373		0.950	
Satd. Flow (perm)	3167	1417	1064	3167	1397	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		182				275
Link Speed (mph)	30			30	30	
Link Distance (ft)	2752			2916	1544	
Travel Time (s)	62.5			66.3	35.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	640	182	736	1464	128	575
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	77.0	77.0	77.0	77.0	43.0	43.0
Total Split (%)	64.2%	64.2%	64.2%	64.2%	35.8%	35.8%
Maximum Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	72.5	72.5	72.5	72.5	38.5	38.5
Actuated g/C Ratio	0.60	0.60	0.60	0.60	0.32	0.32
v/c Ratio	0.33	0.20	1.15	0.77	0.29	0.83
Control Delay	1.1	0.2	108.2	20.9	38.8	40.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.1	0.2	108.2	20.9	38.8	40.0
LOS	A	A	F	C	D	D
Approach Delay	0.9			50.1	39.8	
Approach LOS	A			D	D	
Queue Length 50th (ft)	7	0	~344	413	86	327
Queue Length 95th (ft)	m10	m1	#425	453	144	392
Internal Link Dist (ft)	2672			2836	1464	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		580	560			
Base Capacity (vph)	1913	928	642	1913	448	694
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.20	1.15	0.77	0.29	0.83

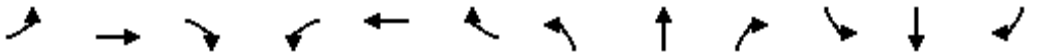
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 37.3		Intersection LOS: D	
Intersection Capacity Utilization 58.3%		ICU Level of Service B	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue E & Cesar Chavez Blvd.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	337	298	72	159	150	251	417	125	207	401	165
Future Volume (vph)	57	337	298	72	159	150	251	417	125	207	401	165
Ideal Flow (vphpl)	1500	1900	1700	1900	1900	1900	1500	1700	1900	1900	1700	1700
Storage Length (ft)	200		200	200		200	250		250	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1863	1417	1770	1863	1583	1397	3167	1583	1770	3167	1417
Flt Permitted	0.950			0.543			0.413			0.401		
Satd. Flow (perm)	1397	1863	1417	1011	1863	1583	607	3167	1583	747	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			359			163			136			226
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1519			349			1313			1091	
Travel Time (s)		34.5			7.9			29.8			24.8	
Peak Hour Factor	0.73	0.92	0.73	0.92	0.92	0.92	0.73	0.73	0.92	0.92	0.73	0.73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	366	408	78	173	163	344	571	136	225	549	226
Turn Type	Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	22.5	22.5	22.5	73.5	73.5	73.5	73.5	73.5	73.5
Total Split (%)	20.0%	20.0%	20.0%	18.8%	18.8%	18.8%	61.3%	61.3%	61.3%	61.3%	61.3%	61.3%
Maximum Green (s)	19.5	19.5	19.5	18.0	18.0	18.0	69.0	69.0	69.0	69.0	69.0	69.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	19.5	19.5	19.5	18.0	18.0	18.0	69.0	69.0	69.0	69.0	69.0	69.0
Actuated g/C Ratio	0.16	0.16	0.16	0.15	0.15	0.15	0.58	0.58	0.58	0.58	0.58	0.58
v/c Ratio	0.34	1.21	0.77	0.52	0.62	0.43	0.99	0.31	0.14	0.52	0.30	0.25
Control Delay	49.5	164.9	18.6	60.3	58.4	10.7	33.2	8.9	0.7	5.6	3.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	164.9	18.6	60.3	58.4	10.7	33.2	8.9	0.7	5.6	3.1	0.9
LOS	D	F	B	E	E	B	C	A	A	A	A	A
Approach Delay		84.3			40.0			15.8			3.2	
Approach LOS		F			D			B			A	
Queue Length 50th (ft)	54	~346	33	56	127	0	215	66	0	57	51	11
Queue Length 95th (ft)	82	#536	50	110	204	61	m114	m51	m0	m20	m18	m0
Internal Link Dist (ft)		1439			269			1233			1011	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	200		200	200		200	250		250	250		250
Base Capacity (vph)	227	302	530	151	279	376	349	1821	968	429	1821	910
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	1.21	0.77	0.52	0.62	0.43	0.99	0.31	0.14	0.52	0.30	0.25

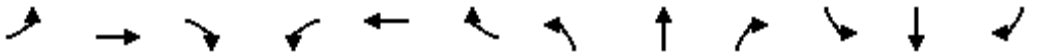
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 32.6		Intersection LOS: C	
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Avenue E & County 23 1/2 St.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	422	891	572	178	604	90	581	308	308	248	411	147
Future Volume (vph)	422	891	572	178	604	90	581	308	308	248	411	147
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	200		200	250		250	250		250
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	2710	3167	1417	2710	3167	1417
Flt Permitted	0.083			0.072			0.401			0.486		
Satd. Flow (perm)	122	1667	1417	106	1667	1417	1144	3167	1417	1387	3167	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			252			75			41			122
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2609			330			442			353	
Travel Time (s)		59.3			7.5			10.0			8.0	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	534	1128	724	225	765	114	735	390	390	314	520	186
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
v/c Ratio	9.54	1.46	0.92	4.59	0.99	0.16	1.39	0.27	0.58	0.49	0.36	0.26
Control Delay	3882.6	244.3	37.4	1673.7	63.6	8.0	215.4	20.4	25.0	25.7	21.6	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3882.6	244.3	37.4	1673.7	63.6	8.0	215.4	20.4	25.0	25.7	21.6	8.1
LOS	F	F	D	F	E	A	F	C	C	C	C	A
Approach Delay		995.8			386.0			116.2			20.4	
Approach LOS		F			F			F			C	
Queue Length 50th (ft)	~785	~1197	371	~290	575	16	~390	95	193	85	133	27
Queue Length 95th (ft)	#870	#1200	427	#387	#670	40	#422	111	240	107	149	54
Internal Link Dist (ft)		2529			250			362			273	

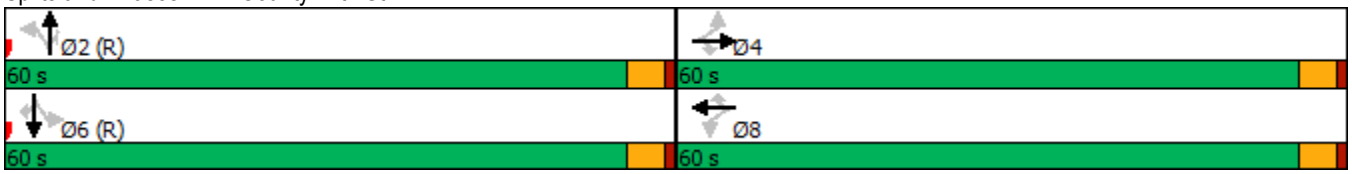
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	200		200	250		250	250		250
Base Capacity (vph)	56	770	790	49	770	695	529	1464	677	641	1464	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	9.54	1.46	0.92	4.59	0.99	0.16	1.39	0.27	0.58	0.49	0.36	0.26

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 9.54	
Intersection Signal Delay: 497.8	Intersection LOS: F
Intersection Capacity Utilization 113.8%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: County 24th St



Traffic Impact Study

San Luis Elementary School
Southwest Corner of Avenue F & County 23 ½ Street
San Luis, Arizona

Prepared for:

Somerton School District #11
343 N. Carlisle Avenue
Somerton, AZ 85350

Prepared by:

Nicklaus Engineering, Inc.
1851 W. 24th Street
Yuma, Arizona 85364

NEI Project No. 021-0247
November 2021

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1 Introduction and Summary

A. Purpose of report and study objectives

Nicklaus Engineering Inc. (NEI) has been tasked by Somerton School District #11 with conducting a traffic impact study to analyze potential traffic impacts associated with the development of a new San Luis Elementary School. The purpose of this study is to evaluate existing and projected vehicular traffic within the study area and identify a remedial strategy for traffic mitigation, if applicable.

The traffic study was completed in accordance with the criteria established by the Arizona Department of Transportation (ADOT) guidelines and is consistent with standard traffic engineering techniques. The study objectives for this report are:

1. Determine existing traffic volumes inside the study area.
2. Determine traffic projections associated with the proposed San Luis Elementary School.
3. Evaluate AM/PM peak hour level of service for build out total traffic (2023) and future total traffic (2028) for the intersections of concern inside the study area.
4. Determine the impact of proposed San Luis Elementary School on study intersections.
5. Document findings and recommendations for the study.

B. Executive summary

The proposed San Luis Elementary School is to be located at the southwest corner of the intersection of Avenue F / County 23 ½ Street in San Luis, Arizona. The school will have a total area of 65,000 square feet and serve approximately 500 students. It will be developed in two phases. Phase I will be a 250-student building with an expected opening year of 2022. Phase two will consist of a building expansion expected to open in 2023 that will increase the student population to 500.

The proposed elementary school will generate 325 AM trips and 170 PM trips when fully occupied that will access the site via two driveways along County 23 ½ Street.

The generated traffic from San Luis Elementary School when fully occupied is likely to have significant impact on the intersection of Avenue F and County 23 ½ Street. Results show that the level of service, capacity utilization, and delay in this intersection will not be acceptable in the buildout year of 2023 and in 2028. A traffic signal warrant study was conducted, and it justifies the installation of a traffic signal for the intersection of Avenue F and County 23 ½ Street. In addition, the simulation analysis determined that a traffic signal and widening of the intersection will cause the performance of the intersection to improve to Level of Service B. The intersection of Avenue F and County 24th Street will operate at acceptable levels in 2023 and 2028.

The other intersection studied, Avenue F and Cesar Chavez Boulevard, is currently operating at Level of Service C. However, in 2028 it will fall to Level of Service F and thus, require improvements. The addition of dual left turn lanes in the northbound direction as well as dual through lanes in the eastbound and westbound direction will help keep the intersection operating at an acceptable level.

2 Proposed Development

A. Site location

Avenue F provides access from Cesar Chavez Boulevard to various subdivisions in the eastern part of San Luis, Arizona. The proposed San Luis Elementary School is planned to serve this residential area. The school will be located at the southwest corner of the intersection of County 23 ½ Street and Avenue F. The area consists of a vacant lot to the north and residential subdivisions to the east, south, and west. A vicinity map (Figure 1) is included in Appendix A.

B. Land use and intensity

The site parcel has an area of 9.51 acres and two buildings (with a combined total floor area of 65,000 square feet) are expected to be built to serve approximately 500 students. The current City of San Luis zoning map designates the subject parcel as R-3 (high-density residential). According to Yuma County records, the vacant land to the north is owned by the State of Arizona. All other area surrounding the site is currently developed with single family residences. The current zoning of this residential district is R-2 (medium-high density residential).

C. Site plan

Figure 2 in Appendix A shows the proposed site plan for this development. Based on this preliminary site plan, which will need to go thru the plan review process in the City of San Luis, the school will contain the following access points:

1. Access A (West Access) fronts County 23 ½ Street, approximately 620 feet west of the intersection of Avenue F / County 23 ½ Street. Access A has the following proposed geometry:
   a. Northbound – Left/Right Turn Driveway
   b. Eastbound –Through/Right Turn Lane
   c. Westbound – Left/Through Lane

2. Access B (East Access) fronts County 23 1/2 Street, approximately 100 feet west of the intersection of Avenue F and County 23 ½ Street. Access B has the following proposed geometry:
   a. Northbound – Right Turn Driveway
   b. Eastbound –Through/Right Turn Lane
   c. Westbound – Through Lane

Avenue F is classified as an arterial road. According to City of San Luis Construction Standards, all driveways need to be along the lower classification street. Also, Access B should be relocated to meet driveway spacing requirements from major intersections. City of San Luis Construction Standard 3-125 specifies that a driveway shall be located at least 300 feet from the face of curb of a minor arterial road.

D. Development phasing and timing

The elementary school is planned to be built in two phases. Phase I includes a school building for 250 students and will open in 2022. Phase II opening year is 2023 and will increase the number of students to 500. Since the opening years will occur soon after the preparation of this report, the study horizon for this traffic study is the buildout year of 2023 and 5 years after opening, 2028, following Arizona Department of Transportation' s *Traffic Guidelines and Processes (240 Traffic Impact Analysis and Statement).*

3 Study Area Conditions

A. Study area

The new school is proposed to be built in a 9.51-acre vacant lot at the southwest corner of the intersection of Avenue F and County 23 ½. According to *ADOT Traffic Guidelines and Processes (240 Traffic Impact Analysis and Statement)*, this development can be classified as a small development with less than 500 peak hour trips and the minimum area of study shall include adjacent signalized intersections and/or major unsignalized street intersections with a minimum of ½ mile of the development. For this study, three intersections meet this criterion: (1) Avenue F and Cesar Chavez Boulevard (SR 195), (2) Avenue F and County 23rd ½ Street, and (3) Avenue F and County 24th Street.

B. Land use

The site parcel has an area of 9.51 acres and two buildings (with a combined total floor area of 65,000 square feet) are expected to be built to serve approximately 500 students. The most current City of San Luis zoning map designates the subject parcel as R-3 (high-density residential). According to Yuma County records, the vacant land to the north is owned by the State of Arizona. All other area surrounding the site is currently developed with single family residences. The current zoning of this residential district is R-2 (medium-high density residential).

C. Site accessibility

Upon buildout, access to the development will be through the three intersections analyzed in this study: (1) Avenue F and Cesar Chavez Boulevard (SR 195), (2) Avenue F and County 23rd ½ Street, and (3) Avenue F and County 24th Street. The school will have two access driveways along County 23 ½ Street.

Avenue F connects to the north to State Route 195, also known as Cesar Chavez Boulevard within the City of San Luis limits. County 23 ½ Street and County 24th Street run east west and provide access to the residential subdivisions surrounding this proposed development.

4 Analysis of Existing Conditions

A. Physical characteristics

Avenue F is a north/south arterial road that connects several existing residential subdivisions to State Route 195 (Cesar Chavez Boulevard). The roadway is built out with one through lane in each direction. This section has a posted speed limit of 35 miles per hour. Once Avenue F enters the residential area, the roadway widens but is not striped. The posted speed limit decreases to 25 miles per hour.

County 23 ½ Street is an east/west road that is currently classified as a local road and is currently built as a half-street. It delineates the north boundary of the existing residential area. It provides access to the various subdivisions and extends easterly to Avenue E.

County 24th Street is an east/west arterial road that provides connectivity between existing subdivisions. Eastbound, County 24th Street consists of dual through lanes for a quarter mile and then reduces to one lane in each direction. Westbound, County 24th Street consists of one lane in each direction. It has no posted speed limit.

The intersection of Cesar Chavez Boulevard and Avenue F is a signalized intersection and has the following geometry:

- Northbound – One right turn lane and one left turn lane
- Eastbound – One through lane and one right turn lane
- Westbound – One through lane and one left turn lane
- Southbound – None

The intersection of Avenue F and County 23 ½ Street is a two-way stop intersection has the following geometry:

- Northbound – One through lane and one right turn lane
- Southbound – One through/left/right lane
- Eastbound – One through/left/right lane
- Westbound – One through/left/right lane

The intersection of Avenue E and County 24th Street is an all-way stop intersection and has the following geometry:

- Northbound – One through lane, one right turn lane, and one left turn lane
- Southbound – One through lane, one right turn lane, and one left turn lane
- Eastbound – Through/left turn lane, and right turn lane
- Westbound – One through lane, one combined through lane/right-turn lane, and one left turn lane

There are no bicycle facilities in this area of the City of San Luis. According to the Yuma County Intergovernmental Public Transportation Authority service map, there is a bus route that serves this area. Silver Route 9 enters Avenue F. The last bust stop is at Los Olivos Drive, one block south of the location of the proposed school.

B. Traffic Volumes

Traffic counts were performed during the month of October at the studied intersections to get the existing volumes and turning movements. These are presented in Table 1. See also Appendix B. The City of San Luis experiences an increase in population and traffic during the fall and winter months because of the agricultural harvesting season and many visitors coming from colder climates. Therefore, the traffic counts along Cesar Chavez Boulevard were adjusted by a factor of 1.25 to account for this increased traffic during this part of the year. Traffic counts on all other streets were adjusted by a factor of 1.05.

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR
Avenue F and César Chavez Boulevard												
AM	0	0	0	444	0	53	13	208	1	1	548	300
PM	0	0	0	364	0	14	88	803	11	0	335	430

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR
Avenue F and County 23 ½ Street												
AM	65	239	45	0	270	0	2	0	100	75	3	2
PM	77	323	84	2	233	0	4	4	83	60	2	6

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR
Avenue F and County 24th Street												
AM	9	15	3	0	21	0	0	21	42	4	6	1
PM	18	15	7	0	14	0	0	19	25	3	5	1

TABLE 1: Peak hour traffic volumes

C. Level of Service

Using the existing network configuration and the existing traffic volumes presented in Table 2, Synchro 11 traffic software was used to model and determine the current level of service for the studied intersections. Results are shown in Table 2. The Synchro report is attached in Appendix C.

Intersection	Avenue F & Cesar Chavez Blvd (Signalized)		Avenue F and County 23 ½ St (Two-way stop)		Avenue F and County 24th St. (All-way stop)	
Time	AM	PM	AM	PM	AM	PM
Level of Service	C	C	D (Eastbound Approach)	D (Eastbound Approach)	A	A
Delay (secs)	27.6	25.8	26.7 (Eastbound Approach)	28.3 (Eastbound Approach)	7.4	7.4

TABLE 2: Existing intersection Level of Service

D. Safety

The City of San Luis provided the most recent crash data for the study area—for 2014 to 2021. This information has been included in Appendix D. Based on the low number of crashes or incidents that have occurred in Cesar Chavez Blvd. and Avenue F, it has been determined that no safety improvement measures are necessary.

E. Roadway Capacity

An analysis was performed to determine the current capacity of Cesar Chavez Boulevard and Avenue F. The official 2020 traffic counts were obtained from the Yuma Metropolitan Planning Organization website. The results are presented in the following table. Using a growth factor of 5%, the volumes were adjusted for 2021.

Roadway	2020 Peak Traffic Counts (winter)	2021 Adjustment	Roadway Capacity (2 lane w/ left turn lanes Level of Service D/E thresholds, HCM 6th Ed.)	Result
Cesar Chavez Blvd. (west of Ave F)	17,509	18,385	18,300	Operating at capacity
Cesar Chavez Blvd. (east of Ave F)	10,414	10,935	18,300	Operating at 60% of capacity
Avenue F (south of Cesar Chavez Blvd)	7,073	10,610	18,300	Operating at 58% of capacity

TABLE 3: Existing Roadway Capacity

This analysis shows that Cesar Chavez Boulevard is already at capacity and dual lanes in each direction are necessary. This would increase capacity to approximately 36,800 vehicles per day.

F. Data Sources

- City of San Luis Public Works Department
- City of San Luis Police Department
- City of San Luis 2040 General Plan
- Yuma Metropolitan Planning Organization (YMPO)

5 Projected Traffic

A. Site Traffic Forecasting

Trip Generation. Data published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual – 10th Edition*, was used to identify the number of daily and peak hour trips that are anticipated to be generated by the new elementary school. Tables 4 and 5 show the trip generation for this project.

ITE Land Use	Land Use Code	Size	Unit	Multiplier			Trips		
				Daily	AM	PM	Daily	AM	PM
Elementary School	520	250	Students	1.89	0.65	0.34	473	163	85
Distribution				50/50	54/46	45/55	IN	88	38
							OUT	75	47

TABLE 4: Phase I trip generation (2022)

ITE Land Use	Land Use Code	Size	Unit	Multiplier			Trips		
				Daily	AM	PM	Daily	AM	PM
Elementary School	520	500	Students	1.89	0.65	0.34	945	325	170
Distribution				50/50	54/46	45/55	IN	176	77
							OUT	150	94

TABLE 5: Total trip generation (buildout year, 2023)

Trip Distribution. The total traffic generated shown in Table 5 was distributed and assigned among the existing road network. Figure 3 shows the assumed trip distribution for the school.

B. Traffic Volumes (Each horizon year)

Total traffic volumes were projected for the buildout year of 2023 and for 2028, five years after the opening year. The yearly growth factor used was 5%. See Tables 6 and 7. These volumes are also presented in Figures 4 and 5 in Appendix A.

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR
						Avenue F and Cesar Chavez Blvd.						
AM	0	0	0	497	0	65	23	229	1	1	604	340
PM	0	0	0	406	0	20	101	885	12	0	369	478
						Avenue F and County 23 ½ Street						
AM	72	263	68	45	298	0	2	53	110	98	48	47
PM	85	356	101	25	257	0	4	27	92	75	30	35
						Avenue F and County 24th Street						
AM	13	24	7	0	32	0	0	23	51	8	7	1
PM	23	22	10	0	20	0	0	21	31	6	6	2

TABLE 6: Total traffic volumes at buildout (year 2023)

Time	SBL	SBT	SBR	NBL	NBT	NBR	WBL	WBT	WBR	EBL	EBT	EBR
						Avenue F and Cesar Chavez Blvd.						
AM	0	0	0	634	0	83	29	292	1	1	771	434
PM	0	0	0	518	0	26	129	1130	15	0	471	310
						Avenue F and County 23 ½ Street						
AM	92	336	87	57	380	0	3	68	140	125	61	60
PM	108	454	129	32	328	0	5	34	117	96	38	45
						Avenue F and County 24th Street						
AM	17	31	9	0	41	0	0	29	65	10	9	1
PM	30	29	13	0	26	0	0	27	40	8	8	3

TABLE 7: Projected total traffic volumes (year 2028)

6 Traffic and Improvement Analysis

A. Site access

The site will have two accesses along County 23 ½ Street. Because Avenue F is an arterial street, the eastern access will have to be spaced far enough from the Avenue F face of curb to meet City of San Luis driveway spacing requirements. An access along Avenue F frontage is not being proposed. Avenue F is an arterial street with high traffic and driveways should be located on the lower classification streets.

B. Level of service analysis

An analysis was performed using Synchro 11 software to determine intersection level of service for the opening year 2023. Table 8 presents the results of this analysis. The following assumptions were used in this analysis:

- All approaches and intersections were analyzed with existing lane configurations
- Signal cycle length of 100 seconds was used for this analysis condition

AM

INTERSECTION	TYPE	APPROACH	LOS	DELAY (s)
Ave E/Cesar Chavez	Signalized		D	44.0
Ave E/County 23 ½	Two-Way Stop	EB	F	234.9
		WB	C	23.1
Ave E/County 24	All-way Stop		A	7.9
Access A	T-intersection	NB	B	10.7
Access B	T-intersection	NB	A	9.3

PM

INTERSECTION	TYPE	APPROACH	LOS	DELAY (s)
Ave E/Cesar Chavez	Signalized		C	34.7
Ave E/County 23 ½	Two-Way Stop	EB	F	51.3
		WB	C	15.7
Ave E/County 24	All-way Stop		A	7.5
Access A	T-intersection	NB	A	9.6
Access B	T-intersection	NB	A	9.1

TABLE 8: Level of Service analysis for buildout (2023, existing road configuration)

As it can be seen in this analysis, the intersection of Avenue F and County 23 ½ Street will reach Level of Service F in the eastbound approach once the school is built and operating. The intersection of Avenue E and Cesar Chavez Boulevard will fall to Level of Service D. The next step of the analysis was to determine the level of service of the intersection if a four-way stop sign is installed at County 23 ½ Street and Avenue E. This resulted in the intersection improving to a Level of Service D in the AM peak hour and C in the PM condition.

Since this intersection is adjacent to the proposed school, a traffic signal analysis was performed. The results of installing a traffic signal at the intersection of Avenue F and County 23 ½ Street with one dedicated lane (through, left, and right) in each direction in all approaches are presented in Table 9.

Time	Level of Service	Signal Delay	Intersection Capacity	Intersection Capacity LOS
AM	B	13.4 seconds	47.4%	B
PM	B	10.2 seconds	47.7%	B

TABLE 9: County 23 ½ Street/Avenue F intersection with traffic signal (2023)

In addition to this analysis, a traffic signal warrant analysis was performed, and it was determined that Warrant #3 (Peak Hour) is satisfied. Even though the satisfaction of this traffic signal warrant does not in itself require the installation of a traffic signal, it is recommended that a signal be installed for safety reasons considering the type of project being built in the southwest corner of this intersection. The presence of kids in the area requires the utmost safety considerations. See Appendix E for traffic signal study results.

The intersection of Avenue F and Cesar Chavez Boulevard was found to be in Level of Service D during the morning peak hour in the buildout year of 2023. One solution to keep the Level of Service C in this intersection is to build an additional left turn lane in the northbound direction.

Intersection	Level of Service	Assumptions
Avenue F/ County 23 ½ Street	B	Signalized with one through lane, one left and one right turn lane in all approaches
Avenue F/César Chavez Blvd.	B	Improved to dual northbound lefts and dual eastbound and westbound through lanes

TABLE 10: Level of Service in 2028

An analysis was performed for five years after buildout at year 2028. Assuming the intersection of Avenue F and County 23 ½ Street is improved, widened, and a traffic signal is installed, the Level of Service will be B in 2028. For the intersection of Avenue F and Cesar Chavez Boulevard, if no improvements are made, the Level of Service is projected to be F in 2028. Improvements are needed to keep an acceptable level of service. Recommendations are summarized in Table 10. See Appendix C for full Synchro reports for all analysis scenarios.

C. Roadway improvements

Non-site traffic is expected to be minimal for the new San Luis Elementary School proposed to be built at the southwest corner of Avenue F and County 23 ½ Street. Most students attending this school are assumed to be from the residential subdivisions to the east and west of Avenue F. It is expected that only teachers and other staff travel to this school from Avenue F via Cesar Chavez Boulevard.

The City of San Luis has plans to widen the section of Avenue F from Cesar Chavez to County 23 ½ Street to four lanes to match the existing configuration south of County 23 ½ Street. The time frame for this work is within the next five years.

Improvements recommended in this study include the widening of the intersection of Avenue F and County 23 ½ Street per City of San Luis standards with dedicated turn lanes in each direction in all approaches and the installation of a traffic signal. This will provide an acceptable level of service for the intersection and provide a measure of safety for pedestrians, especially children.

D. Queue Analysis

Access B is assumed to be a right in/right out driveway because of the distance from the Avenue F intersection. A queue analysis was performed for the proposed left and right turn lanes on County 23 ½ Street to determine the required storage lengths. The storage length is determined by the following formulas:

Storage Length = [1.5 x (veh/hr)/(cylces/hr)] x 25 feet (signalized)

Storage Length = [(veh/hr)/(30 periods/hr)] x 25 feet (unsignalized)

The taper length is found by applying the formula $L=WS^2/60$ for speeds of less than 45 miles per hour, where L is the length of taper in feet, S is the posted speed in miles per hour and W is the offset in feet. For these lanes on County 23 ½ Street, the speed used was 25 miles per hour with a 12-foot offset.

Below are the minimum storage and taper lengths required for turn lanes adjacent to school site. The assumed cycle length for the Avenue F & County 23 ½ Street proposed traffic signal is 100 seconds.

1. Left turn lane into Access A — 100 feet of storage with 125 feet of taper
2. Left turn lane EB at Avenue F — 150 feet of storage with 125 feet of taper
3. Right turn lane EB at Avenue F — 100 feet of storage with 125 feet of taper

Both accesses A and B shall be located so that these minimum storage and taper lengths are satisfied.

E. Right-Turn Lane Warrants

A right-turn lane warrant analysis was performed for both accesses to the school site, Access A and Access B, following *ADOT Traffic Guidelines and Processes Section 245 – Turn Lane Warrants*. Due to the low peak hour traffic volume on County 23 ½ Street and the low posted speed limit, the warrant is not satisfied for any of the accesses. However, right-turn lanes may be required for safety based on City of San Luis policy.

F. Pedestrian and bicyclist considerations

Consideration for both pedestrian and bicyclist traffic will not be included in this report as the property does not feature routes or areas reserved exclusively for this method of transportation. For operational and safety reasons, the installation of a traffic signal at Avenue F and County 23 ½ Street is recommended.

7 Conclusions

The proposed new San Luis Elementary School at the southwest corner of Avenue F and County 23 ½ Street is planned to open in July 2022 with an initial 22,500 square foot building for 250 students. In 2023, an expansion of an additional 42,500 square foot building is planned. The total number of students attending the school after both phases will be 500.

This traffic study analyzed the impact presented by the construction of this school to the existing road network at buildout year of 2023 and five years after, in 2028.

It was found that the impact is significant on the adjacent intersection to the school site. The intersection of Avenue F and County 23 ½ Street will operate at Level of Service F in its present configuration.

The intersection of Avenue F and Cesar Chavez Boulevard is currently operating at Level of Service D in the AM peak hour. In 2028, it will fall to Level of Service F. The intersection of Avenue F and County 24th Street operates at Level of Service A in 2023 and will continue in this level in 2028.

8 Recommendations

A. Site access

Access to the school is recommended to be thru County 23 ½ Street. Driveway spacing requirements from the major intersection of Avenue F should be met. Both accesses should meet City of San Luis Standards for a two-way commercial driveway.

For safety reasons, it is not recommended that an access be provided along Avenue F frontage. Avenue F is a major street and access should be along the lower classification street. Should an access be permitted along Avenue F, it should be a right-in/right-out driveway with appropriate deceleration and acceleration lanes.

B. Roadway improvements

To provide an acceptable level of driver comfort and pedestrian safety, the installation of a traffic signal along with the widening of the intersection is recommended. All approaches should be improved to include a dedicated turn lane in each direction with appropriate storage lengths. Also, the widening of Avenue F to two lanes in each direction is recommended.

With these improvements, the intersection will operate at Level of Service B and will continue in this condition until year 2028.

Regarding the intersection of Avenue F and Cesar Chavez Boulevard, it is recommended that this intersection be improved with dual left turn lanes in the northbound direction as well as dual through lanes in the eastbound and westbound directions.

9 Signatures of Professional Engineers

We declare that, to the best of our professional knowledge and belief, we meet the definition of Professional Engineer as defined in 650.305 of 23 CFR. We have the specific qualifications based on education, training, and experience to conduct a traffic impact analysis of the nature, magnitude, and setting of the subject proposed development. We have performed and all applicable guidelines in conformance with the standards and practices set forth in *Arizona Department of Transportation Traffic Guidelines and Processes Section 240*.

_____ 11/17/2021

Eric Gardner, PE, MBA **Date**
Vice President/Senior Engineer

_____ 11/17/2021

Agustin Cruz, PE, **Date**
Project Engineer

10 Appendices

A. List of figures

B. Traffic counts

C. Synchro reports

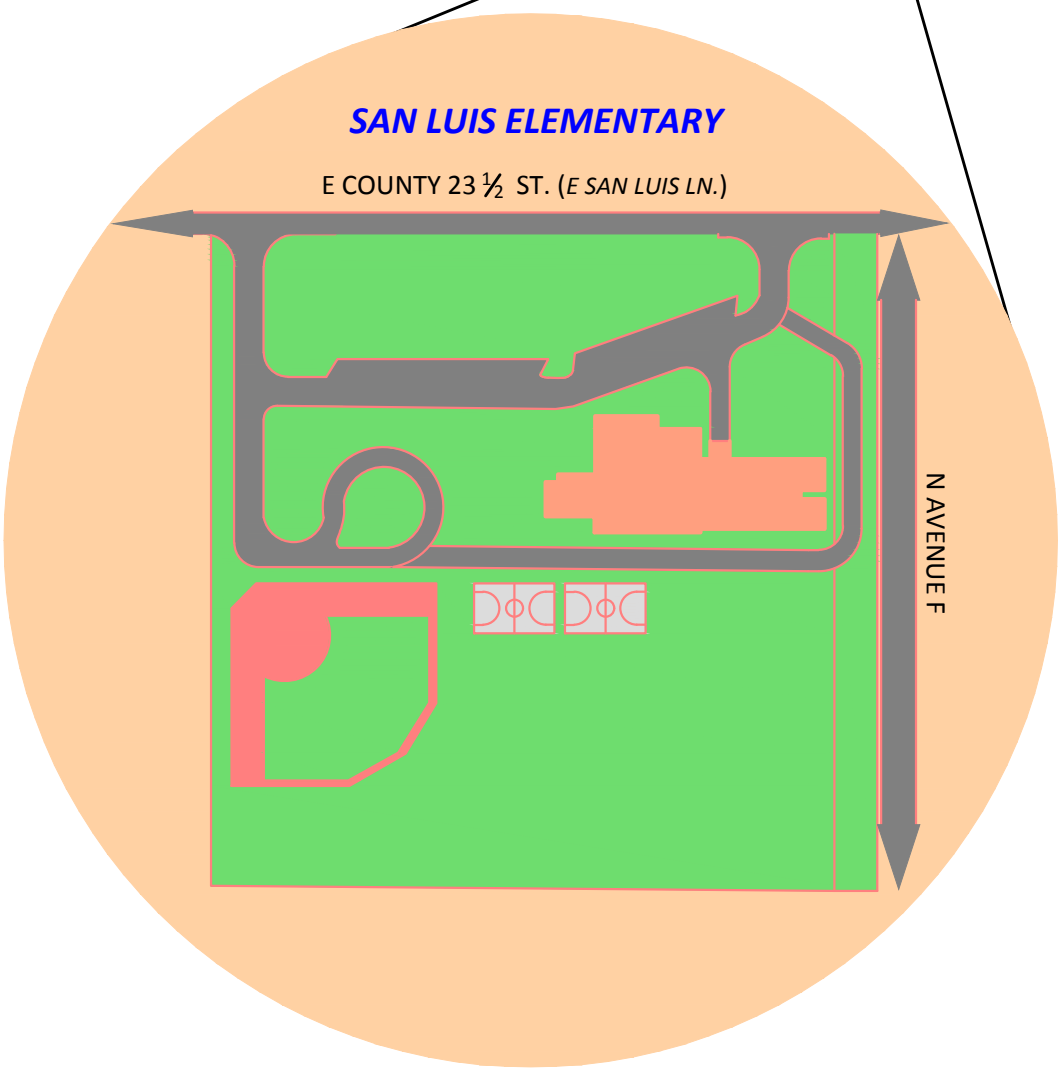
D. Accident data, analysis, and summaries

E. Traffic signal study

APPENDIX A

List of Figures

Figure 1: Vicinity Map
Figure 2: Site Plan
Figure 3: Trip Distribution
Figure 4: Total Traffic Volumes (2023)
Figure 5: Total Traffic Volumes (2028)



N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

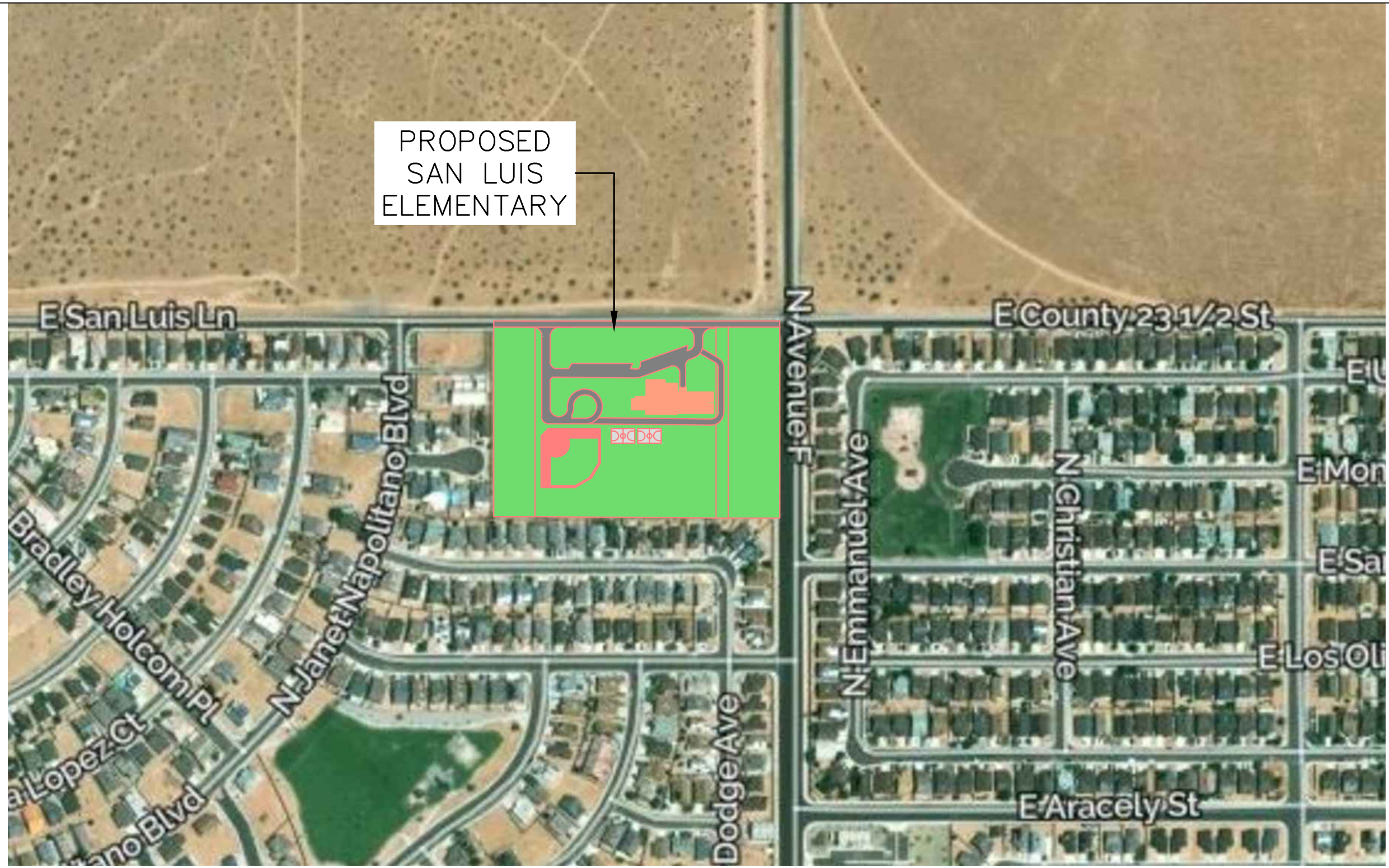
SAN LUIS ELEMENTARY

VICINITY PLAN

SCALE:	NA
DATE: NOVEMBER , 2021	
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET - OF -	

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 1



LEGEND

- ELEMENTARY AREA
- BUILDING AREA

N

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

SAN LUIS ELEMENTARY

SITE PLAN

SCALE:	NA
DATE:	NOVEMBER , 2021
DES. BY:	XXX
DRAWN BY:	XXX
SURVEYED BY:	XXX
JOB. No.:	XXX
SHEET	- OF -

Nicklaus Engineering Inc.
1851 West 24th Street P.O. Box 6029
YUMA, ARIZONA 85364 (928)344-8374
Email: nei@neiaw.com

FIGURE 2

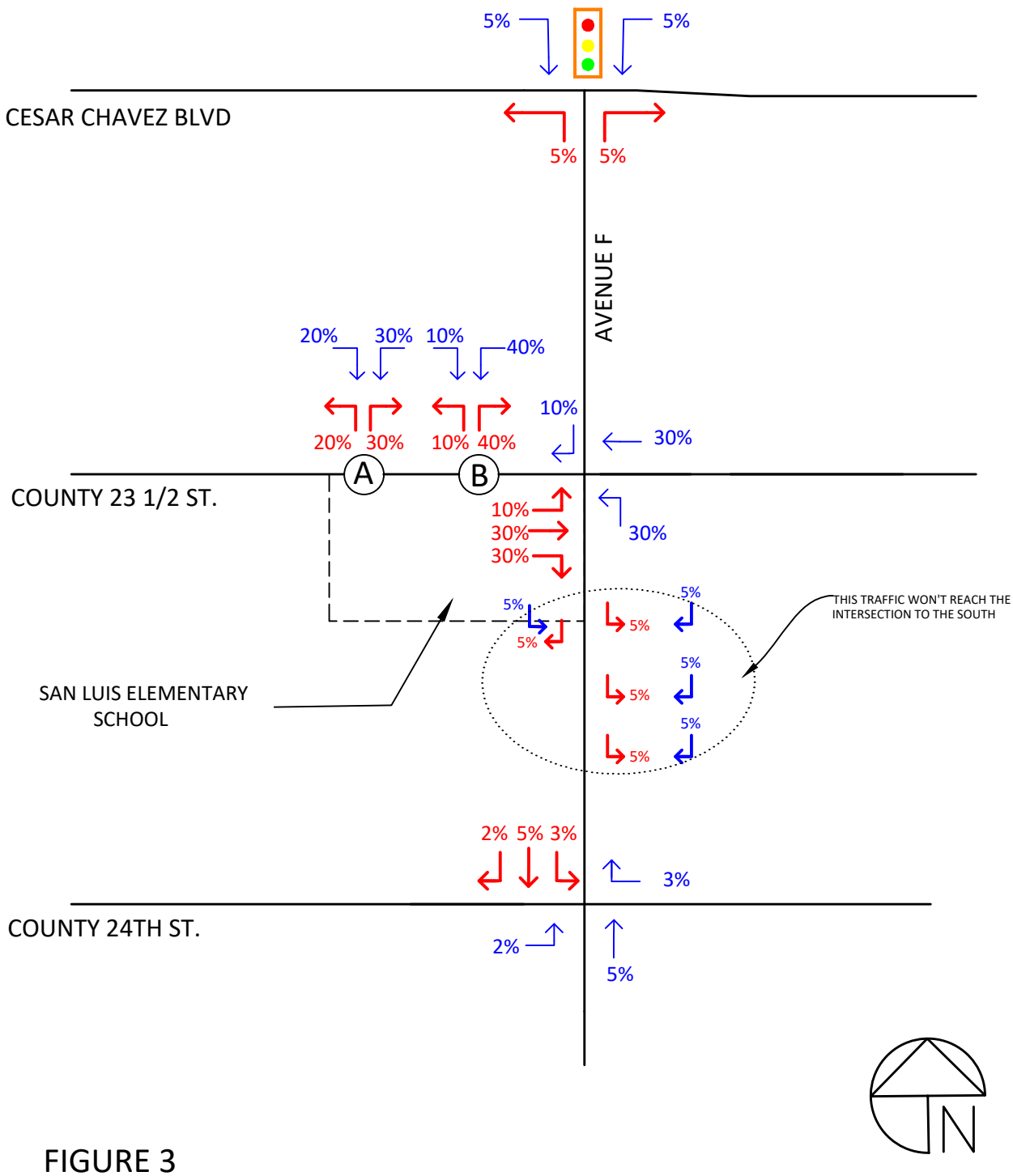


FIGURE 3
TRIP DISTRIBUTION

San Luis Elementary School

NOT TO SCALE

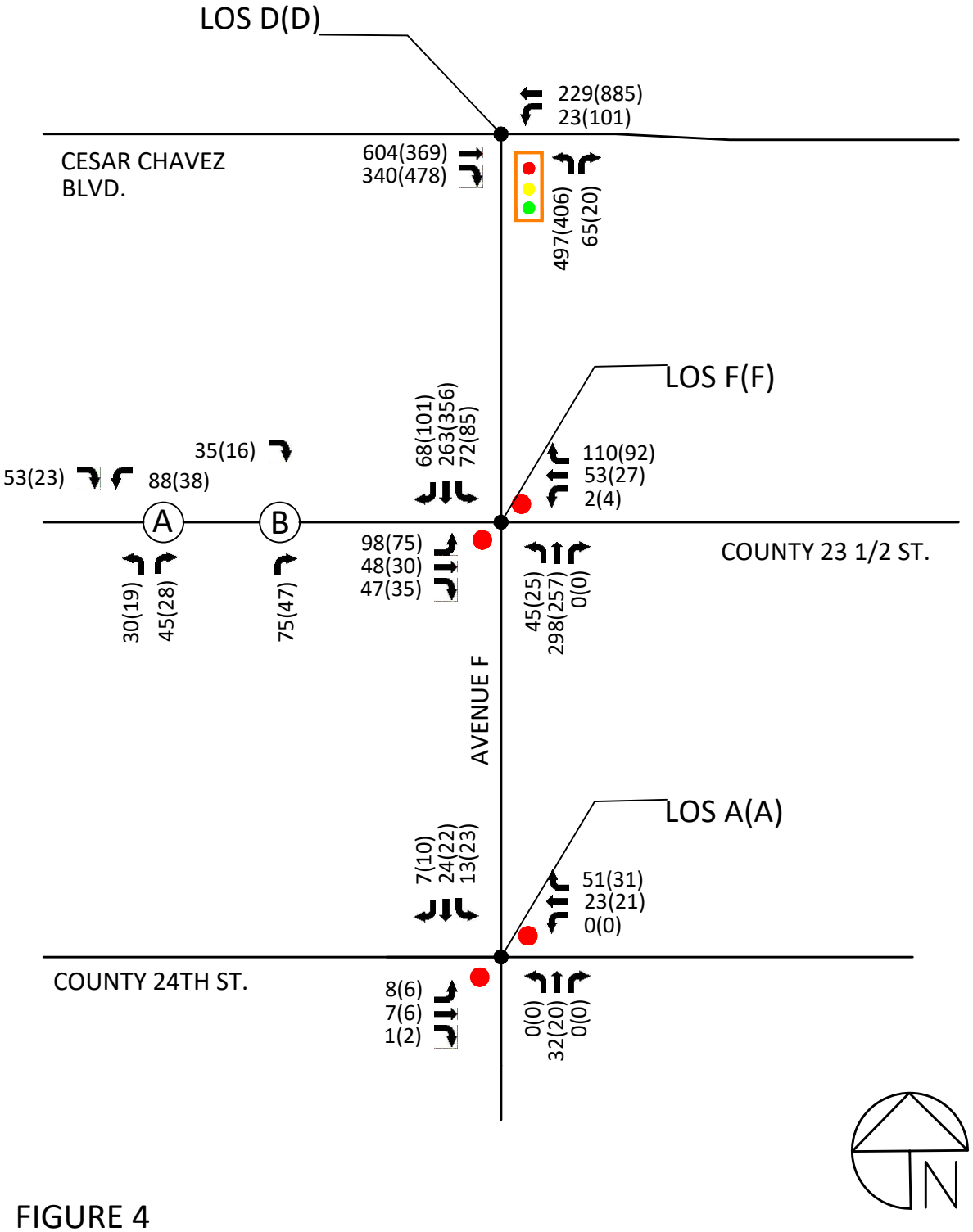


FIGURE 4
TOTAL TRAFFIC VOLUMES
YEAR 2023, AM(PM)

NOT TO SCALE

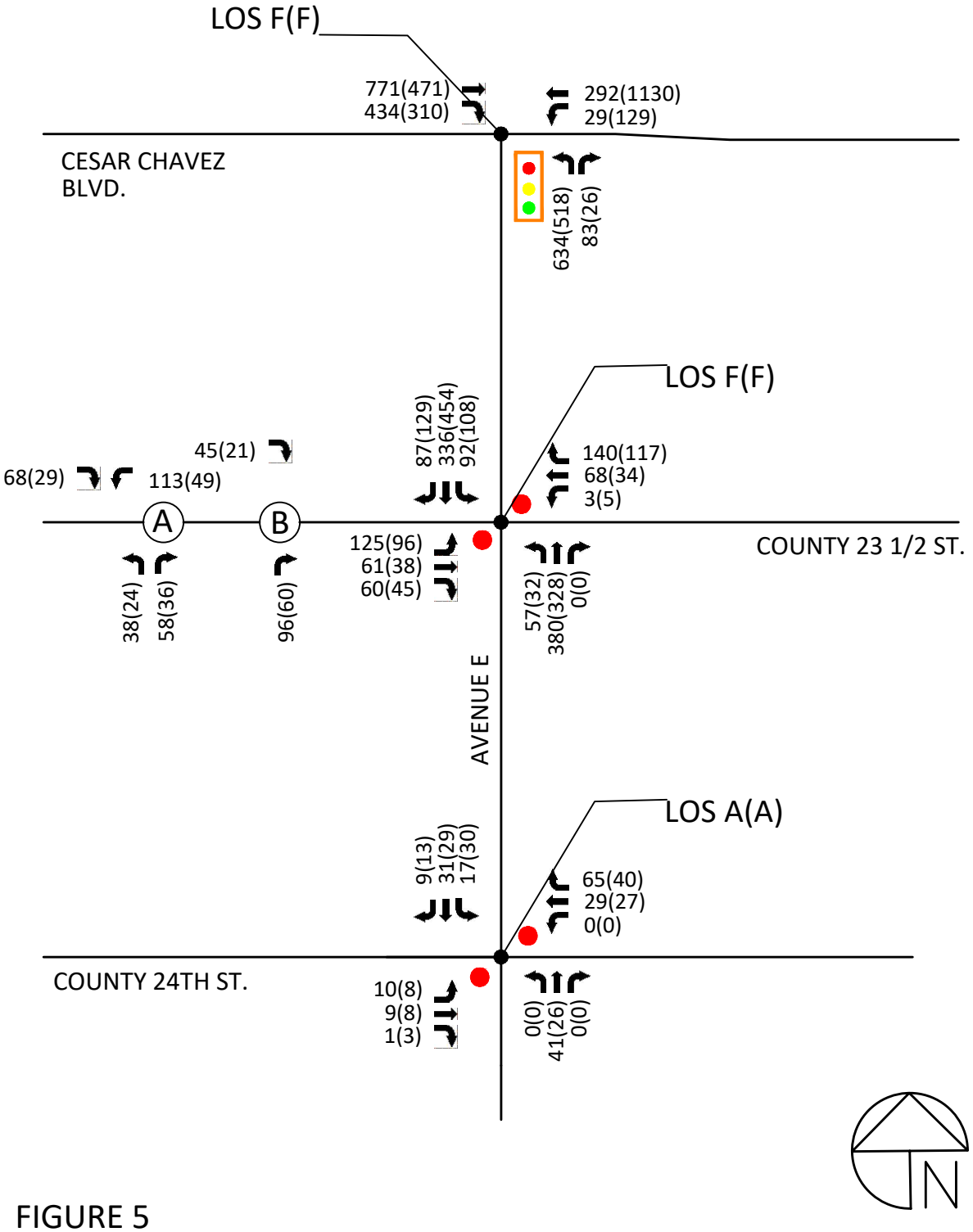


FIGURE 5
PROJECTED TOTAL TRAFFIC VOLUMES
YEAR 2028, AM(PM)

NOT TO SCALE

APPENDIX B

Traffic Counts

		4	3	2		12	11	10		8	7	6		16	15	14					
Vehicle Movements at Avenue F / Cesar Chavez Blvd.																					
Time		**From North**				**From South**				**From East**				**From West**				**Total Veh**	**Truck Factor**	**Peak Hour**	**Peak Hour Factor**
Mov		**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**				
7:00	7:15	0	0	0	0	107	17	0	124	4	57	0	61	0	128	53	181	366	2.9%	366	
7:15	7:30	0	0	0	0	1	37	0	38	82	1	10	93	0	86	37	123	254	4.2%	620	
7:30	7:45	0	0	0	0	42	0	7	49	3	21	0	24	0	60	19	79	152	1.9%	772	
7:45	8:00	0	0	0	0	111	0	9	120	2	59	1	62	0	114	54	168	350	2.5%	1122	
8:00	8:15	0	0	0	0	93	0	13	106	3	33	0	36	0	121	60	181	323	3.3%	1079	
8:15	8:30	0	0	0	0	114	0	11	125	1	36	0	37	1	123	76	200	362	2.9%	1187	
8:30	8:45	0	0	0	0	32	0	9	41	3	23	0	26	0	71	45	116	183	2.1%	1218	1.66
8:45	9:00	0	0	0	0	52	0	8	60	2	40	1	43	0	71	38	109	212	4.9%	1080	
Peak Hour Total		0	0	0	0	350	0	42	392	9	151	1	161	1	429	235	665	1218			
Vehicle & Truck Peak		0	0	0	0	355	0	42	397	10	166	1	177	1	438	240	679	1253			
2021 Peak hour Total		0	0	0	0	374	0	44	418	11	175	1	186	1.1	461	253	715	1319			
4:00	4:15	0	0	0	0	78	0	3	81	16	157	0	173	0	88	89	177	431	3.1%	1184	0.92
4:15	4:30	0	0	0	0	67	0	2	69	14	149	0	163	0	56	95	151	383	5.0%	1184	
4:30	4:45	0	0	0	0	74	0	2	76	19	138	0	157	0	59	78	137	370	3.4%	1184	
4:45	5:00	0	0	0	0	69	0	2	71	21	179	0	200	0	50	77	127	398	1.5%	1582	
5:00	5:15	0	0	0	0	90	0	1	91	19	187	0	206	0	69	63	132	429	2.1%	1580	
5:15	5:30	0	0	0	0	69	0	6	75	21	163	4	188	0	83	92	175	438	2.4%	1635	
5:30	5:45	0	0	0	0	80	0	3	83	19	156	1	176	0	59	85	144	403	2.7%	1668	
5:45	6:00	0	0	0	0	91	0	6	97	7	153	4	164	0	55	74	129	390	2.3%	1660	
Peak Hour Total		0	0	0	0	288	0	9	297	70	623	0	693	0	253	339	592	1582			
Vehicle & Truck Peak		0	0	0	0	291	0	11	302	70	642	9	721	0	268	344	612	1635			
2021 Peak hr. Tot		0	0	0	0	306	0	12	318	74	676	9.5	759	0	282	362	644	1721			

Truck Movements at Avenue E /County 23rd 1/2 Street																		
7:00	7:15	0	0	0	0	1	0	0	1	1	0	0	1	0	9	0	9	11
7:15	7:30	0	0	0	0	0	0	0	0	1	0	0	1	0	8	2	10	11
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
7:45	8:00	0	0	0	0	3	0	0	3	0	5	0	5	0	1	0	1	9
8:00	8:15	0	0	0	0	1	0	0	1	0	6	0	6	0	1	3	4	11
8:15	8:30	0	0	0	0	1	0	0	1	1	2	0	3	0	5	2	7	11
8:30	8:45	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
8:45	9:00	0	0	0	0	2	0	0	2	0	7	0	7	0	2	0	2	11

		4	3	2		12	11	10		8	7	6		16	15	14					
Vehicle Movements at Avenue F / County 23rd 1/2 Street																					
Time		**From North**				**From South**				**From East**				**From West**				**Total Veh**	**Truck Factor**	**Peak Hour**	**Peak Hour Factor**
Mov		**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**				
7:00	7:15	10	31	9	50	0	98	0	98	0	0	33	33	26	0	1	27	208	1.0%	208	
7:15	7:30	13	54	5	72	0	92	0	92	0	2	20	22	28	1	0	29	215	1.4%	423	
7:30	7:45	15	57	17	89	0	72	2	74	0	0	24	24	0	0	18	18	205	2.4%	628	
7:45	8:00	12	57	8	77	0	81	0	81	0	0	39	39	19	2	0	21	218	3.1%	846	
8:00	8:15	16	47	8	71	0	84	0	84	0	0	34	34	20	1	0	21	210	1.9%	848	
8:15	8:30	20	73	16	109	0	59	0	59	0	0	13	13	24	0	2	26	207	1.9%	840	
8:30	8:45	14	46	9	69	0	26	0	26	2	0	7	9	8	0	0	8	112	0.9%	747	1.67
8:45	9:00	10	30	8	48	1	28	0	29	0	0	15	15	8	2	0	10	102	1.9%	631	
Peak Hour Total		62	223	41	326	0	250	0	250	2	0	93	95	71	3	2	76	747			
Vehicle & Truck Peak		62	228	43	333	0	257	0	257	2	0	95	97	71	3	2	76	763			
2021 Peak hour Total		65	240	45	351	0	271	0	271	2	0	100	102	75	3.2	2.1	80	803			
4:00	4:15	24	87	17	128	0	46	0	46	2	0	17	19	15	1	1	17	210	2.3%	624	0.97
4:15	4:30	22	79	20	121	2	51	0	53	0	2	20	22	14	0	2	16	212	2.3%	624	
4:30	4:45	15	66	18	99	0	63	0	63	1	2	23	26	12	0	2	14	202	1.9%	624	
4:45	5:00	11	68	23	102	0	55	0	55	1	0	17	18	16	1	1	18	193	3.0%	817	
5:00	5:15	17	63	19	99	0	69	0	69	1	0	22	23	14	2	0	16	207	1.0%	814	
5:15	5:30	19	106	19	144	0	62	0	62	1	0	27	28	8	0	1	9	243	1.6%	845	
5:30	5:45	20	74	19	113	1	53	0	54	0	1	22	23	14	0	0	14	204	1.9%	847	
5:45	6:00	22	65	16	103	0	54	0	54	2	1	26	29	17	1	1	19	205	1.9%	859	
Peak Hour Total		72	300	78	450	2	215	0	217	4	4	77	85	57	2	6	65	817			
Vehicle & Truck Peak		73	308	80	461	2	222	0	224	4	4	79	87	57	2	6	65	837			
2021 Peak hr. Tot		77	324	84	485	2.1	234	0	236	4.2	4.2	83	92	60	2.1	6.3	68.4	881			

Truck Movements at Avenue F /County 23rd 1/2 Street																		
7:00	7:15	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
7:15	7:30	0	1	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
7:30	7:45	0	2	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
7:45	8:00	0	2	1	3	0	4	0	4	0	0	0	0	0	0	0	0	7
8:00	8:15	0	2	1	3	0	0	0	0	0	0	1	1	0	0	0	0	4
8:15	8:30	0	1	0	1	0	2	0	2	0	0	1	1	0	0	0	0	4
8:30	8:45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:45	9:00	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2

		4	3	2		12	11	10		8	7	6		16	15	14					
Vehicle Movements at Avenue F / County 24th Street																					
Time		**From North**				**From South**				**From East**				**From West**				**Total Veh**	**Truck Factor**	**Peak Hour**	**Peak Hour Factor**
Mov		**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**	**LT**	**ST**	**RT**	**Tot**				
7:00	7:15	3	3	2	8	0	3	0	3	0	7	8	15	0	0	0	0	26	7.1%	26	
7:15	7:30	3	4	2	9	0	3	0	3	0	4	6	10	1	0	0	1	23	0.0%	49	
7:30	7:45	6	4	3	13	0	1	0	1	0	3	4	7	0	2	0	2	23	0.0%	72	
7:45	8:00	4	3	0	7	0	5	0	5	0	3	5	8	2	3	0	5	25	3.8%	97	
8:00	8:15	1	5	1	7	0	7	0	7	0	6	19	25	0	0	0	0	39	0.0%	110	
8:15	8:30	3	5	2	10	0	4	0	4	0	7	5	12	0	2	0	2	28	6.7%	115	
8:30	8:45	0	0	0	0	0	2	0	2	0	3	11	14	2	1	1	4	20	4.8%	112	1.40
8:45	9:00	6	2	1	9	0	3	0	3	0	2	1	3	0	3	0	3	18	0.0%	105	
Peak Hour Total		8	13	3	24	0	18	0	18	0	19	40	59	4	6	1	11	112			
Vehicle & Truck Peak		9	14	3	26	0	19	0	19	0	20	40	60	4	6	1	11	116			
2021 Peak hour Total		9.5	15	3.2	27	0	20	0	20	0	21	42	63	4.2	6.3	1.1	11.6	122			
4:00	4:15	3	3	2	8	0	3	0	3	0	7	8	15	0	0	0	0	26	7.1%	72	0.93
4:15	4:30	3	4	2	9	0	3	0	3	0	4	6	10	1	0	0	1	23	0.0%	72	
4:30	4:45	6	4	3	13	0	1	0	1	0	3	4	7	0	2	0	2	23	0.0%	72	
4:45	5:00	4	3	0	7	0	5	0	5	0	3	5	8	2	3	0	5	25	3.8%	97	
5:00	5:15	1	5	1	7	0	7	0	7	0	6	19	25	0	0	0	0	39	0.0%	110	
5:15	5:30	2	5	3	10	0	4	0	4	0	7	5	12	0	2	0	2	28	12.5%	115	
5:30	5:45	3	3	1	7	0	2	0	2	0	3	11	14	2	1	1	4	27	12.9%	119	
5:45	6:00	6	2	1	9	0	3	0	3	0	2	1	3	0	3	0	3	18	10.0%	112	
Peak Hour Total		16	14	7	37	0	12	0	12	0	17	23	40	3	5	0	8	97			
Vehicle & Truck Peak		17	14	7	38	0	13	0	13	0	17	23	40	3	5	1	9	100			
2021 Peak hr. Tot		18	15	7.4	40	0	14	0	14	0	18	24	42	3.2	5.3	1.1	9.47	105			

Truck Movements at Avenue F / County 24th Street																		
7:00	7:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00	8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	8:30	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
8:30	8:45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
8:45	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C

Synchro Reports

EXISTING CONDITIONS

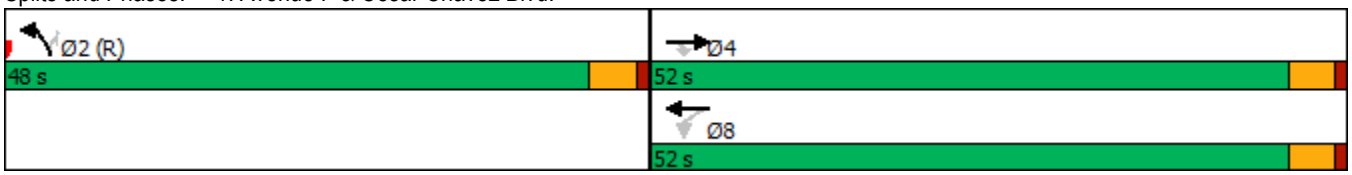
AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	548	300	13	208	444	53
Future Volume (vph)	548	300	13	208	444	53
Ideal Flow (vphpl)	1500	1500	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1471	1250	1397	1667	1397	1417
Flt Permitted			0.195		0.950	
Satd. Flow (perm)	1471	1250	287	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		357				63
Link Speed (mph)	55			55	35	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	17.7			19.2	32.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	652	357	15	248	529	63
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	52.0	52.0	52.0	52.0	48.0	48.0
Total Split (%)	52.0%	52.0%	52.0%	52.0%	48.0%	48.0%
Maximum Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.44	0.44
v/c Ratio	0.93	0.46	0.11	0.31	0.87	0.10
Control Delay	47.6	3.8	17.2	17.6	43.0	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	3.8	17.2	17.6	43.0	4.8
LOS	D	A	B	B	D	A
Approach Delay	32.1			17.6	38.9	
Approach LOS	C			B	D	
Queue Length 50th (ft)	378	0	5	94	299	0
Queue Length 95th (ft)	#547	35	17	138	#442	20
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	698	781	136	791	607	651
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.46	0.11	0.31	0.87	0.10

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 32.2		Intersection LOS: C	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.



Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	75	3	2	2	0	100	0	270	0	65	239	45
Future Vol, veh/h	75	3	2	2	0	100	0	270	0	65	239	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	3	2	2	0	116	0	314	0	76	278	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	828	770	304	773	796	314	330	0	0	314	0	0
Stage 1	456	456	-	314	314	-	-	-	-	-	-	-
Stage 2	372	314	-	459	482	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	290	331	736	316	320	726	1229	-	-	1246	-	-
Stage 1	584	568	-	697	656	-	-	-	-	-	-	-
Stage 2	648	656	-	582	553	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	230	306	736	295	296	726	1229	-	-	1246	-	-
Mov Cap-2 Maneuver	230	306	-	295	296	-	-	-	-	-	-	-
Stage 1	584	525	-	697	656	-	-	-	-	-	-	-
Stage 2	544	656	-	533	512	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.8	11.1	0	1.5
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1229	-	-	236	706	1246	-	-
HCM Lane V/C Ratio	-	-	-	0.394	0.168	0.061	-	-
HCM Control Delay (s)	0	-	-	29.8	11.1	8.1	0	-
HCM Lane LOS	A	-	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.8	0.6	0.2	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	6	1	0	21	42	0	21	0	9	15	3
Future Vol, veh/h	4	6	1	0	21	42	0	21	0	9	15	3
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	8	1	0	29	58	0	29	0	13	21	4
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	7.7	7.3	7.8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	86%	100%	100%	14%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	14%	0%	0%	86%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	21	0	4	7	0	14	49	9	15	3
LT Vol	0	0	0	4	0	0	0	0	9	0	0
Through Vol	0	21	0	0	6	0	14	7	0	15	0
RT Vol	0	0	0	0	1	0	0	42	0	0	3
Lane Flow Rate	0	29	0	6	10	0	19	68	12	21	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.039	0	0.008	0.013	0	0.025	0.077	0.018	0.028	0.005
Departure Headway (Hd)	4.779	4.779	4.779	5.376	4.676	4.68	4.68	4.08	5.265	4.764	4.064
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	739	0	670	754	0	758	868	673	743	868
Service Time	2.572	2.572	2.572	3.076	2.475	2.453	2.453	1.852	3.051	2.55	1.849
HCM Lane V/C Ratio	0	0.039	0	0.009	0.013	0	0.025	0.078	0.018	0.028	0.005
HCM Control Delay	7.6	7.8	7.6	8.1	7.5	7.5	7.6	7.2	8.1	7.7	6.9
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0	0	0	0	0.1	0.2	0.1	0.1	0

EXISTING CONDITIONS

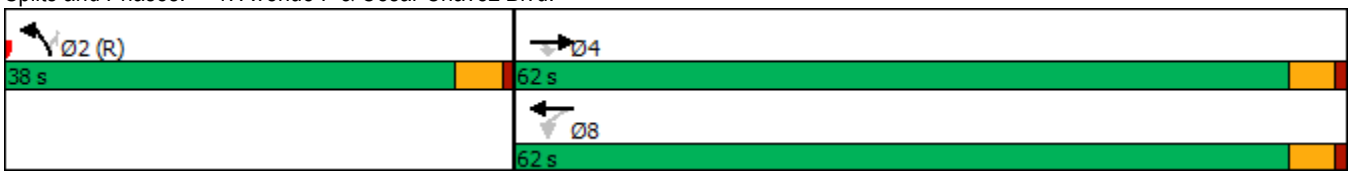
PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	335	430	88	803	364	14
Future Volume (vph)	335	430	88	803	364	14
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.485		0.950	
Satd. Flow (perm)	1667	1417	713	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		467				15
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	364	467	96	873	396	15
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	38.0	38.0
Total Split (%)	62.0%	62.0%	62.0%	62.0%	38.0%	38.0%
Maximum Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.34	0.34
v/c Ratio	0.38	0.46	0.23	0.91	0.85	0.03
Control Delay	13.0	2.6	12.3	34.6	49.5	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	2.6	12.3	34.6	49.5	10.6
LOS	B	A	B	C	D	B
Approach Delay	7.1			32.4	48.0	
Approach LOS	A			C	D	
Queue Length 50th (ft)	118	0	28	465	232	0
Queue Length 95th (ft)	180	41	58	#760	#399	14
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	958	1013	409	958	467	484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.46	0.23	0.91	0.85	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.



Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	60	2	6	4	4	83	2	233	0	77	323	84
Future Vol, veh/h	60	2	6	4	4	83	2	233	0	77	323	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	2	6	4	4	87	2	245	0	81	340	88

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	841	795	384	799	839	245	428	0	0	245	0	0
Stage 1	546	546	-	249	249	-	-	-	-	-	-	-
Stage 2	295	249	-	550	590	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	284	320	664	304	302	794	1131	-	-	1321	-	-
Stage 1	522	518	-	755	701	-	-	-	-	-	-	-
Stage 2	713	701	-	519	495	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	234	293	664	280	277	794	1131	-	-	1321	-	-
Mov Cap-2 Maneuver	234	293	-	280	277	-	-	-	-	-	-	-
Stage 1	521	476	-	753	700	-	-	-	-	-	-	-
Stage 2	629	700	-	470	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.1	11.1	0.1	1.3
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1131	-	-	250	683	1321	-	-
HCM Lane V/C Ratio	0.002	-	-	0.286	0.14	0.061	-	-
HCM Control Delay (s)	8.2	0	-	25.1	11.1	7.9	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.5	0.2	-	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	5	1	0	19	25	0	14	0	18	15	7
Future Vol, veh/h	3	5	1	0	19	25	0	14	0	18	15	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	5	1	0	20	27	0	15	0	19	16	8
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	7.6	7.1	7.6	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	83%	100%	100%	20%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	17%	0%	0%	80%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	14	0	3	6	0	13	31	18	15	7
LT Vol	0	0	0	3	0	0	0	0	18	0	0
Through Vol	0	14	0	0	5	0	13	6	0	15	0
RT Vol	0	0	0	0	1	0	0	25	0	0	7
Lane Flow Rate	0	15	0	3	6	0	14	34	19	16	8
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.02	0	0.005	0.008	0	0.018	0.038	0.028	0.021	0.008
Departure Headway (Hd)	4.7	4.7	4.7	5.204	4.587	4.654	4.654	4.095	5.161	4.661	3.961
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	756	0	682	772	0	764	867	691	765	898
Service Time	2.466	2.466	2.466	2.979	2.362	2.413	2.413	1.855	2.91	2.409	1.709
HCM Lane V/C Ratio	0	0.02	0	0.004	0.008	0	0.018	0.039	0.027	0.021	0.009
HCM Control Delay	7.5	7.6	7.5	8	7.4	7.4	7.5	7	8.1	7.5	6.7
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0

2023 PROJECTED CONDITIONS

AM

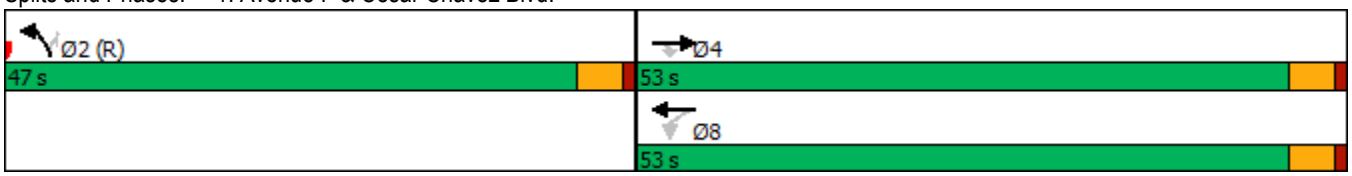
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	604	340	23	229	497	65
Future Volume (vph)	604	340	23	229	497	65
Ideal Flow (vphpl)	1500	1500	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1471	1250	1397	1667	1397	1417
Flt Permitted			0.151		0.950	
Satd. Flow (perm)	1471	1250	222	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		405				77
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	719	405	27	273	592	77
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	53.0	53.0	53.0	53.0	47.0	47.0
Total Split (%)	53.0%	53.0%	53.0%	53.0%	47.0%	47.0%
Maximum Green (s)	48.5	48.5	48.5	48.5	42.5	42.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	48.5	48.5	48.5	48.5	42.5	42.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.42	0.42
v/c Ratio	1.01	0.50	0.25	0.34	1.00	0.12
Control Delay	63.0	3.9	22.7	17.3	66.8	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.0	3.9	22.7	17.3	66.8	4.6
LOS	E	A	C	B	E	A
Approach Delay	41.7			17.8	59.7	
Approach LOS	D			B	E	
Queue Length 50th (ft)	~452	0	10	103	367	0
Queue Length 95th (ft)	#627	35	30	148	#537	23
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	713	814	107	808	593	646
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.50	0.25	0.34	1.00	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 44.0		Intersection LOS: D	
Intersection Capacity Utilization 82.6%		ICU Level of Service E	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.



Intersection	
Int Delay, s/veh	45.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	98	48	47	2	53	110	45	298	0	72	263	68
Future Vol, veh/h	98	48	47	2	53	110	45	298	0	72	263	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	56	55	2	62	128	52	347	0	84	306	79

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1060	965	346	1020	1004	347	385	0	0	347	0	0
Stage 1	514	514	-	451	451	-	-	-	-	-	-	-
Stage 2	546	451	-	569	553	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	202	255	697	215	242	696	1173	-	-	1212	-	-
Stage 1	543	535	-	588	571	-	-	-	-	-	-	-
Stage 2	522	571	-	507	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	114	220	697	143	208	696	1173	-	-	1212	-	-
Mov Cap-2 Maneuver	114	220	-	143	208	-	-	-	-	-	-	-
Stage 1	513	487	-	556	540	-	-	-	-	-	-	-
Stage 2	357	540	-	377	468	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	234.9	23.1	1.1	1.5
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1173	-	-	169	387	1212	-	-
HCM Lane V/C Ratio	0.045	-	-	1.328	0.496	0.069	-	-
HCM Control Delay (s)	8.2	0	-	234.9	23.1	8.2	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	13.3	2.7	0.2	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	83	35	0	166	0	75
Future Vol, veh/h	83	35	0	166	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	41	0	195	0	88

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	314	119
Stage 1	-	-	-	-	119	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	679	933
Stage 1	-	-	0	-	906	-
Stage 2	-	-	0	-	838	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	679	933
Mov Cap-2 Maneuver	-	-	-	-	679	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	838	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	933	-	-	-
HCM Lane V/C Ratio	0.095	-	-	-
HCM Control Delay (s)	9.3	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	53	88	78	30	45
Future Vol, veh/h	80	53	88	78	30	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	62	104	92	35	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	156	0	425	125
Stage 1	-	-	-	-	125	-
Stage 2	-	-	-	-	300	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1424	-	586	926
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	752	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1424	-	541	926
Mov Cap-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	721	-	-	1424	-
HCM Lane V/C Ratio	0.122	-	-	0.073	-
HCM Control Delay (s)	10.7	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	7	1	0	23	51	0	32	0	34	24	7
Future Vol, veh/h	8	7	1	0	23	51	0	32	0	34	24	7
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	10	1	0	32	71	0	44	0	47	33	10
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	8.1	7.6	8.1	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	88%	100%	100%	13%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	12%	0%	0%	87%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	32	0	8	8	0	15	59	34	24	7
LT Vol	0	0	0	8	0	0	0	0	34	0	0
Through Vol	0	32	0	0	7	0	15	8	0	24	0
RT Vol	0	0	0	0	1	0	0	51	0	0	7
Lane Flow Rate	0	44	0	11	11	0	21	81	47	33	10
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.062	0	0.017	0.015	0	0.029	0.099	0.071	0.046	0.011
Departure Headway (Hd)	5.048	5.048	5.048	5.603	5.014	4.963	4.963	4.354	5.449	4.948	4.247
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	712	0	641	716	0	724	826	660	726	845
Service Time	2.761	2.761	2.761	3.319	2.73	2.672	2.672	2.062	3.163	2.662	1.96
HCM Lane V/C Ratio	0	0.062	0	0.017	0.015	0	0.029	0.098	0.071	0.045	0.012
HCM Control Delay	7.8	8.1	7.8	8.4	7.8	7.7	7.8	7.5	8.6	7.9	7
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.2	0	0.1	0	0	0.1	0.3	0.2	0.1	0

2023 PROJECTED CONDITIONS

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	369	478	101	885	406	20
Future Volume (vph)	369	478	101	885	406	20
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.460		0.950	
Satd. Flow (perm)	1667	1417	676	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		520				22
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	401	520	110	962	441	22
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	63.0	63.0	63.0	63.0	37.0	37.0
Total Split (%)	63.0%	63.0%	63.0%	63.0%	37.0%	37.0%
Maximum Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	58.5	58.5	58.5	58.5	32.5	32.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.32	0.32
v/c Ratio	0.41	0.50	0.28	0.99	0.97	0.05
Control Delay	12.9	2.7	12.6	47.6	70.6	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.9	2.7	12.6	47.6	70.6	9.8
LOS	B	A	B	D	E	A
Approach Delay	7.1			44.0	67.7	
Approach LOS	A			D	E	
Queue Length 50th (ft)	130	0	32	561	275	0
Queue Length 95th (ft)	197	42	67	#872	#475	17
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	975	1044	395	975	454	475
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.50	0.28	0.99	0.97	0.05

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Pretimed			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 34.7		Intersection LOS: C	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	75	30	35	4	27	92	25	257	0	85	356	101
Future Vol, veh/h	75	30	35	4	27	92	25	257	0	85	356	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	32	37	4	28	97	26	271	0	89	375	106

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	992	929	428	964	982	271	481	0	0	271	0	0
Stage 1	606	606	-	323	323	-	-	-	-	-	-	-
Stage 2	386	323	-	641	659	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	225	268	627	235	249	768	1082	-	-	1292	-	-
Stage 1	484	487	-	689	650	-	-	-	-	-	-	-
Stage 2	637	650	-	463	461	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	161	236	627	180	219	768	1082	-	-	1292	-	-
Mov Cap-2 Maneuver	161	236	-	180	219	-	-	-	-	-	-	-
Stage 1	470	440	-	670	632	-	-	-	-	-	-	-
Stage 2	517	632	-	366	417	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.3	15.7	0.7	1.3
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1082	-	-	216	464	1292	-	-
HCM Lane V/C Ratio	0.024	-	-	0.682	0.279	0.069	-	-
HCM Control Delay (s)	8.4	0	-	51.3	15.7	8	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	4.3	1.1	0.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	16	0	153	0	47
Future Vol, veh/h	96	16	0	153	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	17	0	166	0	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	279	113
Stage 1	-	-	-	-	113	-
Stage 2	-	-	-	-	166	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	711	940
Stage 1	-	-	0	-	912	-
Stage 2	-	-	0	-	863	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	711	940
Mov Cap-2 Maneuver	-	-	-	-	711	-
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	863	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	940	-	-	-
HCM Lane V/C Ratio	0.054	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	68	23	38	115	19	28
Future Vol, veh/h	68	23	38	115	19	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	25	41	125	21	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	99	0	294	87
Stage 1	-	-	-	-	87	-
Stage 2	-	-	-	-	207	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1494	-	697	971
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	828	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1494	-	677	971
Mov Cap-2 Maneuver	-	-	-	-	677	-
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	804	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	826	-	-	1494	-
HCM Lane V/C Ratio	0.062	-	-	0.028	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	6	2	0	21	31	0	20	0	23	22	10
Future Vol, veh/h	6	6	2	0	21	31	0	20	0	23	22	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	6	2	0	23	33	0	22	0	25	24	11
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	7.7	7.2	7.7	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	75%	100%	100%	18%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	25%	0%	0%	82%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	20	0	6	8	0	14	38	23	22	10
LT Vol	0	0	0	6	0	0	0	0	23	0	0
Through Vol	0	20	0	0	6	0	14	7	0	22	0
RT Vol	0	0	0	0	2	0	0	31	0	0	10
Lane Flow Rate	0	22	0	6	9	0	15	41	25	24	11
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.028	0	0.009	0.011	0	0.02	0.047	0.036	0.031	0.012
Departure Headway (Hd)	4.747	4.747	4.747	5.258	4.583	4.705	4.705	4.133	5.196	4.695	3.995
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	745	0	672	769	0	753	855	685	757	887
Service Time	2.536	2.536	2.536	3.057	2.381	2.485	2.485	1.914	2.959	2.459	1.758
HCM Lane V/C Ratio	0	0.03	0	0.009	0.012	0	0.02	0.048	0.036	0.032	0.012
HCM Control Delay	7.5	7.7	7.5	8.1	7.4	7.5	7.6	7.1	8.2	7.6	6.8
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0

2023 (ALL WAY STOP SIGN AT 23 ½)

AM

Intersection	
Intersection Delay, s/veh	28.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	48	47	2	53	110	45	298	0	72	263	68
Future Vol, veh/h	98	48	47	2	53	110	45	298	0	72	263	68
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	56	55	2	62	128	52	347	0	84	306	79
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	16.8	14.8	32	37.1
HCM LOS	C	B	D	E

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	51%	1%	18%
Vol Thru, %	87%	100%	25%	32%	65%
Vol Right, %	0%	0%	24%	67%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	343	0	193	165	403
LT Vol	45	0	98	2	72
Through Vol	298	0	48	53	263
RT Vol	0	0	47	110	68
Lane Flow Rate	399	0	224	192	469
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.792	0	0.463	0.385	0.856
Departure Headway (Hd)	7.152	7.084	7.431	7.233	6.579
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	507	0	483	495	553
Service Time	4.871	4.803	5.498	5.305	4.597
HCM Lane V/C Ratio	0.787	0	0.464	0.388	0.848
HCM Control Delay	32	9.8	16.8	14.8	37.1
HCM Lane LOS	D	N	C	B	E
HCM 95th-tile Q	7.3	0	2.4	1.8	9.2

2023 (ALL WAY STOP SIGN AT 23 ½)

PM

Intersection	
Intersection Delay, s/veh	22.7
Intersection LOS	C

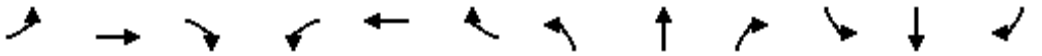
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	30	35	4	27	92	25	257	0	85	356	101
Future Vol, veh/h	75	30	35	4	27	92	25	257	0	85	356	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	32	37	4	28	97	26	271	0	89	375	106
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay	12.2	11.2	15.4	31.8
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	0%	54%	3%	16%
Vol Thru, %	91%	100%	21%	22%	66%
Vol Right, %	0%	0%	25%	75%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	282	0	140	123	542
LT Vol	25	0	75	4	85
Through Vol	257	0	30	27	356
RT Vol	0	0	35	92	101
Lane Flow Rate	297	0	147	129	571
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.512	0	0.273	0.228	0.852
Departure Headway (Hd)	6.208	6.163	6.677	6.35	5.379
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	576	0	541	568	668
Service Time	4.006	3.961	4.684	4.357	3.462
HCM Lane V/C Ratio	0.516	0	0.272	0.227	0.855
HCM Control Delay	15.4	9	12.2	11.2	31.8
HCM Lane LOS	C	N	B	B	D
HCM 95th-tile Q	2.9	0	1.1	0.9	9.6

2023 (TRAFFIC SIGNAL AT 23 ½ WITH INTERSECTION IMPROVEMENTS)

AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	48	47	2	53	110	45	298	0	72	263	68
Future Volume (vph)	98	48	47	2	53	110	45	298	0	72	263	68
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	250		250	250		0	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	1397	1667	1667	1397	1667	1417
Flt Permitted	0.717			0.720			0.529			0.495		
Satd. Flow (perm)	1054	1667	1417	1059	1667	1417	778	1667	1667	728	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55			128						79
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		223			1357			1290			986	
Travel Time (s)		5.1			30.8			29.3			22.4	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	56	55	2	62	128	52	347	0	84	306	79
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	39.0	61.0	61.0	61.0	61.0	61.0	61.0
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%
Maximum Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5	56.5	56.5	56.5	56.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	34.5	34.5	34.5	34.5	34.5	34.5	56.5	56.5		56.5	56.5	56.5
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.56	0.56		0.56	0.56	0.56
v/c Ratio	0.31	0.10	0.10	0.01	0.11	0.22	0.12	0.37		0.20	0.33	0.09
Control Delay	27.1	22.9	6.8	21.5	23.1	5.3	11.1	13.4		12.3	12.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	27.1	22.9	6.8	21.5	23.1	5.3	11.1	13.4		12.3	12.8	2.6
LOS	C	C	A	C	C	A	B	B		B	B	A
Approach Delay		21.1			11.2			13.1			11.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	53	24	0	1	27	0	15	114		25	98	0
Queue Length 95th (ft)	95	50	24	6	53	34	32	164		49	143	18
Internal Link Dist (ft)		143			1277			1210			906	

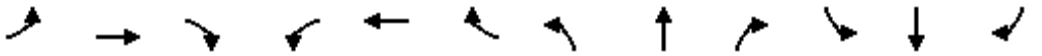
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	250		250	250			250		250
Base Capacity (vph)	363	575	524	365	575	572	439	941		411	941	834
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.31	0.10	0.10	0.01	0.11	0.22	0.12	0.37		0.20	0.33	0.09

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue F & County 23 1/2 St.

2023 (TRAFFIC SIGNAL AT 23 ½ WITH INTERSECTION IMPROVEMENTS)

PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	30	35	4	27	92	25	257	0	85	356	101
Future Volume (vph)	75	30	35	4	27	92	25	257	0	85	356	101
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Storage Length (ft)	250		250	250		250	250		0	250		250
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1583	1667	1417	1583	1667	1417	1583	1667	1667	1583	1667	1417
Flt Permitted	0.739			0.736			0.504			0.580		
Satd. Flow (perm)	1232	1667	1417	1227	1667	1417	840	1667	1667	967	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			37			97						106
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		223			1357			1290			986	
Travel Time (s)		5.1			30.8			29.3			22.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	32	37	4	28	97	26	271	0	89	375	106
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	29.0	29.0	29.0	29.0	29.0	29.0	71.0	71.0	71.0	71.0	71.0	71.0
Total Split (%)	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%
Maximum Green (s)	24.5	24.5	24.5	24.5	24.5	24.5	66.5	66.5	66.5	66.5	66.5	66.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	24.5	24.5	24.5	24.5	24.5	24.5	66.5	66.5		66.5	66.5	66.5
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24	0.24	0.66	0.66		0.66	0.66	0.66
v/c Ratio	0.26	0.08	0.10	0.01	0.07	0.23	0.05	0.24		0.14	0.34	0.11
Control Delay	33.3	29.8	10.5	28.8	29.7	7.9	6.1	7.4		6.8	8.3	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	33.3	29.8	10.5	28.8	29.7	7.9	6.1	7.4		6.8	8.3	1.5
LOS	C	C	B	C	C	A	A	A		A	A	A
Approach Delay		26.9			13.3			7.3			6.8	
Approach LOS		C			B			A			A	
Queue Length 50th (ft)	41	16	0	2	14	0	5	62		19	93	0
Queue Length 95th (ft)	82	40	25	11	36	40	14	97		38	140	16
Internal Link Dist (ft)		143			1277			1210			906	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	250		250	250			250		250
Base Capacity (vph)	301	408	375	300	408	420	558	1108		643	1108	977
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.26	0.08	0.10	0.01	0.07	0.23	0.05	0.24		0.14	0.34	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Pretimed			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue F & County 23 1/2 St.

2023 (WITH IMPROVEMENTS AT CESAR CHAVEZ BOULEVARD)

AM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	604	340	23	229	497	65
Future Volume (vph)	604	340	23	229	497	65
Ideal Flow (vphpl)	1500	1500	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1471	1250	1397	1667	2710	1417
Flt Permitted			0.257		0.950	
Satd. Flow (perm)	1471	1250	378	1667	2710	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		405				77
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	719	405	27	273	592	77
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	66.0	66.0	66.0	66.0	34.0	34.0
Total Split (%)	66.0%	66.0%	66.0%	66.0%	34.0%	34.0%
Maximum Green (s)	61.5	61.5	61.5	61.5	29.5	29.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	61.5	61.5	61.5	61.5	29.5	29.5
Actuated g/C Ratio	0.62	0.62	0.62	0.62	0.30	0.30
v/c Ratio	0.80	0.44	0.12	0.27	0.74	0.16
Control Delay	22.8	2.5	9.5	9.7	35.9	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	2.5	9.5	9.7	35.9	8.8
LOS	C	A	A	A	D	A
Approach Delay	15.5			9.7	32.8	
Approach LOS	B			A	C	
Queue Length 50th (ft)	318	0	7	74	167	6
Queue Length 95th (ft)	427	25	18	106	208	31
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	904	924	232	1025	799	472
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.44	0.12	0.27	0.74	0.16

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 20.2		Intersection LOS: C	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.

2023 (WITH IMPROVEMENTS AT CESAR CHAVEZ BOULEVARD)

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	369	478	101	885	406	20
Future Volume (vph)	369	478	101	885	406	20
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	2710	1417
Flt Permitted			0.491		0.950	
Satd. Flow (perm)	1667	1417	722	1667	2710	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		520				22
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	401	520	110	962	441	22
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	73.0	73.0	73.0	73.0	27.0	27.0
Total Split (%)	73.0%	73.0%	73.0%	73.0%	27.0%	27.0%
Maximum Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	68.5	68.5	68.5	68.5	22.5	22.5
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
v/c Ratio	0.35	0.46	0.22	0.84	0.72	0.07
Control Delay	7.6	1.9	7.2	20.6	47.0	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.6	1.9	7.2	20.6	47.0	17.8
LOS	A	A	A	C	D	B
Approach Delay	4.4			19.3	45.6	
Approach LOS	A			B	D	
Queue Length 50th (ft)	93	0	23	403	139	0
Queue Length 95th (ft)	141	30	47	642	196	23
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	1141	1134	494	1141	609	335
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.46	0.22	0.84	0.72	0.07

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 80			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 74.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.

2028 (SIGNAL AT 23 ½)

AM

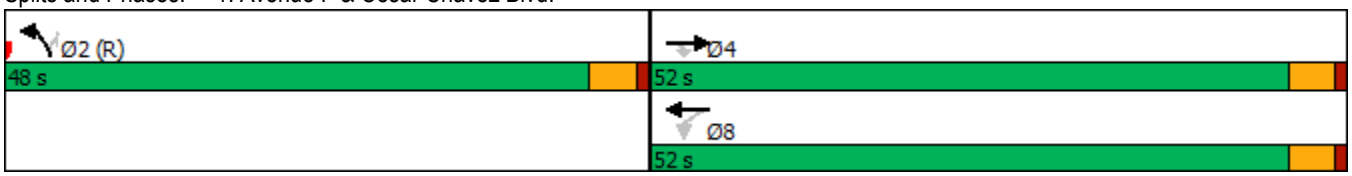
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	771	434	29	292	634	83
Future Volume (vph)	771	434	29	292	634	83
Ideal Flow (vphpl)	1500	1500	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1471	1250	1397	1667	1397	1417
Flt Permitted			0.084		0.950	
Satd. Flow (perm)	1471	1250	124	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		425				83
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	918	517	35	348	755	99
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	52.0	52.0	52.0	52.0	48.0	48.0
Total Split (%)	52.0%	52.0%	52.0%	52.0%	48.0%	48.0%
Maximum Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.44	0.44
v/c Ratio	1.32	0.63	0.60	0.44	1.24	0.15
Control Delay	178.0	7.6	66.3	19.6	151.2	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	178.0	7.6	66.3	19.6	151.2	6.8
LOS	F	A	E	B	F	A
Approach Delay	116.6			23.9	134.5	
Approach LOS	F			C	F	
Queue Length 50th (ft)	~759	32	16	142	~617	10
Queue Length 95th (ft)	#897	91	#65	197	#764	34
Internal Link Dist (ft)	1348			1472	1599	

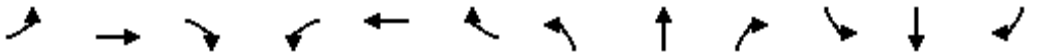
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	698	816	58	791	607	663
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.32	0.63	0.60	0.44	1.24	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.32			
Intersection Signal Delay: 109.0		Intersection LOS: F	
Intersection Capacity Utilization 103.4%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	61	60	3	68	140	57	328	0	92	336	87
Future Volume (vph)	125	61	60	3	68	140	57	328	0	92	336	87
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	250		250	0		0	250		250
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950				0.993		0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	0	1655	1667	1397	1667	1417
Flt Permitted	0.706			0.711				0.892		0.412		
Satd. Flow (perm)	1038	1667	1417	1046	1667	1417	0	1487	1667	606	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			163						101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			1357			1290			986	
Travel Time (s)		7.4			30.8			29.3			22.4	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	71	70	3	79	163	0	447	0	107	391	101
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	35.5	35.5	35.5	35.5	35.5	35.5	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	35.5	35.5	35.5	35.5	35.5	35.5		55.5		55.5	55.5	55.5
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36		0.56		0.56	0.56	0.56
v/c Ratio	0.39	0.12	0.13	0.01	0.13	0.27		0.54		0.32	0.42	0.12
Control Delay	28.2	22.5	6.0	21.0	22.7	4.8		17.2		10.6	10.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay	28.2	22.5	6.0	21.0	22.7	4.8		17.2		10.6	10.5	0.4
LOS	C	C	A	C	C	A		B		B	B	A
Approach Delay		21.4			10.8			17.3			8.8	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)	68	30	0	1	34	0		171		26	102	0
Queue Length 95th (ft)	118	58	26	7	64	37		243		m34	102	m0
Internal Link Dist (ft)		244			1277			1210			906	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	250		250				250		250
Base Capacity (vph)	368	591	548	371	591	608		825		336	925	831
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0
Reduced v/c Ratio	0.39	0.12	0.13	0.01	0.13	0.27		0.54		0.32	0.42	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 69.3%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue F & County 23 1/2 St.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	9	1	0	29	65	0	41	0	17	31	9
Future Vol, veh/h	10	9	1	0	29	65	0	41	0	17	31	9
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	13	1	0	40	90	0	57	0	24	43	13
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	8.2	7.7	8.3	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	90%	100%	100%	13%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	10%	0%	0%	87%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	41	0	10	10	0	19	75	17	31	9
LT Vol	0	0	0	10	0	0	0	0	17	0	0
Through Vol	0	41	0	0	9	0	19	10	0	31	0
RT Vol	0	0	0	0	1	0	0	65	0	0	9
Lane Flow Rate	0	57	0	14	14	0	27	104	24	43	12
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.081	0	0.022	0.02	0	0.037	0.126	0.036	0.061	0.015
Departure Headway (Hd)	5.111	5.111	5.111	5.657	5.086	4.979	4.979	4.368	5.563	5.061	4.36
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	702	0	634	705	0	721	823	645	709	822
Service Time	2.832	2.832	2.832	3.378	2.807	2.694	2.694	2.083	3.284	2.782	2.08
HCM Lane V/C Ratio	0	0.081	0	0.022	0.02	0	0.037	0.126	0.037	0.061	0.015
HCM Control Delay	7.8	8.3	7.8	8.5	7.9	7.7	7.9	7.7	8.5	8.1	7.1
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0	0.1	0.1	0	0.1	0.4	0.1	0.2	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	68	113	100	38	58
Future Vol, veh/h	102	68	113	100	38	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	74	123	109	41	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	185	0	503	148
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1390	-	528	899
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	710	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1390	-	482	899
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	670	-	-	1390	-
HCM Lane V/C Ratio	0.156	-	-	0.088	-
HCM Control Delay (s)	11.4	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	106	45	0	212	0	96
Future Vol, veh/h	106	45	0	212	0	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	49	0	230	0	104

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	370	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	630	908
Stage 1	-	-	0	-	887	-
Stage 2	-	-	0	-	808	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	630	908
Mov Cap-2 Maneuver	-	-	-	-	630	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	908	-	-	-
HCM Lane V/C Ratio	0.115	-	-	-
HCM Control Delay (s)	9.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

2028 (SIGNAL AT 23 ½)

PM

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	471	310	129	1130	518	26
Future Volume (vph)	471	310	129	1130	518	26
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1667	1417	1397	1667	1397	1417
Flt Permitted			0.373		0.950	
Satd. Flow (perm)	1667	1417	549	1667	1397	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		337				28
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	512	337	140	1228	563	28
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	38.0	38.0
Total Split (%)	62.0%	62.0%	62.0%	62.0%	38.0%	38.0%
Maximum Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.34	0.34
v/c Ratio	0.53	0.35	0.44	1.28	1.21	0.06
Control Delay	15.6	2.2	17.8	158.1	141.6	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.6	2.2	17.8	158.1	141.6	10.9
LOS	B	A	B	F	F	B
Approach Delay	10.3			143.7	135.4	
Approach LOS	B			F	F	
Queue Length 50th (ft)	188	0	48	~999	~426	2
Queue Length 95th (ft)	278	36	101	#1251	#625	21
Internal Link Dist (ft)	1348			1472	1599	

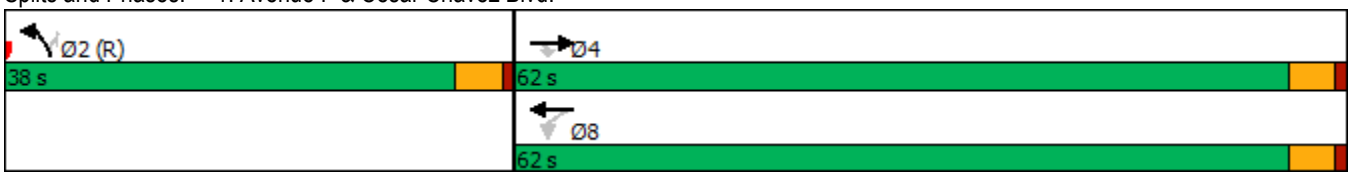
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	958	958	315	958	467	493
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.35	0.44	1.28	1.21	0.06

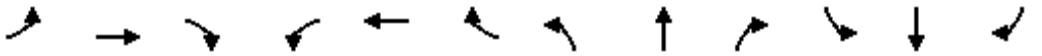
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 140			
Control Type: Pretimed			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay: 101.6		Intersection LOS: F	
Intersection Capacity Utilization 110.3%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	38	45	5	34	117	32	328	0	108	454	129
Future Volume (vph)	96	38	45	5	34	117	32	328	0	108	454	129
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1700	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	250		250	0		0	250		250
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950				0.996		0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	0	1660	1667	1397	1667	1417
Flt Permitted	0.734			0.731				0.936		0.493		
Satd. Flow (perm)	1079	1667	1417	1075	1667	1417	0	1560	1667	725	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			47			123						136
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			1357			1290			986	
Travel Time (s)		7.4			30.8			29.3			22.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	40	47	5	36	123	0	379	0	114	478	136
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	31.8	31.8	31.8	31.8	31.8	31.8	68.2	68.2	68.2	68.2	68.2	68.2
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	68.2%	68.2%	68.2%	68.2%	68.2%	68.2%
Maximum Green (s)	27.3	27.3	27.3	27.3	27.3	27.3	63.7	63.7	63.7	63.7	63.7	63.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	27.3	27.3	27.3	27.3	27.3	27.3		63.7		63.7	63.7	63.7
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27		0.64		0.64	0.64	0.64
v/c Ratio	0.34	0.09	0.11	0.02	0.08	0.26		0.38		0.25	0.45	0.14
Control Delay	33.2	27.9	9.0	27.0	27.7	6.8		10.1		7.5	9.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay	33.2	27.9	9.0	27.0	27.7	6.8		10.1		7.5	9.0	0.5
LOS	C	C	A	C	C	A		B		A	A	A
Approach Delay		26.0			12.0			10.1			7.2	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)	52	19	0	2	17	0		105		22	127	1
Queue Length 95th (ft)	100	45	28	11	42	42		162		45	194	3
Internal Link Dist (ft)		244			1277			1210			906	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	250		250				250		250
Base Capacity (vph)	294	455	421	293	455	476		993		461	1061	951
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0
Reduced v/c Ratio	0.34	0.09	0.11	0.02	0.08	0.26		0.38		0.25	0.45	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue F & County 23 1/2 St.

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	87	29	49	147	24	36
Future Vol, veh/h	87	29	49	147	24	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	32	53	160	26	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	377	111
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	266	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1459	-	625	942
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	603	942
Mov Cap-2 Maneuver	-	-	-	-	603	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	769	-	-	1459	-
HCM Lane V/C Ratio	0.085	-	-	0.037	-
HCM Control Delay (s)	10.1	-	-	7.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	123	21	0	196	0	60
Future Vol, veh/h	123	21	0	196	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	23	0	213	0	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	359	146
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	640	901
Stage 1	-	-	0	-	881	-
Stage 2	-	-	0	-	823	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	640	901
Mov Cap-2 Maneuver	-	-	-	-	640	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	823	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	901	-	-	-
HCM Lane V/C Ratio	0.072	-	-	-
HCM Control Delay (s)	9.3	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	8	3	0	27	40	0	26	0	30	29	13
Future Vol, veh/h	8	8	3	0	27	40	0	26	0	30	29	13
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	9	3	0	29	43	0	28	0	32	31	14
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	7.8	7.4	7.8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	73%	100%	100%	18%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	27%	0%	0%	82%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	26	0	8	11	0	18	49	30	29	13
LT Vol	0	0	0	8	0	0	0	0	30	0	0
Through Vol	0	26	0	0	8	0	18	9	0	29	0
RT Vol	0	0	0	0	3	0	0	40	0	0	13
Lane Flow Rate	0	28	0	9	12	0	19	53	32	31	14
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.038	0	0.013	0.016	0	0.026	0.063	0.047	0.041	0.016
Departure Headway (Hd)	4.932	4.932	4.932	5.456	4.764	4.866	4.866	4.294	5.246	4.746	4.045
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	729	0	659	755	0	740	839	675	745	870
Service Time	2.638	2.638	2.638	3.161	2.469	2.57	2.57	1.997	3.039	2.538	1.837
HCM Lane V/C Ratio	0	0.038	0	0.014	0.016	0	0.026	0.063	0.047	0.042	0.016
HCM Control Delay	7.6	7.8	7.6	8.2	7.5	7.6	7.7	7.3	8.3	7.7	6.9
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0	0	0	0	0.1	0.2	0.1	0.1	0

2028 (SIGNAL AT 23 ½ AND CESAR CHAVEZ IMPROVED)

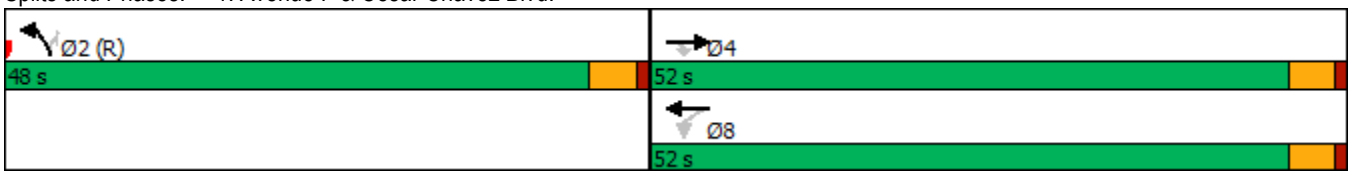
AM

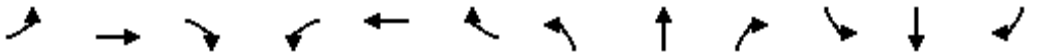
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	771	434	29	292	634	83
Future Volume (vph)	771	434	29	292	634	83
Ideal Flow (vphpl)	1500	1500	1500	1700	1500	1700
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	2794	1250	1397	3167	2710	1417
Flt Permitted			0.214		0.950	
Satd. Flow (perm)	2794	1250	315	3167	2710	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		517				83
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	918	517	35	348	755	99
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	52.0	52.0	52.0	52.0	48.0	48.0
Total Split (%)	52.0%	52.0%	52.0%	52.0%	48.0%	48.0%
Maximum Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	47.5	47.5	47.5	47.5	43.5	43.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.44	0.44
v/c Ratio	0.69	0.60	0.23	0.23	0.64	0.15
Control Delay	23.9	4.7	20.7	16.0	25.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	4.7	20.7	16.0	25.5	6.8
LOS	C	A	C	B	C	A
Approach Delay	17.0			16.4	23.4	
Approach LOS	B			B	C	
Queue Length 50th (ft)	232	0	13	66	198	10
Queue Length 95th (ft)	274	37	33	88	218	34
Internal Link Dist (ft)	1348			1472	1599	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	1327	865	149	1504	1178	663
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.60	0.23	0.23	0.64	0.15

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 60.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	61	60	3	68	140	57	328	0	92	336	87
Future Volume (vph)	125	61	60	3	68	140	57	328	0	92	336	87
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1500	1700	1700	1500	1700	1700
Storage Length (ft)	250		250	250		250	0		0	250		250
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950				0.993		0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	0	1655	1667	1397	1667	1417
Flt Permitted	0.706			0.711				0.892		0.412		
Satd. Flow (perm)	1038	1667	1417	1046	1667	1417	0	1487	1667	606	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			163						101
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			1357			1290			986	
Travel Time (s)		7.4			30.8			29.3			22.4	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	71	70	3	79	163	0	447	0	107	391	101
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Maximum Green (s)	35.5	35.5	35.5	35.5	35.5	35.5	55.5	55.5	55.5	55.5	55.5	55.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	35.5	35.5	35.5	35.5	35.5	35.5		55.5		55.5	55.5	55.5
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.36		0.56		0.56	0.56	0.56
v/c Ratio	0.39	0.12	0.13	0.01	0.13	0.27		0.54		0.32	0.42	0.12
Control Delay	28.2	22.5	6.0	21.0	22.7	4.8		17.2		12.4	12.2	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay	28.2	22.5	6.0	21.0	22.7	4.8		17.2		12.4	12.2	1.1
LOS	C	C	A	C	C	A		B		B	B	A
Approach Delay		21.4			10.8			17.3			10.4	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	68	30	0	1	34	0		171		32	127	0
Queue Length 95th (ft)	118	58	26	7	64	37		243		m45	126	m6
Internal Link Dist (ft)		244			1277			1210			906	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)	250		250	250		250				250		250
Base Capacity (vph)	368	591	548	371	591	608		825		336	925	831
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0
Reduced v/c Ratio	0.39	0.12	0.13	0.01	0.13	0.27		0.54		0.32	0.42	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 14.4		Intersection LOS: B	
Intersection Capacity Utilization 69.3%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Avenue F & County 23 1/2 St.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	9	1	0	29	65	0	41	0	17	31	9
Future Vol, veh/h	10	9	1	0	29	65	0	41	0	17	31	9
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	13	1	0	40	90	0	57	0	24	43	13
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	8.2	7.7	8.3	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	90%	100%	100%	13%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	10%	0%	0%	87%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	41	0	10	10	0	19	75	17	31	9
LT Vol	0	0	0	10	0	0	0	0	17	0	0
Through Vol	0	41	0	0	9	0	19	10	0	31	0
RT Vol	0	0	0	0	1	0	0	65	0	0	9
Lane Flow Rate	0	57	0	14	14	0	27	104	24	43	12
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.081	0	0.022	0.02	0	0.037	0.126	0.036	0.061	0.015
Departure Headway (Hd)	5.111	5.111	5.111	5.657	5.086	4.979	4.979	4.368	5.563	5.061	4.36
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	702	0	634	705	0	721	823	645	709	822
Service Time	2.832	2.832	2.832	3.378	2.807	2.694	2.694	2.083	3.284	2.782	2.08
HCM Lane V/C Ratio	0	0.081	0	0.022	0.02	0	0.037	0.126	0.037	0.061	0.015
HCM Control Delay	7.8	8.3	7.8	8.5	7.9	7.7	7.9	7.7	8.5	8.1	7.1
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.3	0	0.1	0.1	0	0.1	0.4	0.1	0.2	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	68	113	100	38	58
Future Vol, veh/h	102	68	113	100	38	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	74	123	109	41	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	185	0	503	148
Stage 1	-	-	-	-	148	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1390	-	528	899
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	710	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1390	-	482	899
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	670	-	-	1390	-
HCM Lane V/C Ratio	0.156	-	-	0.088	-
HCM Control Delay (s)	11.4	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.3	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	106	45	0	212	0	96
Future Vol, veh/h	106	45	0	212	0	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	49	0	230	0	104

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	370	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	630	908
Stage 1	-	-	0	-	887	-
Stage 2	-	-	0	-	808	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	630	908
Mov Cap-2 Maneuver	-	-	-	-	630	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	908	-	-	-
HCM Lane V/C Ratio	0.115	-	-	-
HCM Control Delay (s)	9.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.4	-	-	-

2028 (SIGNAL AT 23 ½ AND CESAR CHAVEZ IMPROVED)

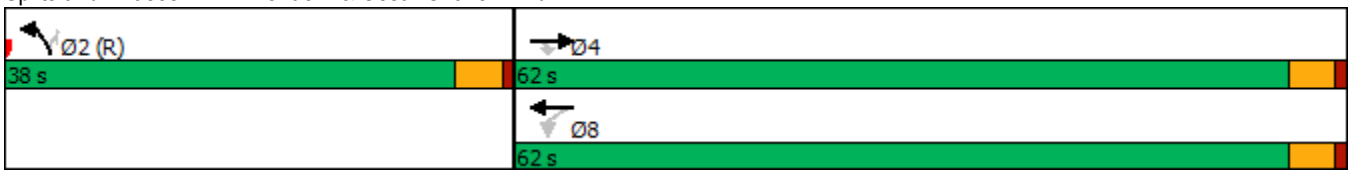
PM

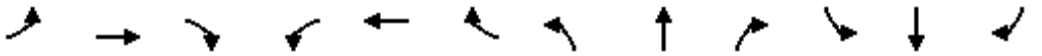
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	471	310	129	1130	518	26
Future Volume (vph)	471	310	129	1130	518	26
Ideal Flow (vphpl)	1700	1700	1500	1700	1500	1700
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		250	275		0	250
Storage Lanes		1	1		2	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3167	1417	1397	3167	2710	1417
Flt Permitted			0.439		0.950	
Satd. Flow (perm)	3167	1417	646	3167	2710	1417
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		337				28
Link Speed (mph)	30			30	30	
Link Distance (ft)	1428			1552	1679	
Travel Time (s)	32.5			35.3	38.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
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%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	512	337	140	1228	563	28
Turn Type	NA	Perm	Perm	NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	8	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	62.0	62.0	62.0	62.0	38.0	38.0
Total Split (%)	62.0%	62.0%	62.0%	62.0%	38.0%	38.0%
Maximum Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	57.5	57.5	57.5	57.5	33.5	33.5
Actuated g/C Ratio	0.58	0.58	0.58	0.58	0.34	0.34
v/c Ratio	0.28	0.35	0.38	0.67	0.62	0.06
Control Delay	11.3	2.2	15.3	17.1	31.1	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	2.2	15.3	17.1	31.1	10.9
LOS	B	A	B	B	C	B
Approach Delay	7.7			16.9	30.1	
Approach LOS	A			B	C	
Queue Length 50th (ft)	81	0	45	267	156	2
Queue Length 95th (ft)	111	36	91	342	208	21
Internal Link Dist (ft)	1348			1472	1599	
Turn Bay Length (ft)		250	275			250
Base Capacity (vph)	1821	958	371	1821	907	493
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.35	0.38	0.67	0.62	0.06

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Avenue F & Cesar Chavez Blvd.





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	38	45	5	34	117	32	328	0	108	454	129
Future Volume (vph)	96	38	45	5	34	117	32	328	0	108	454	129
Ideal Flow (vphpl)	1500	1700	1700	1500	1700	1700	1700	1700	1700	1500	1700	1700
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		250	250		250	0		0	250		250
Storage Lanes	1		1	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950				0.996		0.950		
Satd. Flow (prot)	1397	1667	1417	1397	1667	1417	0	1660	1667	1397	1667	1417
Flt Permitted	0.734			0.731				0.936		0.493		
Satd. Flow (perm)	1079	1667	1417	1075	1667	1417	0	1560	1667	725	1667	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			47			123						136
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			1357			1290			986	
Travel Time (s)		7.4			30.8			29.3			22.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	40	47	5	36	123	0	379	0	114	478	136
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	4	4	4	8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	31.8	31.8	31.8	31.8	31.8	31.8	68.2	68.2	68.2	68.2	68.2	68.2
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	68.2%	68.2%	68.2%	68.2%	68.2%	68.2%
Maximum Green (s)	27.3	27.3	27.3	27.3	27.3	27.3	63.7	63.7	63.7	63.7	63.7	63.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	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
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (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
Minimum Gap (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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	27.3	27.3	27.3	27.3	27.3	27.3		63.7		63.7	63.7	63.7
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27		0.64		0.64	0.64	0.64
v/c Ratio	0.34	0.09	0.11	0.02	0.08	0.26		0.38		0.25	0.45	0.14
Control Delay	33.2	27.9	9.0	27.0	27.7	6.8		10.1		7.5	9.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay	33.2	27.9	9.0	27.0	27.7	6.8		10.1		7.5	9.1	0.5
LOS	C	C	A	C	C	A		B		A	A	A
Approach Delay		26.0			12.0			10.1			7.3	
Approach LOS		C			B			B			A	
Queue Length 50th (ft)	52	19	0	2	17	0		105		22	132	0
Queue Length 95th (ft)	100	45	28	11	42	42		162		46	203	3
Internal Link Dist (ft)		244			1277			1210			906	
Turn Bay Length (ft)	250		250	250		250				250		250
Base Capacity (vph)	294	455	421	293	455	476		993		461	1061	951
Starvation Cap Reductn	0	0	0	0	0	0		0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0		0	0	0
Reduced v/c Ratio	0.34	0.09	0.11	0.02	0.08	0.26		0.38		0.25	0.45	0.14

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Avenue F & County 23 1/2 St.

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	87	29	49	147	24	36
Future Vol, veh/h	87	29	49	147	24	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	32	53	160	26	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	377	111
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	266	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1459	-	625	942
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	603	942
Mov Cap-2 Maneuver	-	-	-	-	603	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	769	-	-	1459	-
HCM Lane V/C Ratio	0.085	-	-	0.037	-
HCM Control Delay (s)	10.1	-	-	7.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	123	21	0	196	0	60
Future Vol, veh/h	123	21	0	196	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	23	0	213	0	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	359	146
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	0	-	640	901
Stage 1	-	-	0	-	881	-
Stage 2	-	-	0	-	823	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	640	901
Mov Cap-2 Maneuver	-	-	-	-	640	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	823	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	901	-	-	-
HCM Lane V/C Ratio	0.072	-	-	-
HCM Control Delay (s)	9.3	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	8	3	0	27	40	0	26	0	30	29	13
Future Vol, veh/h	8	8	3	0	27	40	0	26	0	30	29	13
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	9	3	0	29	43	0	28	0	32	31	14
Number of Lanes	1	1	0	1	2	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	7.8	7.4	7.8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	100%	0%	73%	100%	100%	18%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	27%	0%	0%	82%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	26	0	8	11	0	18	49	30	29	13
LT Vol	0	0	0	8	0	0	0	0	30	0	0
Through Vol	0	26	0	0	8	0	18	9	0	29	0
RT Vol	0	0	0	0	3	0	0	40	0	0	13
Lane Flow Rate	0	28	0	9	12	0	19	53	32	31	14
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.038	0	0.013	0.016	0	0.026	0.063	0.047	0.041	0.016
Departure Headway (Hd)	4.932	4.932	4.932	5.456	4.764	4.866	4.866	4.294	5.246	4.746	4.045
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	729	0	659	755	0	740	839	675	745	870
Service Time	2.638	2.638	2.638	3.161	2.469	2.57	2.57	1.997	3.039	2.538	1.837
HCM Lane V/C Ratio	0	0.038	0	0.014	0.016	0	0.026	0.063	0.047	0.042	0.016
HCM Control Delay	7.6	7.8	7.6	8.2	7.5	7.6	7.7	7.3	8.3	7.7	6.9
HCM Lane LOS	N	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.1	0	0	0	0	0.1	0.2	0.1	0.1	0

APPENDIX D

Accident data, analysis, and summaries

Accidents By Location Report

Print Date/Time: 09/30/2021 13:14
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: CESAR CHAVEZ BLVD

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Resits
E CESAR CHAVEZ BLVD	2019-00023500	10/09/2019 13:11	1	1		
E CESAR CHAVEZ BLVD	2019-00028333	12/10/2019 15:14	2	0		
E CESAR CHAVEZ BLVD	2019-00029244	12/20/2019 17:29	2	0		
E CESAR CHAVEZ BLVD	2020-00000873	01/11/2020 22:40	2	0		
E CESAR CHAVEZ BLVD	2020-00006020	03/12/2020 17:02	2	0		
E CESAR CHAVEZ BLVD	2020-00016123	08/10/2020 19:48	2	1		
E CESAR CHAVEZ BLVD	2020-00025947	12/10/2020 06:36	3	1		
E CESAR CHAVEZ BLVD	2021-00002308	01/26/2021 17:01	3	0		
E CESAR CHAVEZ BLVD	2021-00003067	02/03/2021 20:13	2	1		
E CESAR CHAVEZ BLVD	2021-00004190	02/16/2021 17:55	2			
E CESAR CHAVEZ BLVD	2021-00007462	03/22/2021 16:39	3	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 17						
E CESAR CHAVEZ BLVD @ N AVE G	2021-00006420	03/11/2021 16:23	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
E CESAR CHAVEZ BLVD @ N E 1/2 AVE	2021-00008263	03/30/2021 17:05	2	0		

One (1) accident found by Ave E 1/2 - see highlight

Accidents By Location Report

Print Date/Time: 09/30/2021 13:30
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: JUAN SANCHEZ BLVD

TOTAL ACCIDENTS AT ABOVE LOCATION: 1

N 9TH AVE @ E JUAN SANCHEZ BLVD	2017-00026203	12/14/2017 17:54	2	0	

TOTAL ACCIDENTS AT ABOVE LOCATION: 1

N AVE E @ E JUAN SANCHEZ BLVD BLVD @ AVE E	2017-00011896	06/08/2017 10:40	2	0	One (1) accident reported by Ave E and former Juan Sanchez Blvd - now Cesar Chavez

Accidents By Location Report

Print Date/Time: 09/30/2021 12:53
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: AVE E

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Reslts
S AVE E / S SR 195 HWY	2020-00006439	03/16/2020 18:26	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 23 1/2 ST @ AVE E ST	2014-00021122	09/08/2014 13:28	2	0		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
N AVE E @ E JUAN SANCHEZ BLVD BLVD @ AVE E	2017-00011896	06/08/2017 10:40	2	0		. .
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						

TOTAL ACCIDENTS FOR ORI : 3

Accidents By Location Report

Print Date/Time: 09/30/2021 12:55
Login ID: ebonilla
Injury: All

From Date: 01/01/2008 00:00
To Date: 09/30/2021 23:59

San Luis Police Department
ORI Number: AZ0140800
Location: COUNTY 24TH

Location	Accident #	Date/Time	# of Units	# of Injured	Property Damage Description	BAC Test Reslts
4200 W COUNTY 24TH ST S	2021-00017599	07/08/2021 15:01	2	1		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 24TH ST @ "G" ST	2015-00024705	11/24/2015 17:16	1	1		
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
COUNTY 24TH ST @ AVE I	2017-00027228	12/29/2017 15:47	1	0		.
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
E COUNTY 24TH ST @ N 10TH AVE	2017-00001297	01/18/2017 20:31	1	5		.
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						
N PRIVATE PROPERTY AVE @ W COUNTY 24TH ST	2021-00014787	06/08/2021 08:43	1			
TOTAL ACCIDENTS AT ABOVE LOCATION: 1						

TOTAL ACCIDENTS FOR ORI : 5

One (1) accident as shown highlighted

APPENDIX E

Traffic Signal Warrant Analysis

Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	San Luis Elementary - Signal Warrant
Project/File #	020-0247
Scenario	Projected 2031

Intersection Information			
Major Street (N/S Road)	Avenue F	Minor Street (E/W Road)	County 23 1/2 St.
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	776 vehicles	Total Approach Volume	435 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

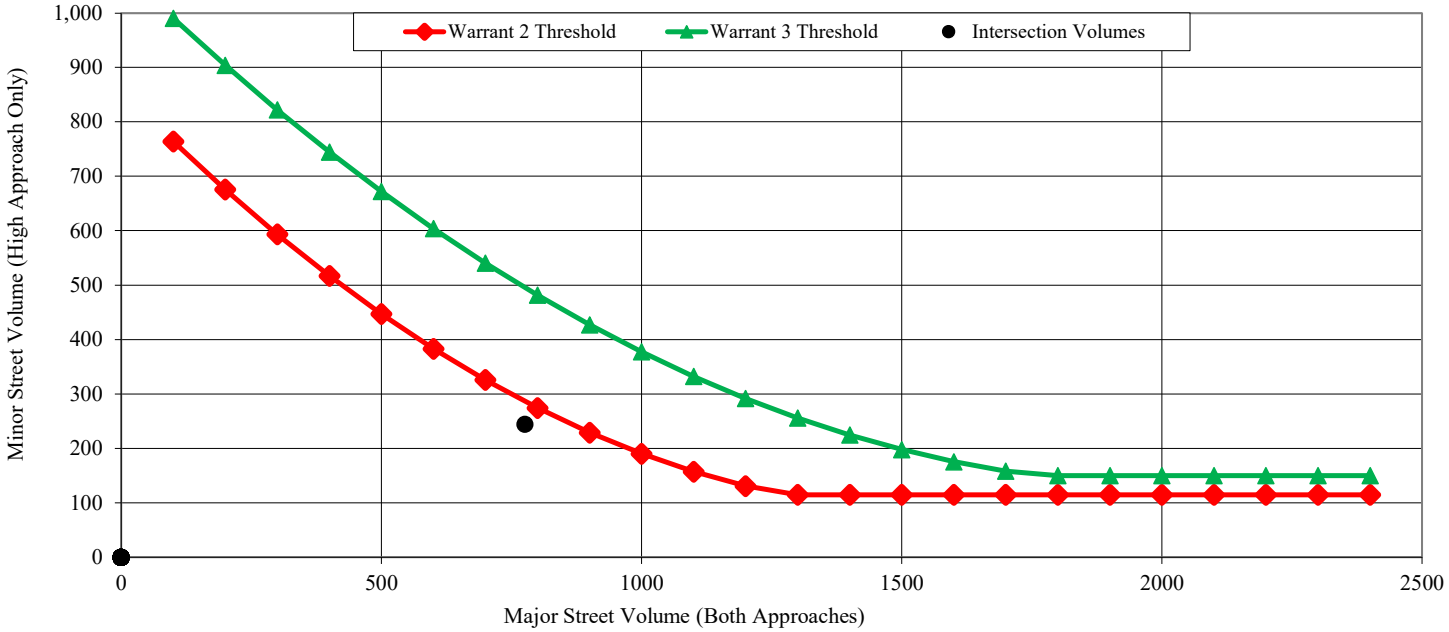
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	**Condition B**	**Condition A+B***
Condition Satisfied?	**Not Satisfied**	**Not Satisfied**	**Not Satisfied**
Required values reached for	1 hour	0 hours	1 (Cond. A) & 1 (Cond. B)
Criteria - Major Street (veh/hr)	600	900	480 (Cond. A) & 720 (Cond. B)
Criteria - Minor Street (veh/hr)	200	100	160 (Cond. A) & 80 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	**Not Satisfied**
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	**Condition B**
Condition Satisfied?	**Satisfied**	**Not Satisfied**
Required values reached for	1211 total, 244 minor, 8.8 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	100	
Criteria - Minor Street High Side Delay (veh-hrs)	4	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)



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AGENDA ITEM REVIEW FORM

Special City Council Meeting **6. G.**

Meeting Date: 01/25/2023

Department Head: Kay Macuil, City Attorney, Attorney's Office

Submitted By: Kay Macuil, City Attorney, Attorney's Office

Action Requested: Motion
Resolution

ITEM:

Discussion and possible action on any and all matters regarding Resolution No. 2242. A resolution of the Mayor and City Council of the City of San Luis, Arizona amending section HR-4-03(A) of the City of San Luis Personnel Policies relating to holidays; repealing conflicting provisions and providing for severability. **(Ralph Velez, Interim City Manager)**

SUMMARY:

This item was continued from the December 7, 2022, Special Council Meeting. The resolution:

- removes Columbus Day (the second Monday in October),
- adds Native American Heritage Day (the day after Thanksgiving), and
- removes COVID-19 Pandemic Remembrance Day as a paid holiday but retains it as a remembrance day.

RECOMMENDATION / SUGGESTED MOTION:

I MOVE TO APPROVE AND ADOPT RESOLUTION NO. 2242.

Fiscal Impact

IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:	No
CITY/STATE/FEDERAL FUNDS:	N/A
TOTAL:	N/A
BUDGETED AMOUNT:	N/A
AVAILABLE AMOUNT TO TRANSFER:	N/A
ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:	N/A

FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):

There is no discernable fiscal impact associated with this item.

Attachments

Res 2242 Paid Holidays

OFFICE OF THE
MAYOR
CITY OF SAN LUIS

Resolution

No. 2242

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, AMENDING SECTION HR-4-03(A) OF THE CITY OF SAN LUIS PERSONNEL POLICIES RELATING TO HOLIDAYS, REPEALING CONFLICTING PROVISIONS, AND PROVIDING FOR SEVERABILITY.

WHEREAS, this resolution removes the second Monday in October (Columbus Day) as a paid holiday; and

WHEREAS, On June 26, 2009, the United States Congress passed a Joint Resolution signed by the President designating the day after Thanksgiving as Native American Heritage Day; and

WHEREAS, this resolution adds the fourth Friday in November, Native American Heritage Day, as a paid holiday; and

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of San Luis, Arizona:

Section 1: The last Monday in October, COVID-19 Pandemic Remembrance Day, shall remain a day of reflection and gratitude for the essential workers' and first responders' dedication to service and their sacrifices during the pandemic; but it shall not be a City service holiday under the Personnel Policies.

Section 2: Section HR-4-03(A) of the City of San Luis Personnel Policies is deleted and replaced to read as follows:

HR-4-03 Holidays.

A. **City service holidays**. Holidays shall be observed on the day they occur
   1. unless the Holiday falls on a Saturday, then the Holiday will be observed the Friday preceding the Saturday or
   2. unless the Holiday falls on a Sunday, then the Holiday will be observed the following Monday.

The city observes 11 holidays as follows:

1.	January 1st	"New Year's Day"
2.	3rd Monday in January	"Martin Luther King, Jr. / Civil Rights Day"
3.	3rd Monday in February	"Lincoln-Washington / Presidents' Day"
4.	March 31st	"César Chávez Day"
5.	Last Monday in May	"Memorial Day"
6.	July 4th	"Independence Day"
7.	1st Monday in September	"Labor Day"
8.	November 11th	"Veterans' Day"
9.	4th Thursday in November	"Thanksgiving Day"
10.	4th Friday in November	"Native American Heritage Day"
11.	December 25th	"Christmas Day"

Section 3: City officers and employees are authorized and directed to perform all acts necessary or desirable to give effect to this resolution.

Section 4: If a conflict arises between the provisions of this Resolution No. 2235 and any other ordinance, resolution, regulation, or policy of the city of San Luis, the conflicting provisions are amended, superseded, and replaced, and this resolution shall govern.

Section 5: If any section, subsection, paragraph, sentence clause, phrase, or portion of this resolution is held to be invalid or unconstitutional by the final decision of any court of competent jurisdiction or operation of law by binding legislation, such decision or legislation shall not affect the validity of the remaining portion of this resolution.

PASSED, ADOPTED, and APPROVED by the Mayor and City Council of the City of San Luis, Yuma County, Arizona, this ____ day of December 2022.

_____
Nieves Riedel, Mayor

ATTEST:

_____
Sonia Cornelio, City Clerk

APPROVED AS TO FORM:

_____
Kay Marion Macuil, City Attorney