



Coyote Gravel Inc., Secondary Site

(Albuquerque, New Mexico)

Draft Traffic Impact Study

November 27, 2024

DRAFT



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**Coyote Gravel, Inc. Secondary Site
SR 303/2nd St South of Woodward Rd.
Draft Traffic Impact Study**

Executive Summary

The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed Coyote Gravel, Inc. Secondary Site, to determine the impact of the site development on the adjacent transportation system, and then recommend improvements to mitigate those impacts where necessary. This TIS is prepared in accordance with the requirements set forth by the City of Albuquerque (COA) and Bernalillo County.

Project Location

The proposed Coyote Gravel, Inc. Secondary Site will be located along the westside of SR 303/2nd St SW, approximately 1770 ft south of Woodward Rd., and approximately 6280 ft north of SR 500/Rio Bravo Blvd. SW in the City of Albuquerque, New Mexico. See Figure 1: Coyote Gravel, Inc. Secondary Site Vicinity Map.



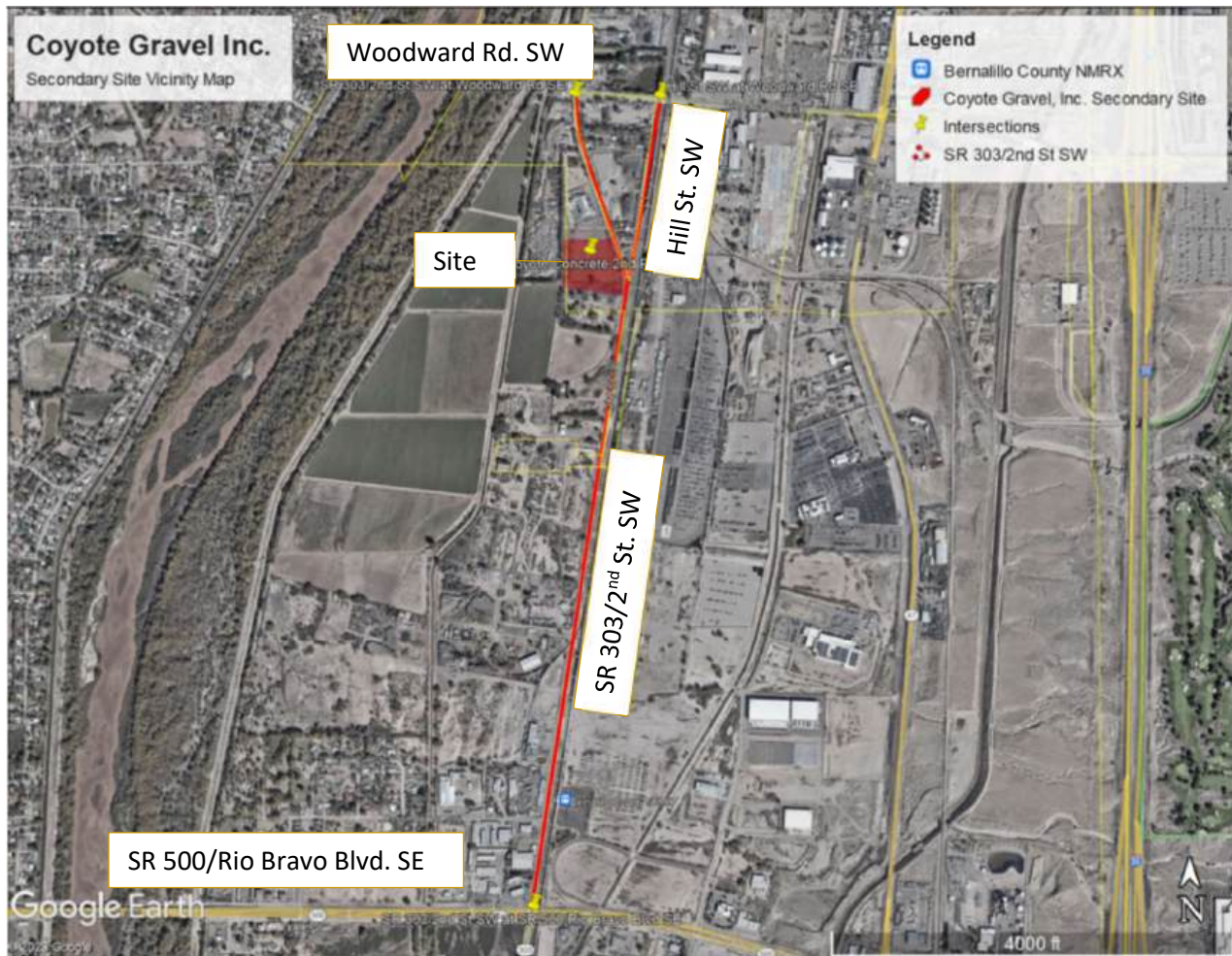


Figure 1: Coyote Gravel, Inc. Secondary Site Vicinity Map

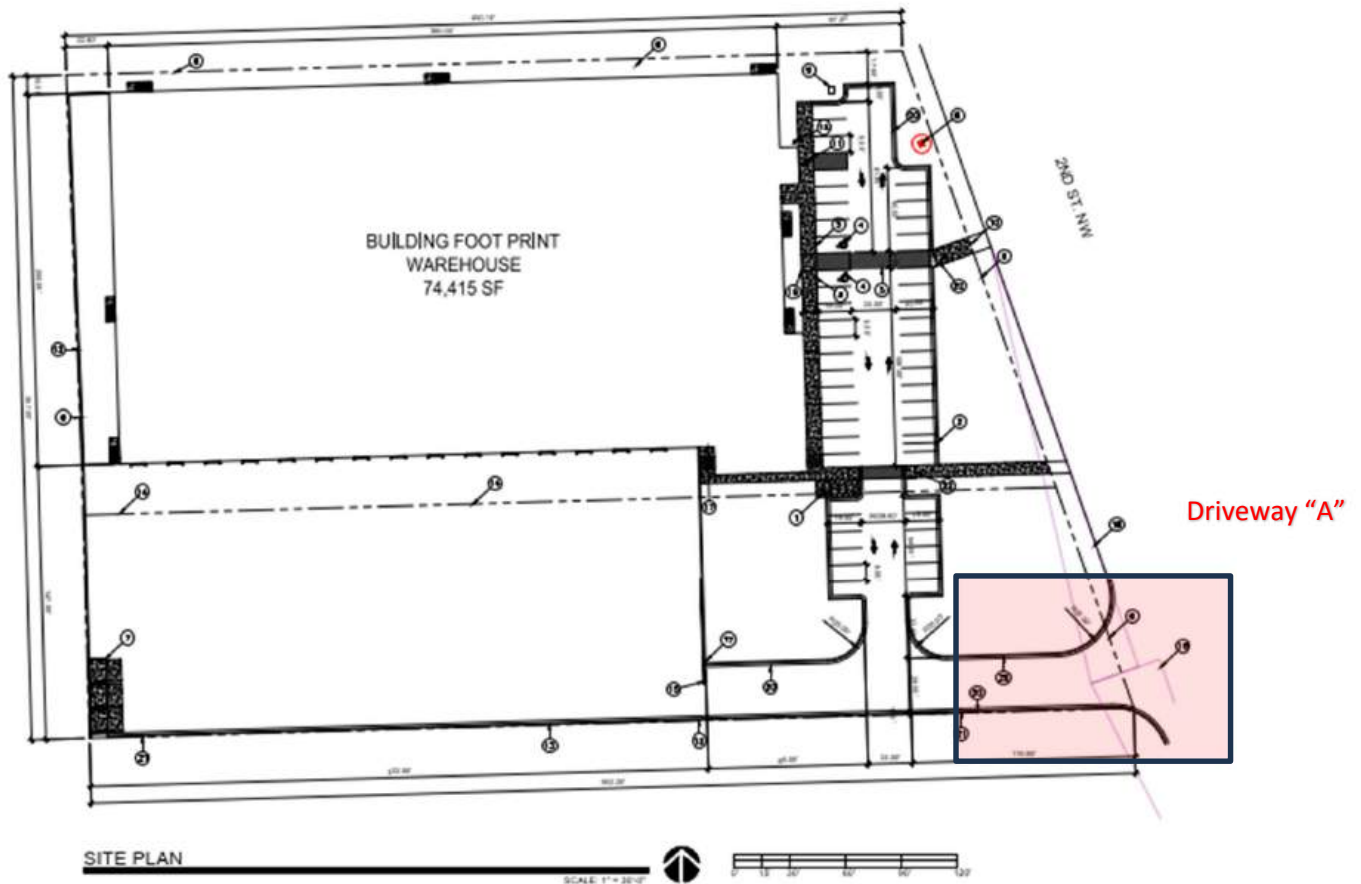
Proposed Study Area

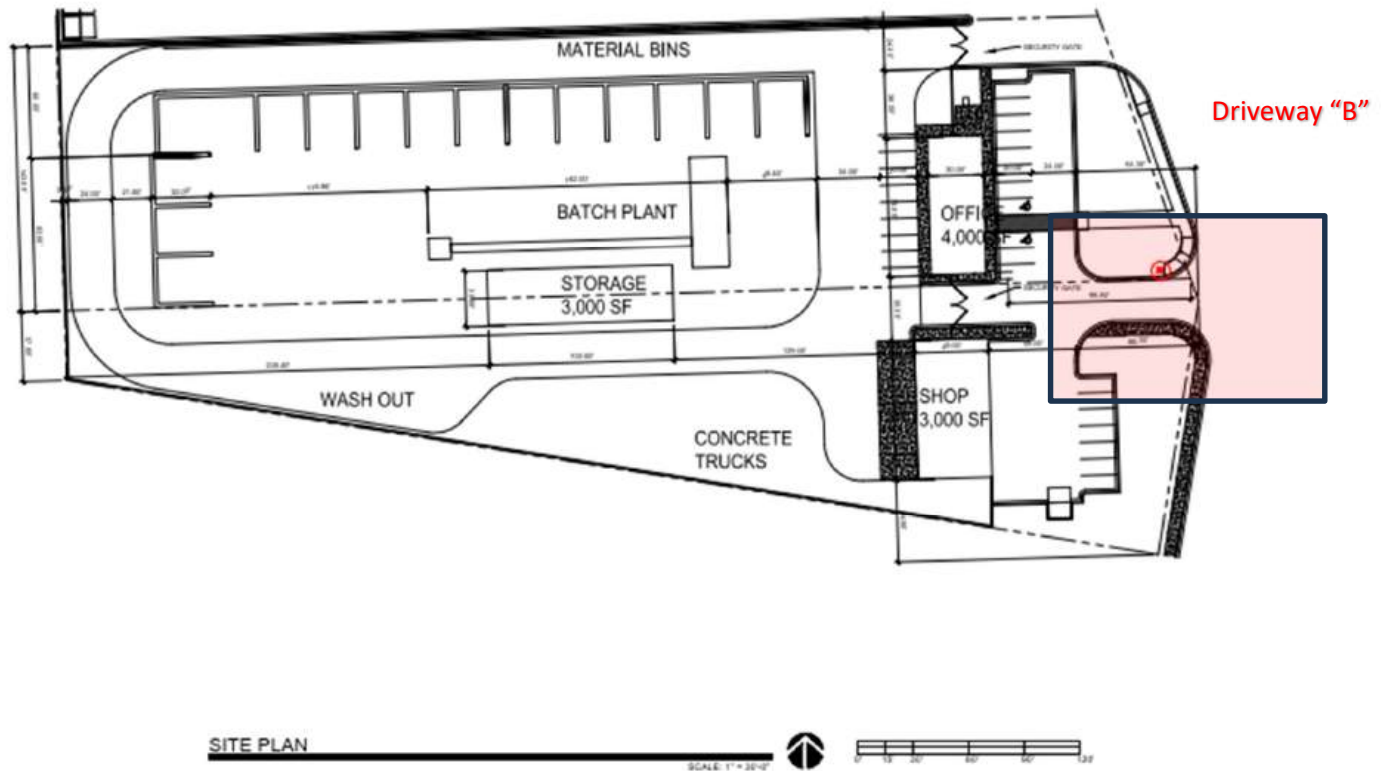
The study area includes the two signalized intersections and one shared unsignalized intersection and access point, and one access point for the Coyote Gravel, Inc. Secondary Site shown on Figure 1: Coyote Gravel, Inc. Secondary Site Vicinity Map and listed below:

1. Woodward Rd. SW at SR 303/2nd St. SW (Signalized)
2. Hill St. SW/Driveway "B" at SR 303/2nd St. SW (Unsignalized Site Access)
3. SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW (Signalized)
4. Driveway "A" at SR 303/2nd St. SW (Unsignalized Site Access)

Proposed Site Description

The approximately 9.3-acre Coyote Gravel Inc. is proposed to be fully developed for the Implementation Year of 2025 and evaluated for the Horizon Year of 2035. The proposed site is to be developed with 85,000 sq. ft of enclosed building floor area. The proposed site plan is shown on the next page and in Appendix 03.





Trip Generation

The ITE Codes used for the proposed Coyote Gravel, Inc. Secondary Site include the following: ITE Code 180 (Specialty Trade Contractor). Table 1: Trip Generations Data summary is below and attached in Appendix 04.

Table 1: Trip Generations Data

Coyote Gravel Products, Inc. (3053 2nd Street NW)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.		
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT	
Summary Sheet		Units					
Specialty Trade Contractor		85.00	792	104	37	52	112
Total Primary Trips				104	37	52	112

No adjustments were made to account for pass-by trips or internal capture trips.

Intersection Analysis Result Summary

The analysis was performed to comply with the requirements set forth by the City of Albuquerque and Bernalillo County. The results of the Implementation Year (2025) and Horizon Year (2035) AM Peak Hour (APH) and PM Peak Hour (PPH) NO BUILD and BUILD conditions are summarized in Table 2: Intersection LOS Analysis Summary Table. All intersections within the study area are performing at a level of service (LOS) E or above, although some intersection turning movements are performing at a LOS F. The following is a summary table of the results of this analysis.

Table 2: Intersection LOS Analysis Summary Table

Intersection LOS Analysis Summary Table **Coyote Gravel Inc. Secondary Site** **(Albuquerque, NM)**

	Intersection Description	Intersection Operation	Case Evaluation	Implementation Year (2025) Conditions		Horizon Year (2035) Conditions	
				AM Peak LOS Delays (s)	PM Peak LOS Delays (s)	AM Peak LOS Delays (s)	PM Peak LOS Delays (s)
1	Woodward Rd. / SR 303-2nd St.	Signalized	No Build	C (32.7)	B (16.0)	D (39.2)	B (16.8)
			Build	C (23.1)	B (16.8)	D (41.2)	B (17.1)
2	Hill St-Driveway "B" / SR 303-2nd St.	Unsignalized	No Build	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			Build	A (0.4)	A (0.8)	A (0.4)	A (0.8)
3	SR 500-Rio Bravo Blvd. / SR 303-2nd St.	Signalized	No Build	C (30.9)	D (35.4)	D (38.5)	E (59.6)
			Build	C (30.9)	D (42.2)	D (38.7)	E (59.4)
4	Driveway "A" / SR 303-2nd St.	Unsignalized	No Build	-	-	-	-
			Build	A (0.4)	A (1.3)	A (0.4)	A (1.3)

Mitigation Analysis

The proposed secondary site does not impose any significant additional strain on the traffic flow, traffic density, and traffic delays. The site location has minimal impact on neighboring facilities and does not pose any significant safety issues such as stopping sight distance (SSD) or entering sight distance (ESD). Supplemental information regarding the intersection of Hill St./Driveway "B" at SR 303/2nd St. is in the Appendix, including a deceleration lane analysis.

Recommendations

Based on this analysis which includes adding two additional driveways to the principal arterial roadway of SR 303/2nd St., this project imposes no significant additional adverse impacts on the adjacent roadway system. The additional trips generated by the proposed Coyote Gravel, Inc. Secondary Site, have no significant adverse impact on the performance of the adjacent roadway system.

It is suggested the Bernalillo County consider restriping the intersection of SR 500/Rio Bravo Blvd. at SR 303/2nd St. to improve lane awareness and delineate crosswalks. The faded striping is not a result of the impact of this development, and therefore should not be required of this developer. Regulations are in place by the Federal Aviation Administration regarding the installation of reflective pavement markings, traffic signs, and roadway lighting in order to protect the safety of aircraft operators. The proposed site location is within the Airport Protection Overlay zone for the entire parcel. The recommendation for striping is for areas within the zone must meet the United States Department of Transportation Federal Aviation Administration 'Advisory Circular' Chapter 5. Other Surface Markings Section 5.2 Vehicle Roadway Markings.

All construction on this project shall maintain adequate sight distances at the proposed driveways and existing intersections.



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Introduction

Purpose of the Analysis

The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed Coyote Gravel Inc., to determine the impact of the development on the adjacent transportation system, and then recommend improvements where necessary. This study is prepared in accordance with the requirements of the City of Albuquerque (COA), and Bernalillo County.

Project Scope

The traffic impact study (TIS) scoping meeting was held on March 28, 2024. The attendees include Matthew Grush, P.E. (City of Albuquerque), Curtis Cherne, P.E. (City of Albuquerque), Julie Luna, P.E. (Bernalillo County), Ronald R. Bohannon, P.E. (Tierra West LLC.), Terry Brown P.E. (Tierra West LLC.), and Jimeia Roberts (Tierra West LLC.). During the scoping meeting the study area was defined, crash analysis was determined to be included in the study, the implementation year was assigned, and traffic count parameters were established. The scoping letter is available in Appendix 02.

Project Study Area Conditions

The proposed Coyote Gravel, Inc. Secondary Site will be located approximately 1770 ft. south of Woodward Rd., and north of SR 500/Rio Bravo Blvd. SW along the west side of SR 303/2nd St. SW in the City of Albuquerque, New Mexico. See Figure 2: Vicinity Map below and attached in Appendix 01.



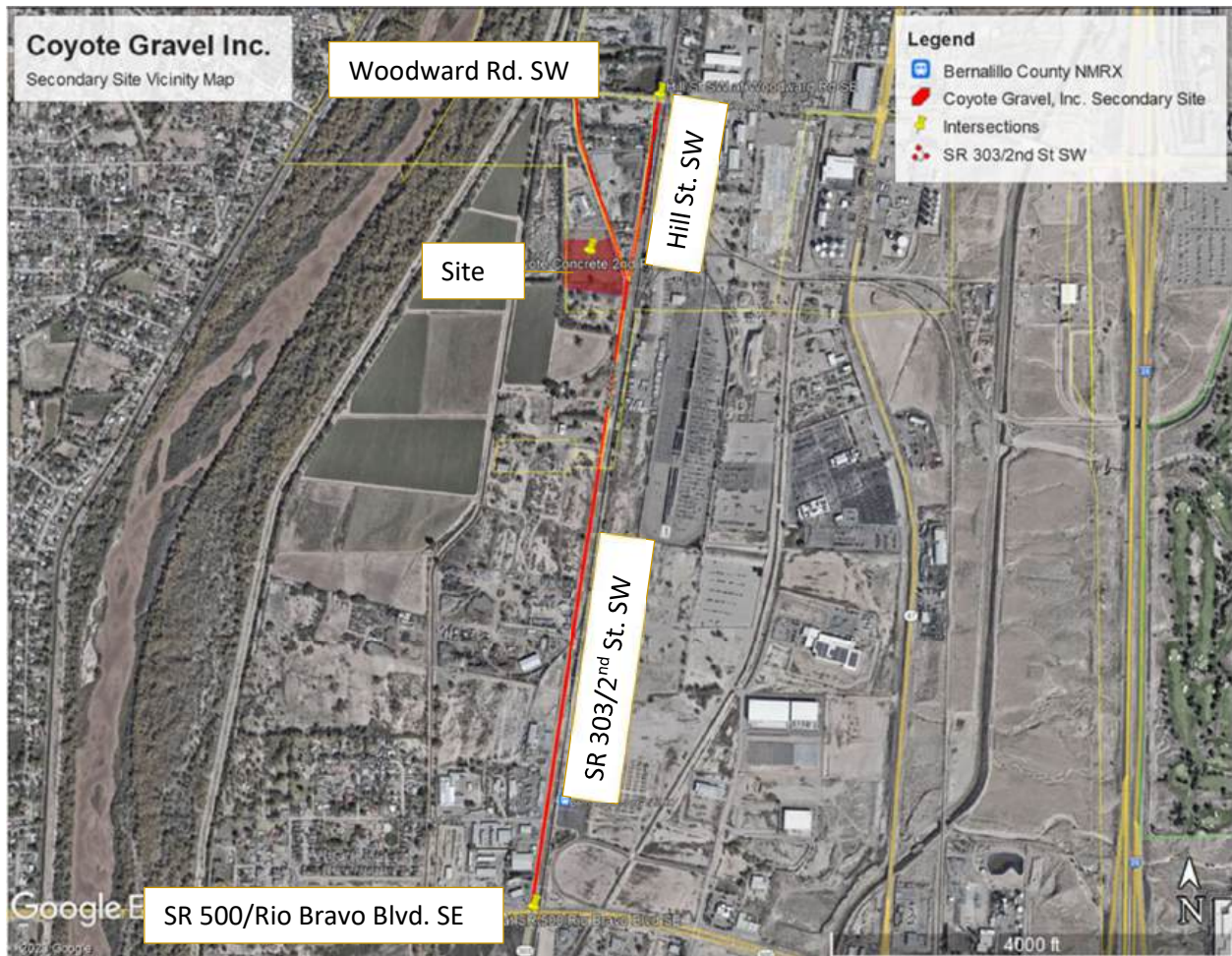


Figure 2: Vicinity Map

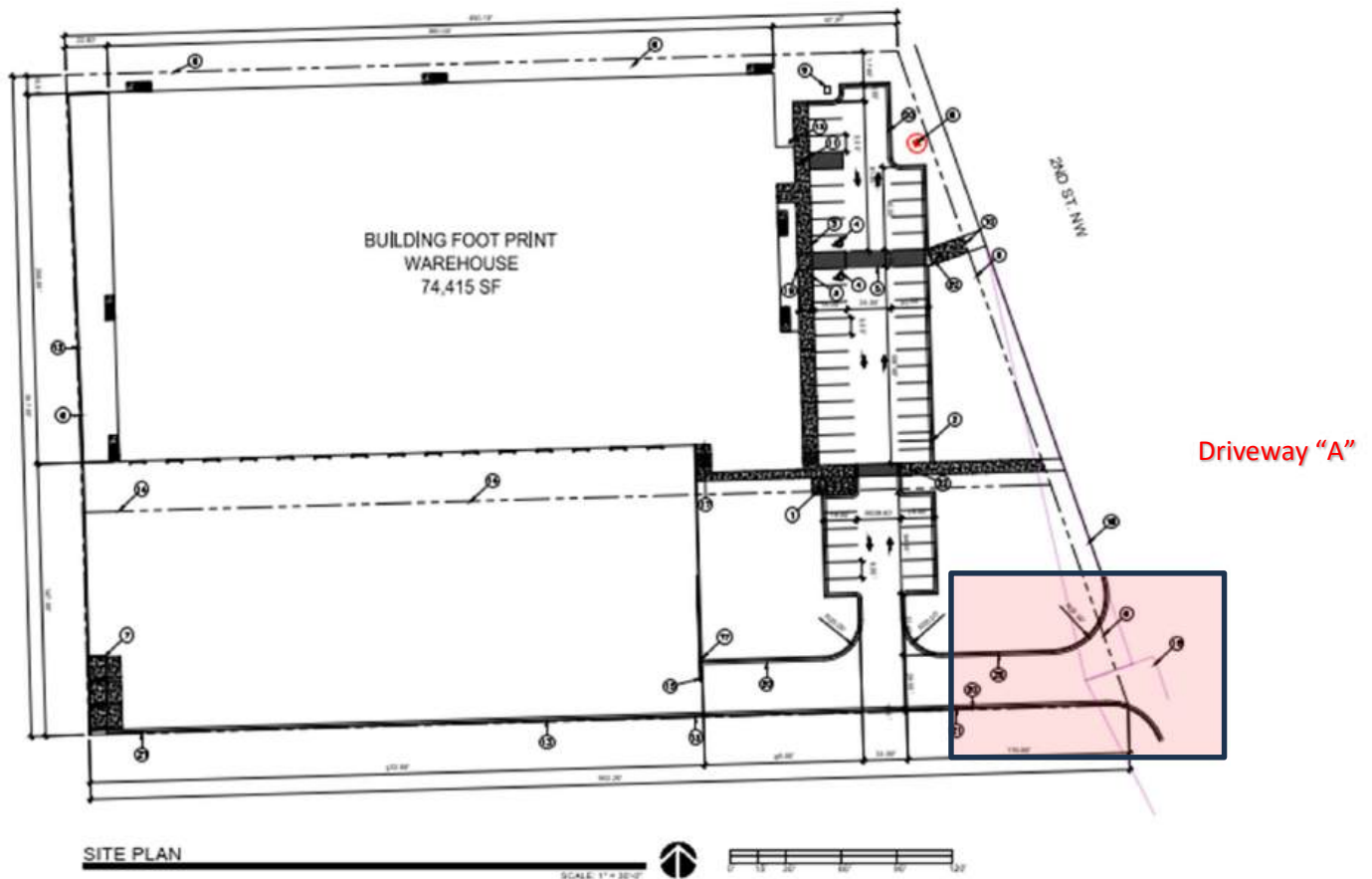
At the scoping meeting, it was determined that the study area for the TIS would include two signalized intersections, and one unsignalized intersection listed below, plus one new driveway. The City of Albuquerque scoping letter for this TIS is on Appendix 02.

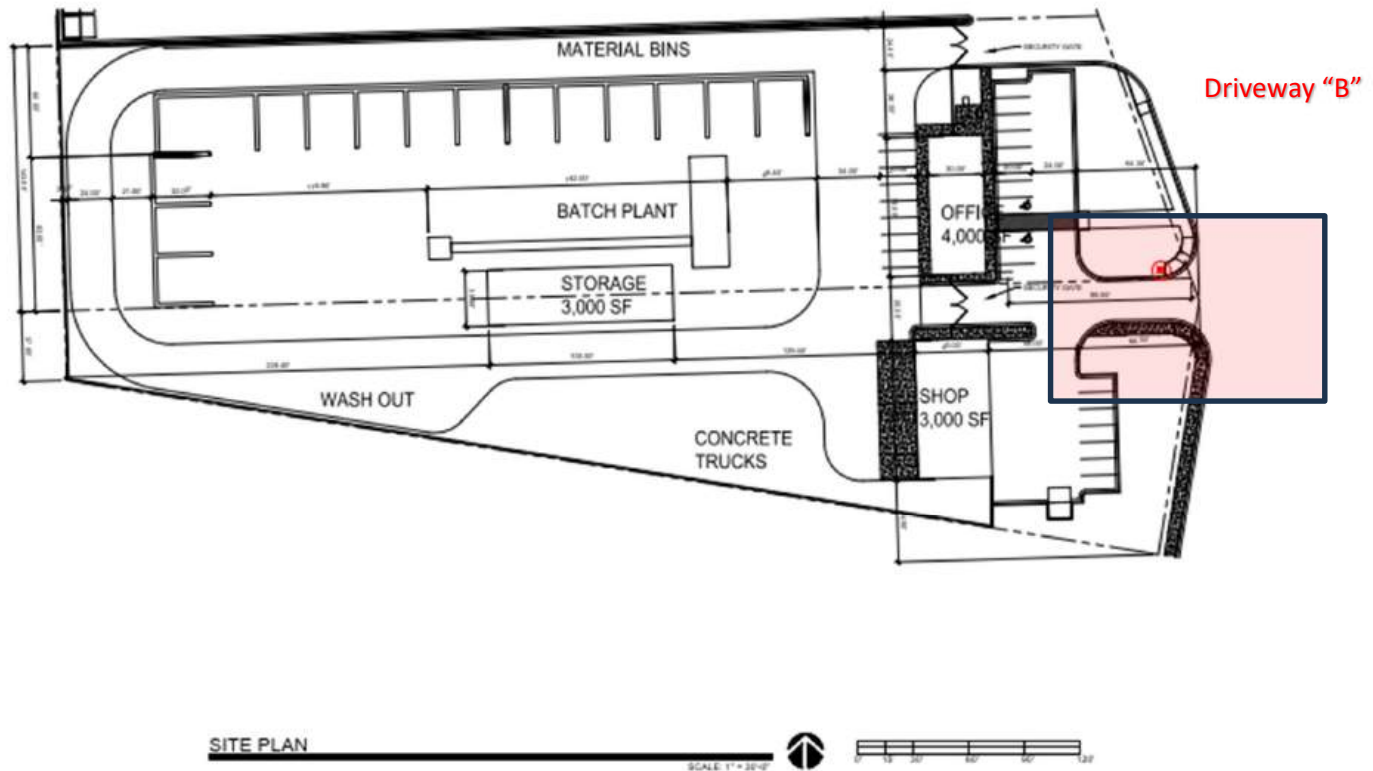
1. Woodward Rd. SW at SR 303/2nd St. SW (Signalized)
2. Hill St. SW/Driveway “B” at SR 303/2nd St. SW (Unsignalized Site Access)
3. SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW (Signalized)
4. Driveway “A” at SR 303/2nd St. SW (Unsignalized Site Access)

Note: Driveway “A” and Driveway “B” are new driveways on the west side of SR 303/2nd St.

Proposed Development

Coyote Gravel Inc. has proposed expanding the existing operations to include an additional facility at the proposed location. The proposed site is to be developed with 85-units (1,000 sq. ft.) ITE Code (180) Specialty Trade Contractor. The proposed site plan is shown on the next page and in Appendix 03.





Study Area Definition

The proposed Concrete Gravel, Inc Secondary Site will be located west of SR 303/2nd St SW south of Woodward Rd., and north of SR 500/Rio Bravo Blvd. SW in the City of Albuquerque, New Mexico. From the scoping meeting the intersection of interest were determined to include two signalized intersections, one unsignalized intersection that will double as an access point, and one access point listed below. See the reference map shown on Figure 3: Intersection Reference Map and attached in Appendix 02.

1. Woodward Rd. SW at SR 303/2nd St. SW (Signalized)
2. Hill St. SW/ Driveway "B" at SR 303/2nd St. SW (Unsignalized Site Access)
3. SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW (Signalized)
4. Driveway "A" at SR 303/2nd St. SW (Unsignalized Site Access)

Intersection Sheet



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(505)858-1118 (Fax)

Traffic Impact Study

The Long Range Roadway System (LRRS) classifies the regional role of existing and planned future 2040 arterials within the overall network. By categorizing network links into two groups regional and community, considerations for existing and planned future 2040 transportation system improvements are ensured. The arterial categories within the study area are illustrated in Figure 4: Futures 2040 Maps for Long Range Roadway Systems Map and attached in Appendix 01.

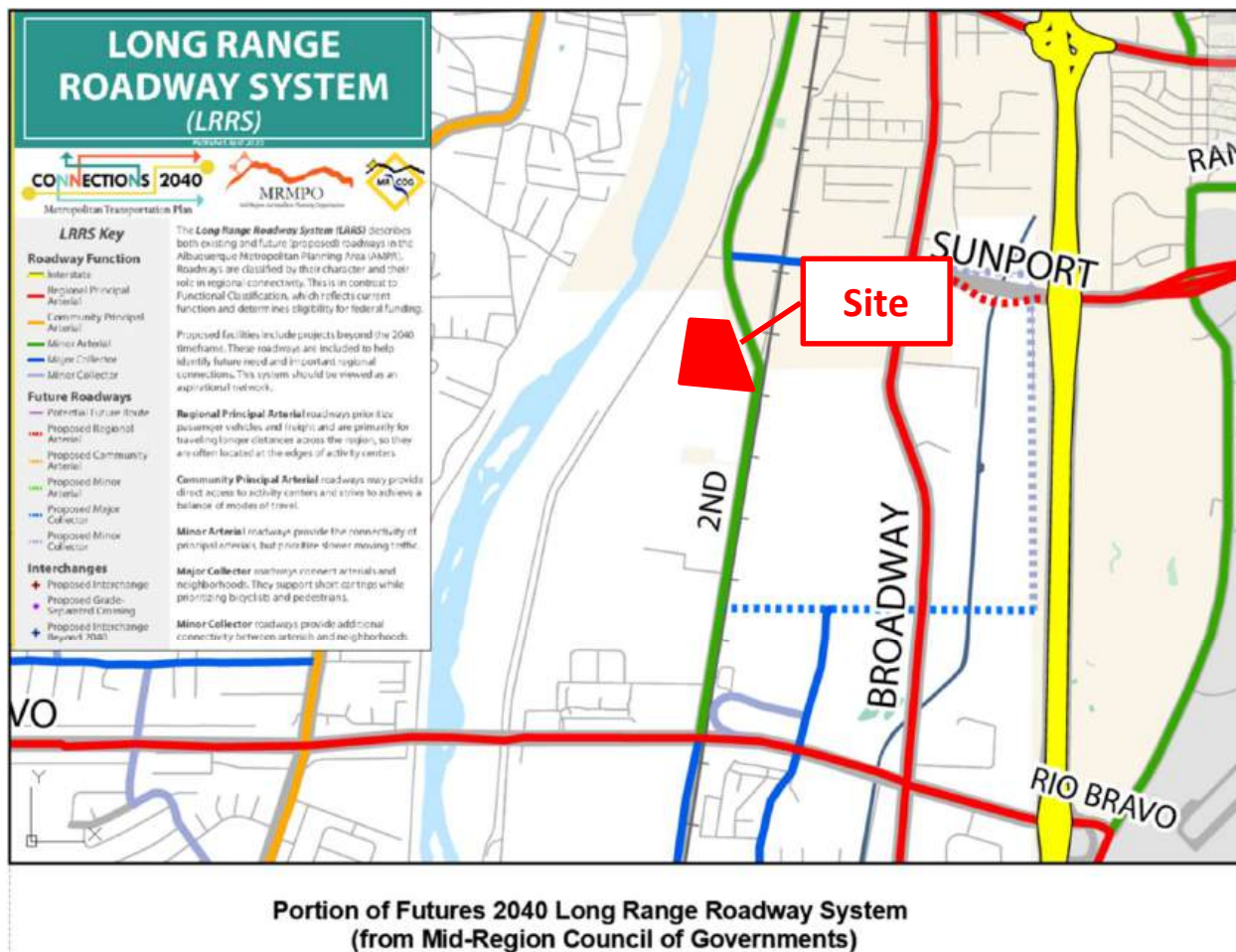


Figure 4: Futures 2040 Maps for Long Range Roadway Systems Map

SR 303/2nd St. SW is classified as an 'Existing Minor Arterial,' on Figure 4: Futures 2040 Maps for Long Range Roadway Systems. SR 303/2nd St. SW within the study area is a one lane in each direction undivided roadway with no raised medians, curbs and gutters, or sidewalks. The posted speed limit along SR 303/2nd St. SW within the study area is 35 mph north of the merge point and 45 MPH south of the merge intersection with Hill St. SW. Woodward Rd. SW is classified as an urban 'Existing Major Collector,' Figure 4: Futures 2040 Maps for Long Range Roadway Systems. Woodward Rd. SW is a three-lane facility with a center left-turn lane. Woodward Rd. SW also has curbs and gutters, and sidewalks. The posted

speed limit along Woodward Rd. SW within the study area is 30 mph. SR 500/Rio Bravo Blvd. SW is classified as an 'Existing Regional Principal Arterial,' Figure 4: Futures 2040 Maps for Long Range Roadway Systems. SR 500/Rio Bravo Blvd. SW is generally a four-lane divided roadway with no curbs and gutters, and no sidewalks. The posted speed limit along SR 500/Rio Bravo Blvd. SW is 45 mph.

Site Access

It is proposed to access this project via two new unsignalized driveways, both being full access. Driveway "A" is proposed to be approximately 1772 ft south of Woodward Rd. SW, center line to center line. Driveway "B" is proposed to be approximately 6280 ft north of SR 500/Rio Bravo Blvd., center line to center line. Driveway "B" will be the west leg of the unsignalized intersection of Hill St. SW at SR 303/2nd St.

Unsignalized Intersection of Driveway "A" at SR 303/2nd St. SW

Driveway 'A' is a proposed as a "full access" driveway and is the only access to the 'main warehouse' of the site.

Unsignalized Intersection of Hill St./Driveway "B" at SR 303/2nd St. SW

Driveway 'B' is a proposed as a "full access" driveway and is the only access to the 'batch plant' of the site. Driveway 'B' should be aligned with the east leg of the intersection, Hill St. SW.

Access Spacing Analysis

Roadway geometry was considered to evaluate the distance between existing roadway access points and intersections. Based on Table 3: Access Spacing Standards for Intersections and Driveways, the driveways meets the minimum access spacing standards of 100 ft approaching and 100 ft departing intersection for full access driveways on principal arterials crossing with local roads.

Table 3: Access Spacing Standards for Intersections and Driveways



Intersection

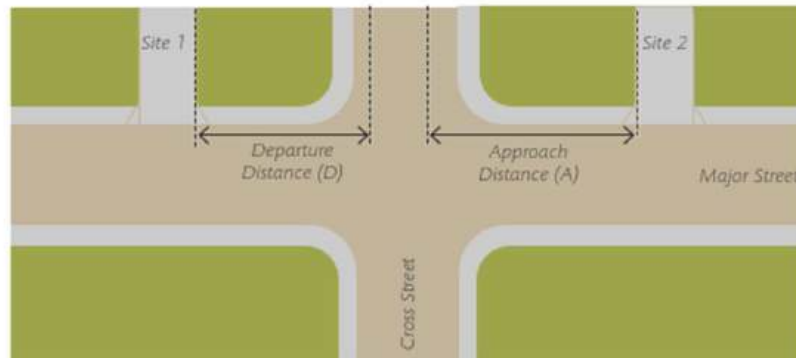


TABLE 7.4.45 Minimum Distance Between Commercial Site Access and Intersection

Type of Street	Cross Street Classes					
	Arterial		Collector		Local	
	A	D	A	D	A	D
Principal Arterial	300 ft.	200 ft.	200 ft.	150 ft.	150 ft.	100 ft.
Minor Arterial	200 ft.	150 ft.	150 ft.	100 ft.	100 ft.	100 ft.
Major Collector	150 ft.	150 ft.	100 ft.	100 ft.	75 ft.	75 ft.
Minor Collector	150 ft.	150 ft.	100 ft.	100 ft.	75 ft.	75 ft.
Local (additional distance may be required for queuing)	75 ft.	75 ft.	50 ft.	50 ft.	25 ft.	25 ft.

TABLE 7.4.46 Maximum Number of Commercial Site Access Points per Site

Type of Street	
Principal Arterials	1-2 access points per 300 ft. frontage
Minor Arterials	1-2 access points per 200 ft. frontage
Collectors	1 access point per 100 ft. frontage

Below is an excerpt of

Table 4: Stopping Sight Distance Design Values (feet) from the NMDOT State Access Management Manual Chapter 7. The distance between the center of the proposed Driveway “A” access and Woodward Rd. along SR 303/2nd St., is approximately 1772 ft. The distance between the center of the proposed Hill St./Driveway “B” access and SR 500/Rio Bravo Blvd. along SR 303/2nd St., is approximately 6280 ft. Both driveways meet the minimum requirement for the stopping sight distance.

Table 4: Stopping Sight Distance Design Values (feet)

Table 18.F-1 Stopping Sight Distance Design Values (feet)										
Grade	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
> +5%	120	160	200	260	320	380	440	520	580	680
+3% to +5%	140	180	230	290	360	430	500	590	650	770
-3% to +3%	150	200	250	325	400	475	550	650	725	850
-5% to -3%	180	240	300	390	480	570	660	780	870	1,020
< -5%	200	270	340	440	540	640	740	880	980	1,150

The required entering sight distance for a 2-lane highway with a posted speed of 45 mph has a minimum criterion for combination trucks of 765 ft and 890 ft, respectively. This is based on



Table 5: Required Site Distance for Vehicles Entering and/or Crossing a Highway *(feet)* excerpt found in NMDOT State Access Management Manual Chapter 7. Both driveways meet the minimum requirement for the entering sight distance.



Table 5: Required Site Distance for Vehicles Entering and/or Crossing a Highway (feet)

Table 18.F-2 Required Sight Distance for Vehicles Entering and/or Crossing a Highway (feet)										
Roadway Condition (see text, Paragraph 18.F.2.a)	Posted Speed of the Highway (mph)									
	25	30	35	40	45	50	55	60	65	70
PASSENGER CAR/PICK-UP										
Minimum Criteria										
2-lane highway	250	300	350	400	450	500	550	600	650	700
4-lane highway	300	360	420	480	540	600	660	720	780	840
6-lane highway	325	390	455	520	585	650	715	780	845	910
Desirable Criteria										
2-lane highway (no median)	250	300	390	490	600	750	870	1090	1280	1560
3-lane highway (incl. 16' median)	270	320	400	500	610	760	890	1110	1290	1580
4-lane highway (no median)	280	340	400	500	610	760	880	1100	1290	1570
4-lane highway (incl. 16' median)	310	370	430	520	630	770	900	1120	1310	1590
6-lane highway (incl. 16' median)	330	400	460	530	640	790	910	1130	1320	1600
SU TRUCK										
Minimum Criteria										
2-lane highway	325	390	455	520	585	650	715	780	845	910
4-lane highway	375	450	525	600	675	750	825	900	975	1050
6-lane highway	425	510	595	680	765	850	935	1020	1105	1190
Desirable Criteria										
2-lane highway (no median)	340	410	480	610	760	960	1120	1420	1680	2070
3-lane highway (incl. 16' median)	380	450	520	630	770	970	1140	1440	1690	2080
4-lane highway (no median)	390	470	550	630	770	970	1140	1430	1690	2080
4-lane highway (incl. 16' median)	420	510	590	680	780	990	1150	1450	1700	2090
6-lane highway (incl. 16' median)	460	550	640	730	830	1000	1160	1460	1720	2110
COMBINATION TRUCK										
Minimum Criteria										
2-lane highway	425	510	595	680	765	850	935	1020	1105	1190
4-lane highway	500	600	700	800	900	1000	1100	1200	1300	1400
6-lane highway	525	630	735	840	945	1050	1155	1260	1365	1470
Desirable Criteria										
2-lane highway (no median)	450	540	630	720	890	1130	1330	1690	1990	2460
3-lane highway (incl. 16' median)	490	590	680	780	910	1150	1350	1700	2010	2480
4-lane highway (no median)	510	610	720	820	920	1140	1340	1700	2000	2470
4-lane highway (incl. 16' median)	550	650	760	870	980	1160	1360	1720	2020	2490
6-lane highway (incl. 16' median)	590	710	830	950	1060	1180	1370	1730	2030	2500



Study Area Characteristics

Existing Land Use

The land parcels for the proposed Coyote Gravel, Inc. Secondary Site are undeveloped, and classified as general agriculture. The land parcels are 3.18, 3.12, and 1.03 acres; totaling 7.33 acres. The land parcels are under the jurisdiction of Bernalillo County with the following UPC codes: 101405502304230103, 101405502501930102, and 101405503101130101. The proposed site address is 2nd St. SW in Albuquerque, New Mexico, 87105. The legal descriptions for both parcels are as follows: MRGCD MAP # 44 TR 100-C CONT 3.1800 AC, MRGCD MAP #44 TR 100-D CONT 3.1168 +/- AC, and TR 2 PLAT OF TRACT 2 LANDS OF GOOD CENTS INC CONT 1.3032 AC.

Existing and Planned Zoning

The proposed site location is currently Integrated Development Ordinance (IDO) zoned as a Non-Residential (NR) General Manufacturing (GM). NR-GM zone district is to accommodate a range of nonresidential uses in general manufacturing. The old zoning designation is M-2 or Heavy Manufacturing which includes M-1 or Light Manufacturing Zone conditional use. Below is an excerpt from the Albuquerque, NM Comprehensive City Zoning Code Chapter 14 -Zoning, Planning, and Building Part 2 Zoning Districts Light Manufacturing conditional use description.



(B) Conditional Uses.

- (1) If so approved, the following uses may be conducted in an area not completely enclosed by a wall or fence:
 - (a) Air separation plant not otherwise allowed as a permissive use.
 - (b) Animal raising, other than those animals which are permissive in this section.
 - (c) Building material storage or sales.
 - (d) Concrete or cement products manufacturing, batching plant, processing of stone.
 - (e) Contractor's equipment storage, or contractor's plant.
 - (f) Feed or fuel storage or sales.
 - (g) Gravel, sand, or dirt removal activity, stockpiling, processing, or distribution.
 - (h) Rental, sales, display, and repair of operative contractor's and heavy farm equipment.
 - (i) Salvage yard for storage and sale of used material provided the yard is enclosed on all sides by a solid wall or fence at least six feet high.
 - (j) Truck terminal, tractor, trailer, or truck storage, including maintenance facilities.

Authorities 1 Zoning District Conditional Use

The purpose of the Airport Protection Overlay (APO) zone is to require the compliance of land use and development that protects the public from noise vibration, and hazard impacts of airport operations. The proposed site location is within the Airport Protection Overlay zone for the entire parcel. This protection includes Runway, and Airspace as well as within the Noise. Air Space protection Sub-Area restricts the building height to 150 feet about the highest point of useable landing area.

Runway Protection Sub-Area denotes areas with adjacent approach surfaces and flares. The proposed site recommend additional striping is for areas within the zone must meet the United States Department of Transportation Federal Aviation Administration 'Advisory Circular' Chapter 5. Other Surface Markings Section 5.2 Vehicle Roadway Markings. Regulations are in place by the Federal Aviation Administration regarding the installation of reflective pavement markings, traffic signs, and roadway lighting to protect the safety of aircraft operators.

Noise Contour Sub-area which is calculated by the FAA Integrated Noise Model to be 65 Day-Night Noise Level (DNL). The proposed 'Other Manufacturing, Fabrication, and Assembly' within the permissive use of 65 DNL. See Figure 5: IDO Zone Atlas Map below and Appendix 01.

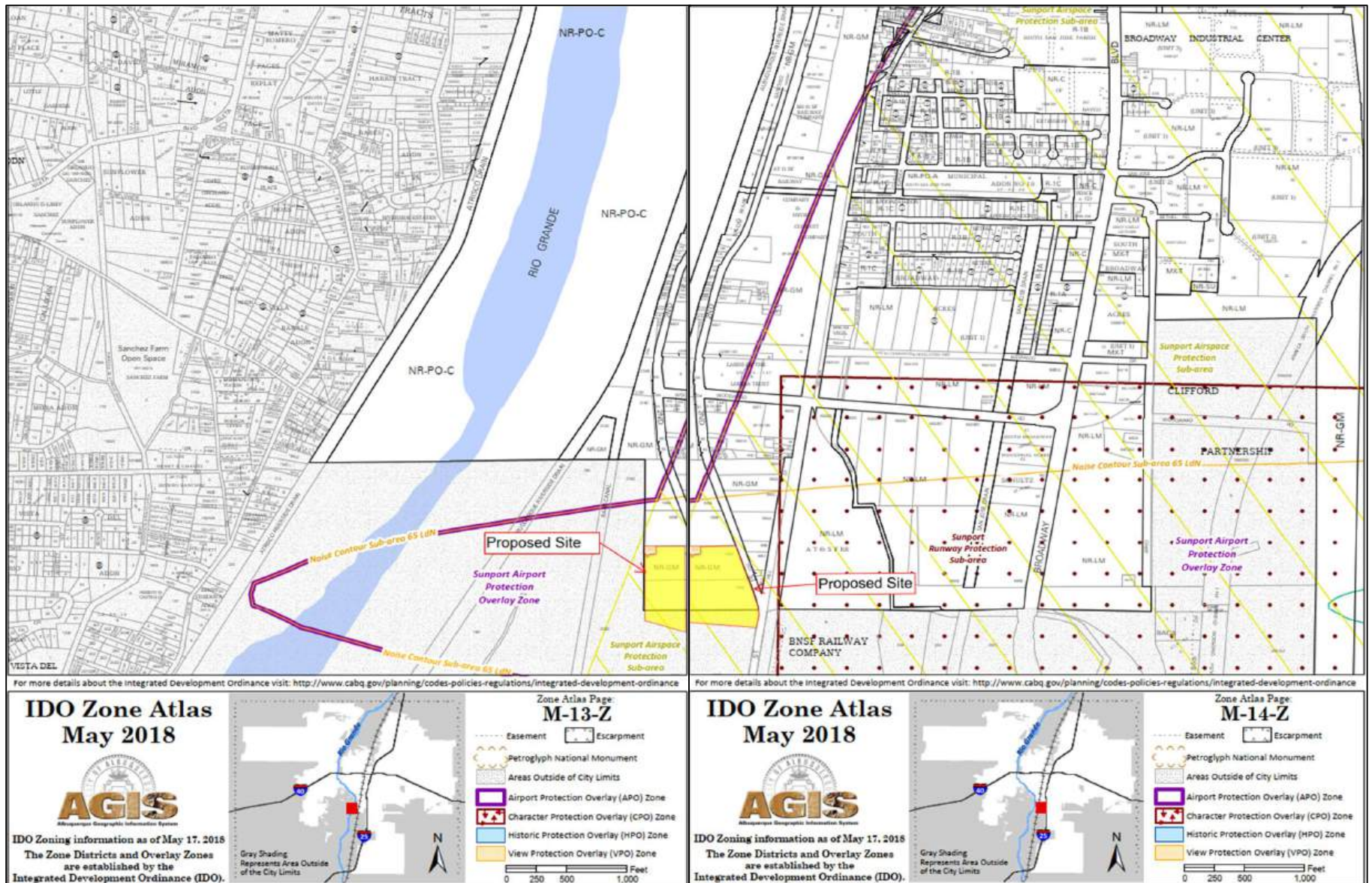


Figure 5: IDO Zone Atlas Map

Long Range Bike Network

The Long Range Bikeway System (LRBS) designates existing and future bikeways and paved trails. The goal is to provide safe and efficient bicycle facilities based on engineering assessment. Overall, the LRBS contributes to a sustainable, healthy, and connected community. The bike system categories within the study area are illustrated in Figure 6: Portion of Futures 2040 Long Range Bikeway System below and Appendix 01.

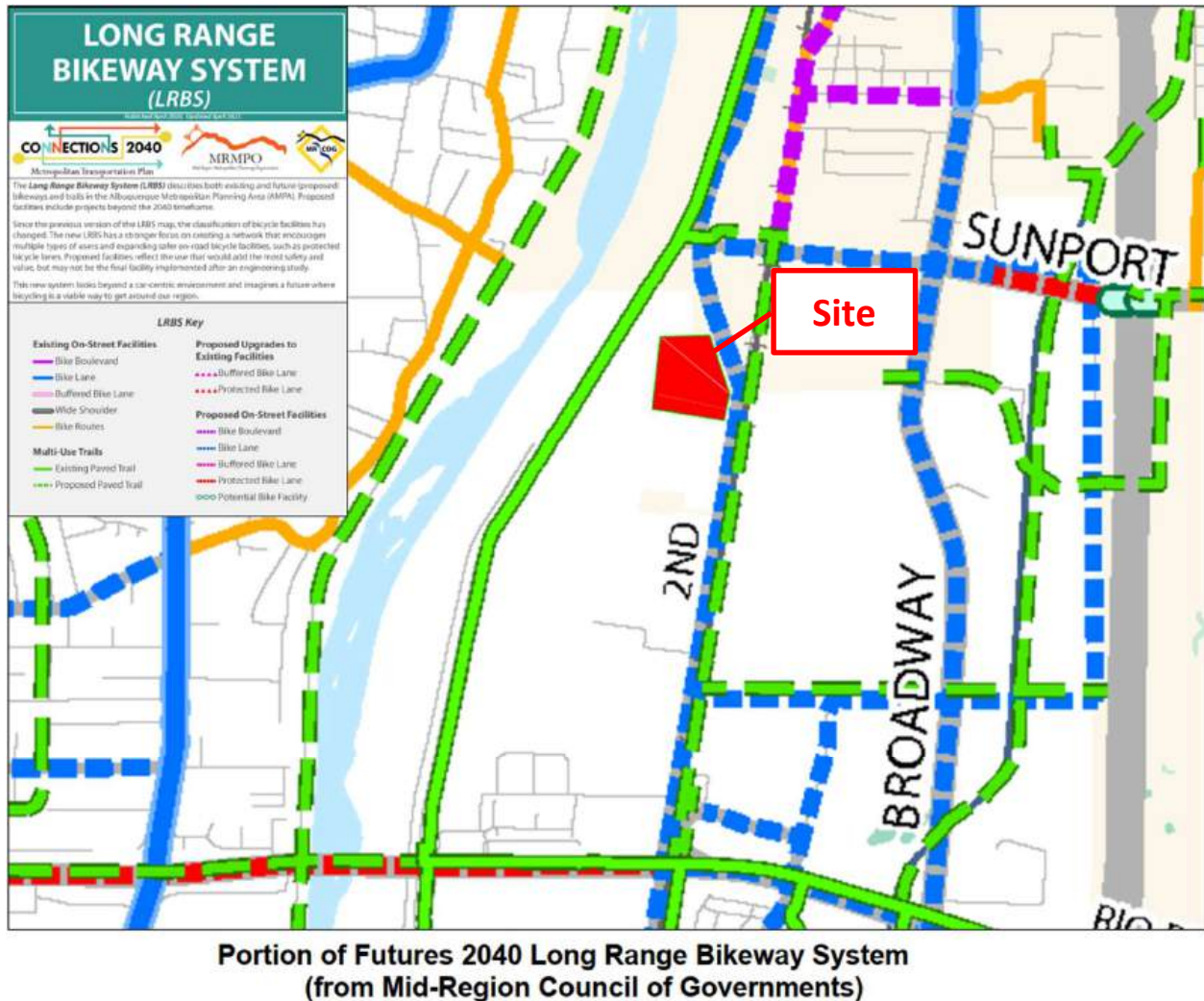


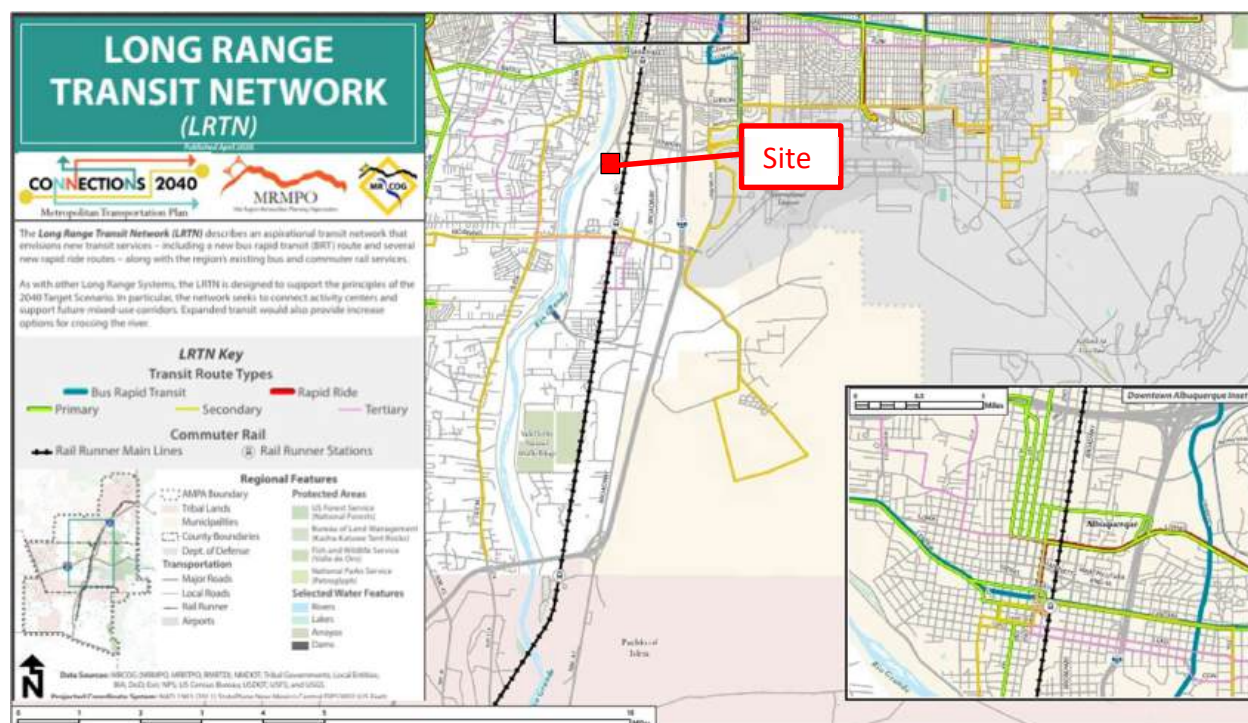
Figure 6: Portion of Futures 2040 Long Range Bikeway System

The Long Range Bikeway System indicates the SR 303/2nd St SE. has a proposed bike lanes along the roadway and a proposed paved trail from Woodward Rd. SW along Hill St. SW. and merging onto SR 303/2nd St. roadway. There is an existing paved trail along the south side of SR 500/Rio Bravo Blvd. SE, as

well as proposed bike lanes on both the north and the south sides of SR 500/Rio Bravo Blvd. West of SR 303/2nd St. SE. along SR 500/Rio Bravo Blvd. SW there is a proposed protected bike lane.

Long Range Transit Network

The Long Range Transit Network (LRTN) is designed to support the goals of the 2040 Target Scenario which is to create a more connected and accessible transit system that can meet future demands and support sustainable growth. The Long Range Transit Network accomplishes this by efficiently connecting regional activity centers conveniently with areas of where residents live, work, and experience entertainment. Thereby expanding the frequency of transit services along mix-use corridors to ensure regular reliable service. The transit route categories within the study area are illustrated in Figure 7: Portion of Future 2040 Long Range Transit Network below and Appendix 01.



**Portion of Future 2040 Long Range Transit Network
(from Mid-Regional Council of Governments)**

Figure 7: Portion of Future 2040 Long Range Transit Network

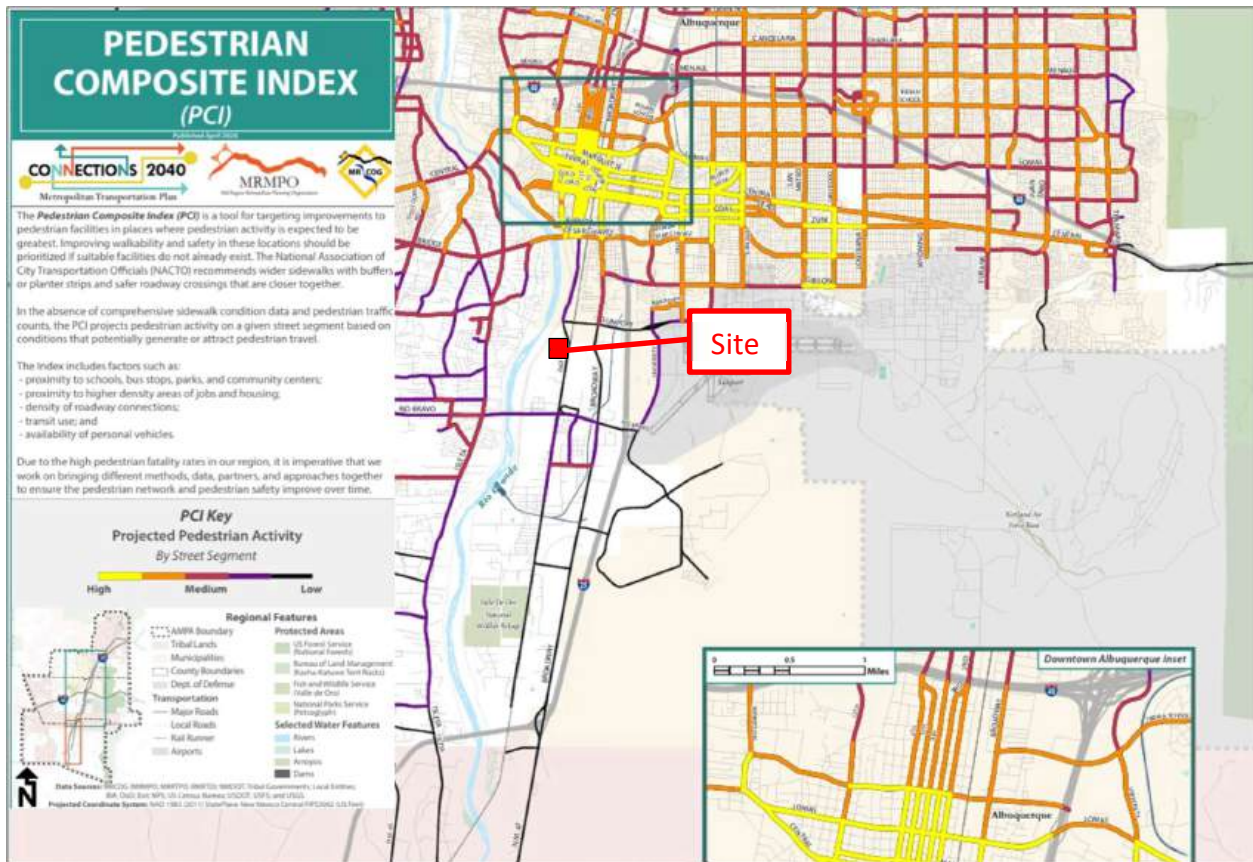
Long Range Transit Network has a secondary transit route that runs eastbound and westbound along San Jose Ave SE. The route name is Broadway-University-Gibson and route code 16. The bus is available Monday through Saturday every 45 minutes (min) and every 65 mins on Sunday. This bus route is north of the site and does not extend east enough to connect with arterials within the study area. The

eastbound and westbound route along SR 500/Rio Bravo Blvd. SW route name is Atrisco – Rio Bravo and route code 51. The bus is also available along SR 500/Rio Bravo Blvd. SW from Monday through Saturday every hour and it is not available on Sundays. Bus route 51 also services SR 303/2nd St. SW south of SR 500/Rio Bravo Blvd. SW. There is another route available just southwest of the proposed site location along SR 500/Rio Bravo Blvd. SW that services the Bernalillo County Rail Runner to Albuquerque International Airport. The route name is Rio Bravo – Sunport and the route code is 222. The service is available Monday through Friday every 65 mins.

Based on the Long Range Transit Network information additional accommodation to proposed bus route network is not recommended. It can be concluded that there is no significant transit service to this project, since the nearest transit route is more than 0.25 miles away.

Pedestrian Composite Index

The Pedestrian Composite Index is a tool used to evaluate and prioritize areas for pedestrian improvements based on various factors. The PCI comprehensive framework is designed to enhance walkability and pedestrian accessibility within urban areas. Factors used to determine index are proximity to city centers, demographics, roadway density, commute, and travel reliability. The pedestrian activity categories within the study area are illustrated in Figure 8: Portion of Future 2040 Pedestrian Composite Index.



**Portion of Future 2040 Pedestrian Composite Index
(from Mid-Regional Council of Governments)**

Figure 8: Portion of Future 2040 Pedestrian Composite Index

SR303/2nd St. has a low PCI, since sidewalks and bus stops are not available along the roadway. Based on the proposed paved trail, additional pedestrian accommodation is not recommended.

Analysis of Existing Conditions

Existing Traffic Volumes

Since the Implementation Year is less than three years in the future and the annual background traffic growth rate is 0.6% and 0.8%, no existing year analysis was performed. The Implementation Year NO BUILD analyses should closely approximate existing conditions. Existing traffic volumes (turning movement counts) were collected at the intersections targeted for analysis in this study on April 16, 2024. Figure 9: Traffic Count Camera Location shows the camera location to capture counts and the traffic counts are attached in Appendix 05.



Figure 9: Traffic Count Camera Location

Existing traffic volumes were collected during April 16 of 2024 while school was in session. The turning movement counts were collected for the 2025 and 2035 AM and PM Peak Hour, NO BUILD, and BUILD conditions for each movement for each intersection of the study area. NO BUILD volumes were generated by adjusting the existing volumes with the background traffic growth. BUILD volumes were calculated by increasing the NO BUILD volumes by the trips generated by the project. Summarized turning movement counts for 2025 volumes can be found in Appendix 08. Summarized turning movement counts for 2035 volumes can be found in Appendix 09.

Existing Signal Timing

The most current signal timing information was gathered from Bernalillo County for the intersection of SR 500/Rio Bravo Blvd. For the intersection of Woodward Rd. at SR 303/2nd St. SW signal timing information was gathered from the City of Albuquerque. Existing signal timing information is available in Appendix 04.

Safety Assessment

The Traffic Flow Maps depict the characteristics of traffic patterns by representing the movement and density of vehicles on road networks. Traffic flow maps assist in the planning and management of roadway infrastructure, assessment of traffic congestion, and determining options for maintenance and improvement. The values presented on the traffic flow map are the Average Annual Weekday Traffic (AAWT) measures the average weekday number of vehicles on a roadway during weekdays over a full year. The 2022 Traffic Flow Map is shown in Figure 10: Portion of 2022 Traffic Flow Map and in Appendix 1.

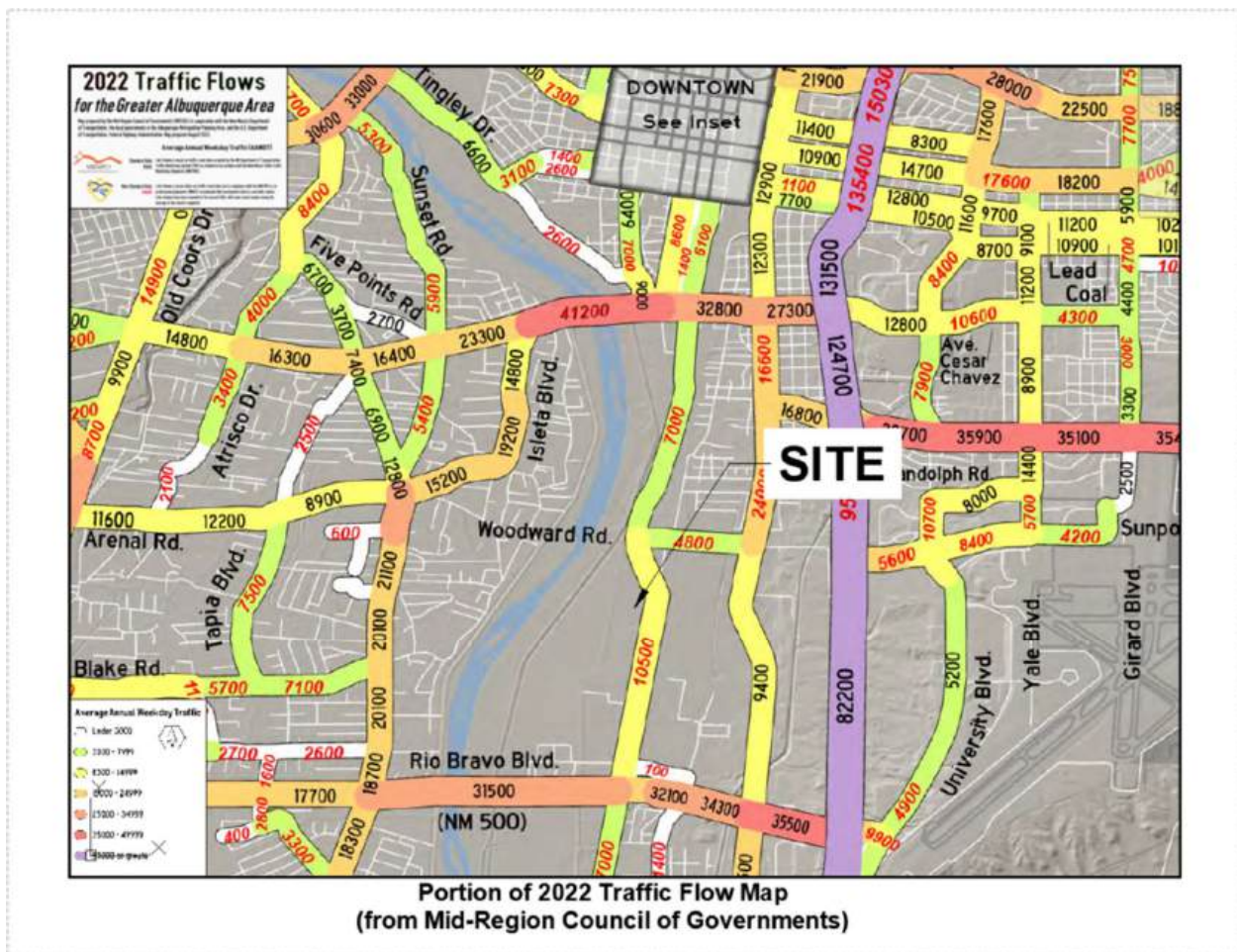


Figure 10: Portion of 2022 Traffic Flow Map

SR 303/2nd St has a moderately low volume of traffic on weekdays. The AWDT is 10540 vehicles. This volume was obtained from the MRCOG TAQA website and will be screen captured in Appendix 05.

Traffic Volume

The historic traffic volume was taken from the MRCOG TAQA website. The Mid-Region Council of Governments provides a Transportation Analysis and Querying Application (MRCOG TAQA) tool designed for the accessibility of transportation data to agencies and the public. MRCOG TAQA provides travel time data, traffic counts, volume-capacity ratios, and various GIS layers. The information provided on the application can be used for transportation planning in making informed decisions regarding transportation infrastructure and project development, in the decision-making process of congestion management control efforts by providing detailed traffic data and promoting transparency of transportation data allowing the public to access and query information.

Traffic monitoring devices have been implemented along SR 303/2nd St. The COG ID, an identifier used to uniquely identify and manage the transportation data, projects, and agencies within the TAQA application, is 26652. The Link ID is an identifier used to uniquely identify, manage and query transportation data such as travel time, traffic counts, and congestion levels for a specific roadway link or road segment within a transportation network. The Link IDs are 2266521, and 266523, for the AM and PM peaks, respectively.

The historic traffic counts north of SR 500/Rio Bravo Blvd. and south of Woodward Rd. were taken on February 4, 2019. The AM Peak hour volumes were 779 vehicles, while the PM peak was 790 vehicles. The roadway capacity is 750 vehicles. The Level of Service for the roadway can be determined using the available traffic flow parameters.

Traffic Density Analysis

The Traffic Density represents the number of vehicles per mile per lane. Traffic density depicts congestions levels along a segment of roadway. Traffic density is calculated in Equation 1: Traffic Density Calculation below.

Equation 1: Traffic Density Calculation

$$\text{Density} = \frac{\text{Number of Vehicle}}{\text{Length of Road Segment} * \text{Number of Lanes}}$$

$$\text{AM Density} = \frac{779}{1.57 * 1}$$

$$\text{AM Density} = 496 \frac{\text{vehicles}}{\text{miles}} / \text{lane}$$

$$\text{PM Density} = 503 \frac{\text{vehicles}}{\text{miles}} / \text{lane}$$

Traffic density determines how concentrated the flow of vehicles are along a segment of roadway. Traffic density is used to design and optimize roadways, improve safety, and manage traffic efficiently. Traffic density was determined in the previous section to be 496 vehicle/mile/lane and 503 vehicle/mile/lane.

LEVEL-OF-SERVICE CRITERIA FOR TWO-LANE HIGHWAYS

<u>Density (pc/mi/ln)</u>	<u>Level-of-Service</u>
≤ 12	A
> 12 and ≤ 20	B
> 20 and ≤ 30	C
> 30 and ≤ 42	D
> 42 and ≤ 67	E
> 67	F

Based on the HCM Criteria for Two-Lane Highways the LOS is F along SR 303/2nd St.

Crash Analysis

A crash analysis for the proposed development was conducted to improve road safety by understanding the causes and consequences of traffic incidents. The crash analysis identifies factors that contributed to the crash such as driver behavior, road conditions, vehicle performance, and environmental influences. The crash analysis evaluates the severity of the crash and its effects on vehicles, passengers, and infrastructure, and assists in finding a safety measure to reduce the occurrence of the crash type. With the crash analysis data, the development of safety measures can be implemented by proposing improvements in road design, traffic regulations, and vehicle safety features to prevent similar accidents in the future. The data provided in this portion of the TIS support policy decisions and infrastructure planning aimed at reducing accident rates and enhancing overall traffic study.

Crash data for the study area was collected for the years 2018, 2019, 2020, 2021, and 2022. The crash data was taken from the New Mexico Department of Transportation's (NMDOT) statewide database. The crash history data was collected for the intersections (3 intersections) surrounding the Coyote Gravel, Inc. Secondary Site study area.

Based on the high number of crashes reported over the recent five-year period (252 crashes), this report finds that there are significant safety issues in the study area. These issues are due to the high volume of traffic utilizing SR 500/Rio Bravo Blvd. and the vicinity of the railroad tracks within the intersection. This poses a driver reaction issue evident in the data retrieved. Table 6: Coyote Gravel Inc. Crash Analysis Summary below summarizes the crashes by year and by crash attributes:

Table 6: Coyote Gravel Inc. Crash Analysis Summary

Crash Analysis Summary Table
Coyote Gravel Inc. Secondary Site
(City of Albuquerque & Bernalillo County, NM)

Crash Analysis Summary Table
Crash Data from (IPRA) Internal Request

CRASH TYPE	Year					SUBTOTAL	PERCENTAGE CRASH TYPE
	2018	2019	2020	2021	2022		
BACKING UP	0	0	1	0	1	2	1%
FIXED OBJECT	4	2	3	0	4	13	5%
LEFT-TURN ANGLE	0	1	5	2	3	11	4%
U-TURN	1	0	0	0	0	1	0%
RIGHT-TURN-ANGLED	8	10	8	4	6	36	14%
HEAD-ON COLLISION	0	1	0	0	0	1	0%
REAR-END	21	24	13	14	25	97	38%
SIDESWIPE LL	0	0	1	1	1	3	1%
SIDESWIPE RL	2	4	4	3	2	15	6%
T-BONE	0	0	2	1	1	4	2%
ROLLOVER	1	0	1	0	0	2	1%
PEDESTRIAN	0	0	0	1	0	1	0%
MOTORCYCLIST	0	0	0	1	0	1	0%
PEDACYCLIST	1	0	3	0	0	4	2%
OTHER	0	2	1	2	1	6	2%
UNKNOWN	3	7	25	1	19	55	22%
SUBTOTAL	41	51	66	30	62	252	100.00%

The right-turn crashes, and rear-end crashes were the highest rate of crashes. Rear-end types of crashes are common at signalized intersections. Right-angle types of crashes are more common at unsignalized intersections. Most crashes are the result of driver error and not an issue to traffic features and infrastructure. There was one fatality reported. The summarized crash analysis tables are attached in Appendix 12.

Table 7: Crash Intensity

Crash Analysis Summary Table
Coyote Gravel Inc. Secondary Site
Crash Data from IPRA

CRASH TYPE	Year					SUBTOTAL	PERCENTAGE CRASH TYPE
	2018	2019	2020	2021	2022		
FATALITY	1	1	0	0	0	2	0.8%
INJURY	13	21	19	11	14	78	31.0%
PROPERTY DAMAGE	35	36	25	20	39	155	61.5%
NO DATA	-	-	-	-	-	17	6.7%
SUBTOTAL	49	58	44	31	53	252	100.0%

Analysis of Future Conditions

Traffic Volume Projections

The anticipated Implementation Year for this project is 2025 and the Horizon Year is 2035. MRCOG Traffic Flow Map data was used for traffic growth from 2010 to 2021 to determine the historical growth rates for the study area. The calculated growth rate at the intersections varies between 0.6% and 0.8% and is the same for both the Implementation Year and Horizon Year. See Appendix 06 for the Historic Growth Rate Graph. The following growth rates percentages were used for each intersection.

1. Woodward Rd. SW at SR 303/2nd St. SW – 0.6%
2. Hill St. SW/Driveway “B” at SR 303/2nd St. SW – 0.6%
3. SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW – 0.8%
4. Driveway “A” at SR 303/2nd St. SW – 0.6%

The growth rates were then applied to the background traffic volumes. The 2025 construction year net volumes are 565 and 807 vehicles per hour, for the AM and PM peaks respectively. The projected turning movement spread sheet is attached in Appendix 09 and Appendix 10.

To balance traffic volumes when building the Synchro 12 model, it was assumed that southbound traffic entering SR 303/2nd St. from Woodward Rd. would terminate prior to the proposed driveway locations. This assumption was based on current conditions as well as residential and commercial properties north of the proposed site location.

Trip Generation

Trip generation is a prediction of trips originating from the proposed new site development that are influenced by land use characteristics, and purpose of trip. The calculated trips generated indicated the number of additional vehicles contributing to traffic demands, and multimodal impacts. The Institute of Transportation Engineers (ITE) Trip Generation Manual provides comprehensive data on vehicles trips generated from corresponding land uses. Each land use has a category of residential, commercial, industrial, and institutional. Table 8: Trip Generations Data summarized the new trip generations, considering pass by trips below and in Appendix 08.

Table 8: Trip Generations Data

Coyote Gravel Products, Inc. (3053 2nd Street NW)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL GROSS	A. M. PEAK HR.		P. M. PEAK HR.	
	DESCRIPTION		ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units				
	Specialty Trade Contractor	85.00	792	104	37	52
	Total Primary Trips		104	37	52	112

The ITE Code used for the proposed Coyote Gravel, Inc. Secondary Site Development is the following: ITE Code (180) Specialty Trade Contractor. The proposed development trip generation is expected to be 141 trucks per hour turning volume with 104 entering and 37 exiting during the AM peak. In addition to that, 164 trucks per hour turning volume with 52 entering and 112 exiting during the PM peak.

Trip Distribution

MRCOG Socio-economic data uses a Geographical Information System (GIS) to support various planning activities. The sub area map enhances the precision and effectiveness of trip distribution models allowing for a granular analysis of travel patterns, accurate data on trip origin and destination, identify congestion issues, and evaluate different scenarios on traffic patterns. Construction trips were distributed based on Mid-Region Council of Governments’ Socio-economic data (2016-2040 data set).

The construction trips were distributed based on the population distribution regionally inversely proportional to the distance of the subarea from the project. The Trip Distribution Map can be found below in Figure 11: Subarea Map and in Appendix 07. Table 9: Trip Distribution and

Table 10: Trip Distribution Continued was used to calculate the Construction Trip Distributions percentages for each subarea and can be found below as well as in Appendix 07.

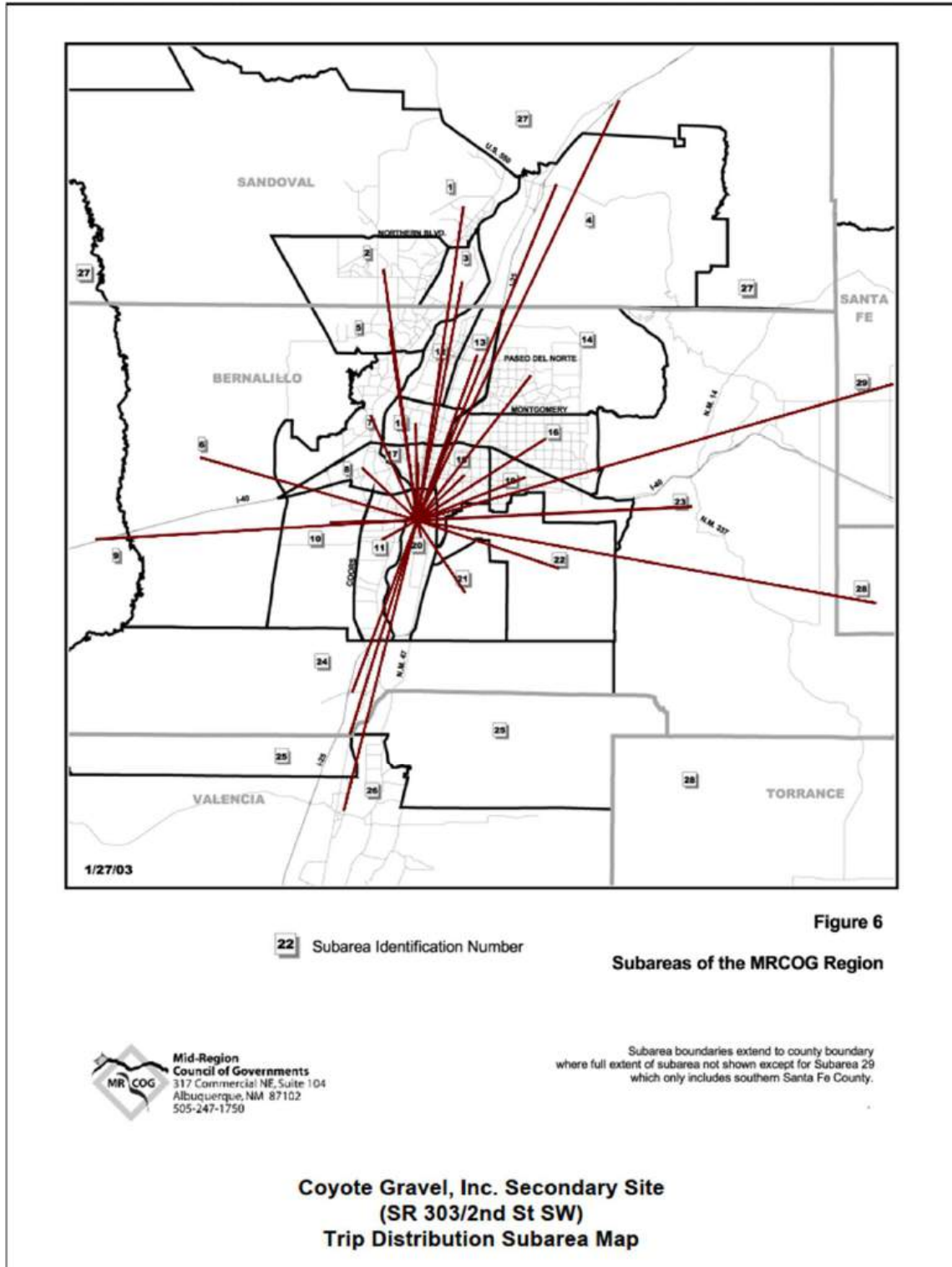


Figure 11: Subarea Map

Table 9: Trip Distribution

Trip Distribution Table

Coyote Gravel, Inc.

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office / Warehouse Development Trips**

2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set
Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

Sub Area I.D.#	% Sub Area in Study	Employment		Interpolated Employment for the Year 2025	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	(2N) SR 303/2nd St SW (North)		(WE) Woodward Rd. SW (East)		(HE) Hill St. (East)		Employment
		2016	2040						% Utilizing	% Employment / Dist. Utilizing	% Utilizing	% Employment / Dist. Utilizing	% Utilizing	% Employment / Dist. Utilizing	
1	100%	44,711	62,255	51,290	51,290	17.6	2,914	2.08%	0%	0.00%	0	100%	2.08%	2,914	0
2	100%	54,828	62,222	57,601	57,601	14	4,114	2.93%	0%	0.00%	0	100%	2.93%	4,114	0
3	100%	8,510	10,377	9,210	9,210	13.5	682	0.49%	0%	0.00%	0	100%	0.49%	682	0
4	100%	13,817	17,784	15,305	15,305	20.2	758	0.54%	0%	0.00%	0	100%	0.54%	758	0
5	100%	59,285	58,890	59,137	59,137	10.7	5,527	3.94%	0%	0.00%	0	100%	3.94%	5,527	0
6	100%	5,988	9,663	7,366	7,366	12.5	589	0.42%	0%	0.00%	0	100%	0.42%	589	0
7	100%	59,485	71,484	63,985	63,985	6.4	9,998	7.13%	0%	0.00%	0	100%	7.13%	9,998	0
8	100%	31,699	34,678	32,816	32,816	4.2	7,813	5.57%	20%	1.11%	1,563	80%	4.46%	6,251	0
9	100%	2,158	3,112	2,516	2,516	17.9	141	0.10%	0%	0.00%	0	100%	0.10%	141	0
10	100%	64,323	61,537	63,278	63,278	4.8	13,183	9.40%	0%	0.00%	0	0%	0.00%	0	0
11	100%	33,210	40,174	35,822	35,822	2.2	16,283	11.61%	0%	0.00%	0	0%	0.00%	0	0
12	100%	15,936	22,087	18,243	18,243	9.1	2,005	1.43%	0%	0.00%	0	100%	1.43%	2,005	0
13	100%	9,888	12,530	10,879	10,879	9.8	1,110	0.79%	0%	0.00%	0	100%	0.79%	1,110	0
14	100%	73,684	84,299	77,665	77,665	10.2	7,614	5.43%	0%	0.00%	0	100%	5.43%	7,614	0
15	100%	24,829	33,670	28,144	28,144	5.4	5,212	3.72%	0%	0.00%	0	100%	3.72%	5,212	0
16	100%	82,412	94,137	86,809	86,809	8.4	10,334	7.37%	0%	0.00%	0	100%	7.37%	10,334	0
17	100%	22,270	37,540	27,996	27,996	3.2	8,749	6.24%	20%	1.25%	1,750	80%	4.99%	6,999	0
18	100%	41,643	56,762	47,313	47,313	3.6	13,142	9.37%	0%	0.00%	0	100%	9.37%	13,142	0
19	100%	65,540	81,066	71,362	71,362	6.5	10,979	7.83%	0%	0.00%	0	100%	7.83%	10,979	0
20*	100%	9,636	10,794	10,070	10,070	1	10,070	7.18%	50%	3.59%	5,035	0%	0.00%	0	0
21	100%	559	17,783	7,018	7,018	4.8	1,462	1.04%	0%	0.00%	0	0%	0.00%	0	0
22	100%	3,511	3,820	3,627	3,627	8.3	437	0.31%	0%	0.00%	0	0%	0.00%	0	0
23	100%	19,163	27,184	22,171	22,171	15.3	1,449	1.03%	0%	0.00%	0	100%	1.03%	1,449	0
24	100%	2,531	3,352	2,839	2,839	10.2	278	0.20%	0%	0.00%	0	0%	0.00%	0	0
25	100%	863	1,161	975	975	12.4	79	0.06%	0%	0.00%	0	0%	0.00%	0	0
26	100%	56,155	59,697	57,483	57,483	16.6	3,463	2.47%	0%	0.00%	0	0%	0.00%	0	0
27	100%	19,926	24,499	21,641	21,641	25.9	836	0.60%	0%	0.00%	0	100%	0.60%	836	0
28	100%	15,662	18,407	16,691	16,691	25.9	644	0.46%	0%	0.00%	0	0%	0.00%	0	0
29	100%	10,397	11,564	10,835	10,835	27.5	394	0.28%	0%	0.00%	0	100%	0.28%	394	0
		852,619	1,032,528	920,085	920,085		140,259	100.00%		5.95%	8,348		64.91%	91,047	0
										5.95%			64.91%		0.00%
										Use 6%			Use 65%		Use 1%

* - Subarea in which the site is located.

Table 10: Trip Distribution Continued

Trip Distribution Table

Coyote Gravel, Inc.

Sub Area Employment Data:

For determination of Trip Distribution for Proposed **Office / Warehouse Development Trips**

2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set

Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(RE)			(2S)			(RW)		
									SR 500/ Rio Bravo Blvd (East)			SR 303/2nd St SW (South)			SR 500/ Rio Bravo Blvd (West)		
Sub Area I.D.#	% Sub Area in Study	2016 Employment	2040 Employment	Interpolated Employment for the Year 2025	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2016	2040														
1	100%	44,711	62,255	51,290	51,290	17.6	2,914	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	54,828	62,222	57,601	57,601	14	4,114	2.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	8,510	10,377	9,210	9,210	13.5	682	0.49%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,817	17,784	15,305	15,305	20.2	758	0.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	59,285	58,890	59,137	59,137	10.7	5,527	3.94%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	5,988	9,663	7,366	7,366	12.5	589	0.42%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7	100%	59,485	71,484	63,985	63,985	6.4	9,998	7.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8	100%	31,699	34,678	32,816	32,816	4.2	7,813	5.57%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	2,158	3,112	2,516	2,516	17.9	141	0.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	64,323	61,537	63,278	63,278	4.8	13,183	9.40%	0%	0.00%	0	0%	0.00%	0	100%	9.40%	13,183
11	100%	33,210	40,174	35,822	35,822	2.2	16,283	11.61%	0%	0.00%	0	0%	0.00%	0	100%	11.61%	16,283
12	100%	15,936	22,087	18,243	18,243	9.1	2,005	1.43%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	9,888	12,530	10,879	10,879	9.8	1,110	0.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	73,684	84,299	77,665	77,665	10.2	7,614	5.43%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,829	33,670	28,144	28,144	5.4	5,212	3.72%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	82,412	94,137	86,809	86,809	8.4	10,334	7.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	22,270	37,540	27,996	27,996	3.2	8,749	6.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	41,643	56,762	47,313	47,313	3.6	13,142	9.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	65,540	81,066	71,362	71,362	6.5	10,979	7.83%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20*	100%	9,636	10,794	10,070	10,070	1	10,070	7.18%	0%	0.00%	0	50%	3.59%	5,035	0%	0.00%	0
21	100%	559	17,783	7,018	7,018	4.8	1,462	1.04%	0%	0.00%	0	100%	1.04%	1,462	0%	0.00%	0
22	100%	3,511	3,820	3,627	3,627	8.3	437	0.31%	100%	0.31%	437	0%	0.00%	0	0%	0.00%	0
23	100%	19,163	27,184	22,171	22,171	15.3	1,449	1.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,531	3,352	2,839	2,839	10.2	278	0.20%	100%	0.20%	278	0%	0.00%	0	0%	0.00%	0
25	100%	863	1,161	975	975	12.4	79	0.06%	100%	0.06%	79	0%	0.00%	0	0%	0.00%	0
26	100%	56,155	59,697	57,483	57,483	16.6	3,463	2.47%	100%	2.47%	3,463	0%	0.00%	0	0%	0.00%	0
27	100%	19,926	24,499	21,641	21,641	25.9	836	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	15,662	18,407	16,691	16,691	25.9	644	0.46%	100%	0.46%	644	0%	0.00%	0	0%	0.00%	0
29	100%	10,397	11,564	10,835	10,835	27.5	394	0.28%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		852,619	1,032,528	920,085	920,085		140,259	100.00%		3.49%	4,901		4.63%	6,497		21.01%	29,465
											3.49%			4.63%			21.01%

Trip Assignments

Trip assignment is the process of determining the routes that trips will take through a transportation network. The trip assignment percentages were used to distribute the trips generated to the individual traffic movements at each intersection. Trip assignments percentages for new trips entering and exiting are derived from data established in the trip distribution determination process and logical routing. A trip assignment diagram can be for each route can be found in Appendix 07.

Intersection Capacity Analysis

The Highway Capacity Manual establishes a criterion for the determinations of signalized and unsignalized levels-of-service. These levels determine if an intersection will be proficient enough to accommodate the projected volumes from the new development. The average control delay is calculated for each intersection and for each lane group of each leg of the intersection. The analysis of the calculated control delay determines the level of service for each lane group. However, if the v/c ratio is 1.0 or greater, then the v/c ratio overrides the calculated delay and qualifies the lane group to be LOS "F". The control delay generally determines the level-of-service based on the following table:

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>Average Delay</u> <u>(secs)</u>	<u>Level-of-Service</u>
≤ 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

For parameters of acceptance, generally a Level-of-Service D or better is an acceptable parameter for design purposes.



In summary, the proposed Coyote Gravel Inc. Secondary Site will have minimal adverse impact on the adjacent transportation system. Level of service (LOS) at the intersections in the study area meet the City of Albuquerque's/Bernalillo County's minimum acceptable Level of Service Standards for the 2025 implementation year and 2035 horizon year for all intersections in the study area with the exception noted in the executive summary.

Level of Service (LOS)

According to the City of Albuquerque Design Process Manual (DPM), LOS standards are defined by Access Category. Table 11: Design Process Manual LOS Criteria identifies the minimum acceptable LOS standards according to Functional Classification & Roadway Type and City of Albuquerque's ABC Comp Plan Type.

Table 11: Design Process Manual LOS Criteria

TABLE 7.5.88 Desired LOS by Location and Corridor Type							
Functional Classification & Roadway Type	ABC Comp Plan Center Type						
	Transit Station Area	Downtown	Urban Center	Activity Center	Village Center	Employment Center	Outside Center
Premium Transit	E-F	E-F	E-F	E-F	E-F	E-F	E-F
Major Transit	E	E-F	E	E	D-E	D-E	D-E
Multi-modal	E	E	E	E	D-E	D-E	D-E
Commuter	E	E	D-E	D-E	D-E	D-E	D
Other Arterial	E	E	E	D-E	D-E	D-E	D
Minor Arterial	E	E	D-E	D-E	D-E	D	D
Collector	E	D-E	D	D	C-D	C-D	C-D

SR 303/2nd St. is considered an 'Other Arterial' within a Transit Station Area. Intersections and driveways along the SR 303/2nd St. roadway should have a LOS E or better. Build conditions should have a LOS=E or better or the proposed roadway should be mitigated to maintain the LOS at existing (No Build) condition levels.

The following Lanes / Volumes Analysis Tables (LVAM) demonstrate the impacts to the adjacent roadway system. The Lanes / Volumes Analysis Tables quantify the AM Peak Hour (APH) and PM Peak Hour (PPH) No Build and Build volumes along with the associated v/c ratios, LOS, calculated delays, and 95th percentile queue lengths. The Lanes / Volume Analysis Tables report on the performance of proposed

driveway access and existing intersections. The tables are attached in Appendix 10 and Appendix 11 for implementation year 2025 and horizon year 2035, respectively.

#1 – Signalized Intersection of Woodward Rd. SW at SR 303/2nd St. SW



Figure 12: Signalized Intersection of Woodward Rd. SW at SE 303/2nd St. SW

The results of the 2025 Implementation Year for the APH and PPH analysis of the unsignalized intersection of Woodward Rd. at SR 303/2nd St. are summarized in Table 12: 2025 Implementation Year Woodward Rd. at SR 303/2nd St. AM Peak LVAM Summary, as well as attached in Appendix 10. The results of the 2035 Horizon Year for the APH and PPH analysis of the unsignalized intersection of Woodward Rd. at SR 303/2nd St. are summarized in Table 13: 2035 Horizon Year Woodward Rd. at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 11.

Table 12: 2025 Implementation Year Woodward Rd. at SR 303/2nd St. AM Peak LVAM Summary

Synchro Results Summary Sheet

1: Woodward Rd. & SR 303/2nd St.

2025_Conditions

Woodward Rd.

SR 303/2nd St.

Signalized

Woodward Rd. / SR 303/2nd St. 2025_Conditions	WB (Woodward Rd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1		1		1>		1	1	
AM Peak Hour									
2025_NO BUILD Volumes	117		60		539	338	52	117	
V/C Ratio	0.15		0.09		0.00	0.91	0.14	0.09	
Level-of-Service	B		B			D	B	A	
Control Delay (Seconds)	18.4		17.9		0.0	39.8	15.8	9.0	
Intersection LOS	C - 32.7								
95th Percentile Queue (veh)									
2025_BUILD Volumes	185		60		541	362	52	123	
V/C Ratio	0.23		0.09		0.00	0.81	0.17	0.09	
Level-of-Service	B		B			C	B	A	
Control Delay (Seconds)	19.4		17.9		0.0	26.6	14.7	9.0	
Intersection LOS	C - 23.1								
95th Percentile Queue (veh)	1.7		0.5		0.0	9.8	0.3	0.6	

PM Peak Hour

2025_NO BUILD Volumes	366		165		133	93	133	286	
V/C Ratio	0.39		0.21		0.00	0.20	0.14	0.18	
Level-of-Service	C		B			B	B	A	
Control Delay (Seconds)	21.6		19.2		0.0	15.7	10.4	9.7	
Intersection LOS	B - 16.0								
95th Percentile Queue (veh)	3.1		1.3		0.0	1.5	0.7	1.4	
2025_BUILD Volumes	400		165		140	166	133	289	
V/C Ratio	0.50		0.24		0.00	0.31	0.19	0.22	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	23.6		19.7		0.0	15.5	10.7	10.0	
Intersection LOS	B - 16.8								
95th Percentile Queue (veh)	4.3		1.6		0.0	2.3	0.7	1.6	

Table 13: 2035 Horizon Year Woodward Rd. at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

1: Woodward Rd. & SR 303/2nd St.

2035_Conditions

Woodward Rd.

SR 303/2nd St.

Signalized

Woodward Rd. / SR 303/2nd St. 2035_Conditions	WB (Woodward Rd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1		1		1>		1	1	
AM Peak Hour									
2025_NO BUILD Volumes	124		64		571	358	55	124	
V/C Ratio	0.16		0.09		0.00	0.96	0.16	0.09	
Level-of-Service	B		B			D	B	A	
Control Delay (Seconds)	18.5		17.9		0.0	48.8	17.1	9.0	
Intersection LOS	D - 39.2								
95th Percentile Queue (veh)	1.1		0.6		0.0	15.1	0.4	0.7	
2025_BUILD Volumes	192		64		573	382	55	130	
V/C Ratio	0.24		0.09		0.00	0.98	0.17	0.10	
Level-of-Service	B		B			D	B	A	
Control Delay (Seconds)	19.5		17.9		0.0	52.9	15.7	9.1	
Intersection LOS	D - 42.1								
95th Percentile Queue (veh)	1.8		0.6		0.0	15.8	0.4	0.7	

PM Peak Hour

2025_NO BUILD Volumes	388		175		141	98	141	303	
V/C Ratio	0.49		0.26		0.00	0.25	0.18	0.23	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	23.3		19.9		0.0	16.2	10.9	10.1	
Intersection LOS	B - 16.8								
95th Percentile Queue (veh)	4.1		1.7		0.0	1.9	0.9	1.8	
2025_BUILD Volumes	422		175		148	171	141	306	
V/C Ratio	0.53		0.26		0.00	0.32	0.20	0.23	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	24.2		19.9		0.0	15.9	10.8	10.1	
Intersection LOS	B - 17.1								
95th Percentile Queue (veh)	4.6		1.7		0.0	2.5	0.8	1.7	

Both the implementation year and the horizon year analysis in the above tables show the signalized intersection of Woodward Rd. at SR 303/2nd St. is operating at an acceptable level of service for all conditions evaluated in this study. The V/C ratio for the northbound right-turn movement is nearly at capacity, 0.91 and the 95th percentile queue length is 15 vehicles for the AM NO Build analysis. For all the other conditions analyzed and movements, the V/C ration and 95th percentile queue length are negligible. The delay experienced by the intersection is 32.7 seconds and 39.2 seconds for the APH No

Build Conditions during both the implementation year and horizon year, respectively. The new trips generated for Coyote Gravel, Inc. Secondary Site present no significant adverse impact to this signalized intersection.

#2 – Unsignalized Intersection of Hill St. SW/Driveway “B” at SR 303/2nd St. SW



Figure 13: Unsignalized Intersection Aerial of Hill St. SW at SR 303/2nd St. SW

The results of the 2025 Implementation Year for the APH and PPH analysis of the signalized intersection of Hill St. at SR 303/2nd St. are summarized in Table 14: 2025 Implementation Year Hill St. at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 10. The results of the 2035 Horizon Year for the APH and PPH analysis of the signalized intersection of Hill St. at SR 303/2nd St. are summarized in Table 15: 2035 Horizon Year Hill St. at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 11.

Table 14: 2025 Implementation Year Hill St. at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

2: Hill St./Driveway "B" & SR 303/2nd St.

2025_Conditions

Hill St/Driveway B

SR 303/2nd St.

Unsignalized

Hill St/Driveway B / SR 303/2nd St. 2025 Conditions	EB (Hill St/Driveway B)			WB (Hill St/Driveway B)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry					<1>			1>			<1	
AM Peak Hour												
2025_NO BUILD Volumes				0	0	0		857	0	0	229	
V/C Ratio												
Level-of-Service					A					A		
Control Delay (Seconds)					0.0					0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			<1>			<1>	
2025_BUILD Volumes	4	0	7	0	1	1	27	860	0	0	232	11
V/C Ratio		0.02			0.01		0.02					
Level-of-Service		C			C		A	A		A		
Control Delay (Seconds)		15.3			18.7		8.8	0.0		0.0		
Intersection LOS	A - 0.4											
95th Percentile Queue (veh)		0.1			0.0		0.1			0.0		

PM Peak Hour

Existing Lane Geometry					<1>			1>			<1	
2025_NO BUILD Volumes				0	0	0	0	233	4	0	684	
V/C Ratio					0.00					0.00		
Level-of-Service					A					A		
Control Delay (Seconds)					9.0					0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)					0.0					0.0		
Build Lane Geometry		<1>			<1>			<1>			<1>	
2025_BUILD Volumes	13	1	22	0	0	4	14	235	4	1	694	6
V/C Ratio		0.08			0.00		0.01			0.00		
Level-of-Service		C			B		B	A		A	A	
Control Delay (Seconds)		16.6			10.4		10.2	0.0		7.5	0.0	
Intersection LOS	A - 0.8											
95th Percentile Queue (veh)		0.2			0.0		0.0			0.0		

Table 15: 2035 Horizon Year Hill St. at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

2: Hill St./Driveway "B" & SR 303/2nd St.

2035_Conditions

Hill St/Driveway B

SR 303/2nd St.

Unsignalized

Hill St/Driveway B / SR 303/2nd St. 2035_Conditions	EB (Hill St/Driveway B)			WB (Hill St/Driveway B)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry					<1>			1>			<1	
AM Peak Hour												
2025_NO BUILD Volumes				0	0	0		908	0	0	243	
V/C Ratio												
Level-of-Service									A	A		
Control Delay (Seconds)									0.0	0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			1>			<1	
2025_BUILD Volumes	4	0	7	0	1	1	27	911	0	0	246	11
V/C Ratio		0.02			0.01		0.02					
Level-of-Service		C			C		A	A		A		
Control Delay (Seconds)		15.9			19.6		8.8	0.0		0.0		
Intersection LOS	A - 0.4											
95th Percentile Queue (veh)		0.1			0.0		0.1			0.0		

PM Peak Hour

Existing Lane Geometry					<1>			1>			<1	
2025_NO BUILD Volumes				0	0	4	0	247	4	0	725	0
V/C Ratio										0.00		
Level-of-Service									A	A		
Control Delay (Seconds)									0.0	0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			1>			<1	
2025_BUILD Volumes	13	1	22	0	0	4	14	249	4	1	735	6
V/C Ratio		0.08			0.00		0.01			0.00		
Level-of-Service		C			B		B	A		A	A	
Control Delay (Seconds)		17.3			10.4		10.3	0.0		7.6	0.0	
Intersection LOS	A - 0.8											
95th Percentile Queue (veh)		0.3			0.0		0.0			0.0		

Both the implementation year and the horizon year analysis in the above tables show the unsignalized intersection of Hill St./Driveway "B" at SR 303/2nd St. is operating at an acceptable level of service for all conditions evaluated in this study. The V/C and the 95th percentile queue length are negligible for each approached analyzed. The delay experienced by the intersection is 7.3 seconds for PPH during both the implementation year and horizon year. The new trips generated for Coyote Gravel, Inc. Secondary Site present no significant adverse impact to this unsignalized intersection.

#3 – Signalized Intersection of SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW



Figure 14: Signalized Intersection of SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW

The results of the 2025 Implementation Year for the APH and PPH analysis of the unsignalized intersection of SR 500/Rio Bravo Blvd. at SR 303/2nd St. are summarized in Table 16: 2025 Implementation Year SR 500/Rio Bravo Blvd. at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 10. The results of the 2035 Horizon Year for the APH and PPH analysis of the unsignalized intersection of Woodward Rd. at University Blvd are summarized in Table 17: 2035 Horizon Year SR 500/Rio Bravo Blvd. at SR 303/2nd St. LVAM Summary, as well as in Appendix 11. The intersection configuration is shown in Figure 14: Signalized Intersection of SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW.

Table 16: 2025 Implementation Year SR 500/Rio Bravo Blvd. at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

3: . SR 500/ Rio Bravo Blvd. & SR 303/2nd St

2025_Conditions

Rio Bravo Blvd.

SR 303/2nd St.

Signalized

Rio Bravo Blvd. / SR 303/2nd St. 2025_Conditions	EB (Rio Bravo Blvd.)			WB (Rio Bravo Blvd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2	1	1	2	1	1	1>		1	1	1
AM Peak Hour												
2025_NO BUILD Volumes	413	1,468	262	40	702	76	226	130		61	79	133
V/C Ratio	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Level-of-Service	C	D	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
Intersection LOS	C - 30.9											
95th Percentile Queue (veh)	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0
2025_BUILD Volumes	413	1,468	262	40	702	76	226	130	56	61	79	133
V/C Ratio	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Level-of-Service	C	D	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
Intersection LOS	C - 30.9											
95th Percentile Queue (veh)	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0

PM Peak Hour

2025_NO BUILD Volumes	113	818	218	28	1,871	28	181	44	56	52	105	351
V/C Ratio	0.47	0.40	0.24	0.06	0.98	0.04	0.39	0.00	0.26	0.13	0.31	
Level-of-Service	C	B	B	B	D	B	C		C	C	D	
Control Delay (Seconds)	23.1	17.6	16.2	14.9	47.0	16.3	31.8	0.0	34.8	32.8	38.3	0.0
Intersection LOS	D - 35.4											
95th Percentile Queue (veh)	1.0	4.5	2.2	0.3	19.8	0.3	2.8	0.0	1.6	0.8	1.8	0.0
2025_BUILD Volumes	124	818	218	28	1,871	30	181	47	56	55	111	375
V/C Ratio	0.54	0.42	0.25	0.07	1.03	0.04	0.41	0.00	0.28	0.14	0.34	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	23.6	18.0	16.5	15.2	59.6	16.6	31.9	0.0	35.2	32.9	38.9	0.0
Intersection LOS	D - 42.2											
95th Percentile Queue (veh)	1.2	4.8	2.4	0.3	22.8	0.3	2.9	0.0	1.8	0.9	2.0	0.0

Table 17: 2035 Horizon Year SR 500/Rio Bravo Blvd. at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

3: . SR 500/ Rio Bravo Blvd. & SR 303/2nd St

2035_Conditions

Rio Bravo Blvd.

SR 303/2nd St.

Signalized

Rio Bravo Blvd. / SR 303/2nd St. 2035_Conditions	EB (Rio Bravo Blvd.)			WB (Rio Bravo Blvd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2	1	1	2	1	1	1>		1	1	1
AM Peak Hour												
2025_NO BUILD Volumes	422	1,584	283	44	757	78	244	135	61	65	83	135
V/C Ratio	0.79	1.01	0.41	0.23	0.70	0.18	0.44	0.00	0.42	0.16	0.22	
Level-of-Service	C	F	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	21.1	54.8	21.0	25.5	30.5	25.8	25.3	0.0	30.2	27.5	32.2	0.0
Intersection LOS	D - 38.5											
95th Percentile Queue (veh)	4.6	17.3	3.4	0.5	5.7	1.0	3.2	0.0	2.9	0.9	1.2	0.0
2025_BUILD Volumes	444	1,584	283	44	757	81	244	140	61	66	85	143
V/C Ratio	0.82	1.01	0.41	0.23	0.72	0.19	0.44	0.00	0.43	0.16	0.23	
Level-of-Service	C	F	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	22.2	54.9	21.0	25.9	31.4	26.5	25.3	0.0	30.4	27.5	32.3	0.0
Intersection LOS	D - 38.7											
95th Percentile Queue (veh)	5.0	17.3	3.4	0.6	5.8	1.1	3.2	0.0	3.0	0.9	1.3	0.0

PM Peak Hour

2025_NO BUILD Volumes	122	883	235	30	2,019	30	196	48	61	57	113	379
V/C Ratio	0.54	0.46	0.28	0.08	1.12	0.04	0.44	0.00	0.29	0.14	0.35	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	23.8	18.9	17.1	15.5	91.5	16.8	31.7	0.0	35.2	33.2	39.3	0.0
Intersection LOS	E - 59.4											
95th Percentile Queue (veh)	1.2	5.4	2.6	0.3	29.4	0.3	3.2	0.0	1.9	0.9	2.1	0.0
2025_BUILD Volumes	133	883	235	30	2,019	32	196	51	61	60	119	403
V/C Ratio	0.58	0.46	0.28	0.08	1.12	0.05	0.44	0.00	0.29	0.15	0.36	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	24.0	18.8	17.1	15.6	92.0	16.9	31.8	0.0	35.4	33.2	39.5	0.0
Intersection LOS	E - 59.6											
95th Percentile Queue (veh)	1.3	5.4	2.6	0.3	29.5	0.3	3.2	0.0	1.9	1.0	2.2	0.0

Both the implementation year and the horizon year analysis in the above tables show the signalized intersection of SR 500/Rio Bravo Blvd. at SR 303/2nd St. is operating at an acceptable level of service for all conditions evaluated in this study. The V/C ratio exceeds 1.0 for the westbound through movement along SR 500/Rio Bravo Blvd. during the PPH No build condition. The 95th percentile queue length is 23 vehicles during the PPH for the westbound through movement. The delay for the westbound through movement is approximately 60 seconds. The delay experienced by the intersection is 7.1 seconds and 7.2 seconds for both the APH and PPH during both the implementation year and horizon year. The

new trips generated for Coyote Gravel, Inc. Secondary Site present no significant adverse impact to this signalized intersection.

#4 – Unsignalized Intersection of Driveway “A” at SR 303/2nd St. SW

The results of the 2025 Implementation Year for the APH and PPH analysis of the unsignalized intersection of Driveway “A” at SR 303/2nd St. are summarized in Table 18: 2025 Implementation Year Driveway “A” at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 10. The results of the 2035 Horizon Year for the APH and PPH analysis of the unsignalized intersection of Driveway “A” at SR 303/2nd St. are summarized in Table 18: 2025 Implementation Year Driveway “A” at SR 303/2nd St. LVAM Summary, as well as attached in Appendix 11.

Table 18: 2025 Implementation Year Driveway “A” at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

4: Driveway A & SR 303/2nd St.

2025_Conditions

Driveway A

SR 303/2nd St.

Unsignalized

Driveway A / SR 303/2nd St. 2025_Conditions	EB (Driveway A)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1>			<1>			<1>	
AM Peak Hour									
2025_BUILD Volumes	22		4	4	861			240	62
V/C Ratio	0.06			0.00					
Level-of-Service	C			A	A				
Control Delay (Seconds)	17.7			8.8	0.0				
Intersection LOS	A - 0.4								
95th Percentile Queue (veh)	0.2			0.0					

PM Peak Hour

2025_BUILD Volumes	67		11	2	246			690	31
V/C Ratio	0.15			0.00					
Level-of-Service	C			A	A				
Control Delay (Seconds)	17.4			9.9	0.0				
Intersection LOS	A - 1.3								
95th Percentile Queue (veh)	0.5			0.0					

Table 19: 2035 Horizon Year Driveway "A" at SR 303/2nd St. LVAM Summary

Synchro Results Summary Sheet

4: Driveway A & SR 303/2nd St.

2035_Conditions

Driveway A

SR 303/2nd St.

Unsignalized

Driveway A / SR 303/2nd St. 2035_Conditions	EB (Driveway A)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1>			<1>			<1>	
AM Peak Hour									
2025_BUILD Volumes	22	0	4	4	912	0	0	254	62
V/C Ratio		0.06		0.00					
Level-of-Service		C		A	A				
Control Delay (Seconds)		18.6		8.8	0.0				
Intersection LOS	A - 0.4								
95th Percentile Queue (veh)		0.2		0.0					

PM Peak Hour

2025_BUILD Volumes	67	0	11	2	260	0	0	731	31
V/C Ratio		0.15		0.00					
Level-of-Service		C		B	A				
Control Delay (Seconds)		18.2		10.1	0.0				
Intersection LOS	A - 1.3								
95th Percentile Queue (veh)		0.5		0.0					

Both the implementation year and the horizon year analysis in the above tables show the unsignalized intersection of Driveway "A" at SR 303/2nd St. is operating at an acceptable level of service for all conditions evaluated in this study. The V/C and the 95th percentile queue length are negligible for each approached analyzed. The delay experienced by the intersection is 1.3 seconds for PPH during both the implementation year and horizon year. The new trips generated for Coyote Gravel, Inc. Secondary Site present no significant adverse impact to this unsignalized intersection.

Intersection Capacity Analysis Summary

The analysis was performed to comply with the requirements set forth by the City of Albuquerque and Bernalillo County. The results of the Implementation Year (2025) and Horizon Year (2035) AM Peak Hour (APH) and PM Peak Hour (PPH) NO BUILD and BUILD conditions are summarized in Table 2: Intersection LOS Analysis Summary Table. All intersections within the study area are performing at a level

of service (LOS) E or above, although some intersection turning movements are performing at a LOS F. The following is a summary table of the results of this analysis.

Table 20: Intersection LOS Analysis Summary Table

Intersection LOS Analysis Summary Table
Coyote Gravel Inc. Secondary Site
(Albuquerque, NM)

	Intersection Description	Intersection Operation	Case Evaluation	Implementation Year (2025) Conditions		Horizon Year (2035) Conditions	
				AM Peak LOS Delays (s)	PM Peak LOS Delays (s)	AM Peak LOS Delays (s)	PM Peak LOS Delays (s)
1	Woodward Rd. / SR 303-2nd St.	Signalized	No Build	C (32.7)	B (16.0)	D (39.2)	B (16.8)
			Build	C (23.1)	B (16.8)	D (41.2)	B (17.1)
2	Hill St-Driveway "B" / SR 303-2nd St.	Unsignalized	No Build	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			Build	A (0.4)	A (0.8)	A (0.4)	A (0.8)
3	SR 500-Rio Bravo Blvd. / SR 303-2nd St.	Signalized	No Build	C (30.9)	D (35.4)	D (38.5)	E (59.6)
			Build	C (30.9)	D (42.2)	D (38.7)	E (59.4)
4	Driveway "A" / SR 303-2nd St.	Unsignalized	No Build	-	-	-	-
			Build	A (0.4)	A (1.3)	A (0.4)	A (1.3)

Mitigation Analysis

This mitigation analysis extends the contexts of the traffic impact study to alleviate potential impacts to adjacent roadways. However, the proposed secondary site does not impose any additional strain on the traffic flow, traffic density, and traffic delays. The site location has minimal impact on neighboring facilities and does not pose any safety issues such as SSD, or ESD. Supplemental information regarding the intersection of Hill St./Driveway "B" at SSR 303/2nd St. is included in the Appendix. This information includes a deceleration lane analysis. The warrant is not met therefore additional analysis was not taken for this intersection.

Recommendations

Based on this analysis which includes adding two additional driveways to the principal arterial roadway of SR 303/2nd St., this project imposes no significant additional adverse impacts on the adjacent roadway system. The additional trips generated by the proposed Coyote Gravel, Inc. Secondary Site, have no significant adverse impact on the performance of the adjacent roadway system.

It is suggested the Bernalillo County consider restriping the intersection of SR 500/Rio Bravo Blvd. at SR 303/2nd St. to improve lane awareness and delineate crosswalks. The faded striping is not a result of the impact of this development, and therefore should not be required of this developer.

All construction on this project shall maintain adequate sight distances at the proposed driveways and existing intersections.



Bibliography

DEVELOPMENT PROCESS MANUAL DEVELOPMENT PROCESS MANUAL. (2020, June 08). Albuquerque, New Mexico, USA. Retrieved 2024

Institute of Traffic Engineer's. (n.d.). *Trip Generation Rates* (11th ed.). USA. Retrieved November 27, 2024, from <https://www.itetripgen.org/>

MRMPO Long Range Roadway System (LRRS). (2024, 10 31). Retrieved from Mid-Region Council of Governments:
<https://mrmpo.maps.arcgis.com/apps/webappviewer/index.html?id=9d3876c8b09f4e22aacd3e900892c381>

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Appendix 01

Vicinity Map

Zone Atlas Map

Intersection Reference Map

Long Range Roadway System

Long Range Bicycle System

Long Range Transit Network

Pedestrian Composite Index

Traffic Flow Map



Appendix 02

Scoping Letter



Appendix 03

Site Plan

Site Plat



Appendix 04

Signal Timing



Appendix 05

Traffic Volume

Appendix 06

Subarea Map

Historical Growth Table

Historical Growth Chart



Appendix 07

Trip Distribution

Trip Assignment



Appendix 08

Trip Generation



Appendix 09

2025 Turning Movement Spreadsheet



Appendix 10

2035 Turning Movement Spread Sheet



Appendix 11

2025 Intersection Analysis

2025 LVAM Tables



Appendix 12

2035 Intersection Analysis

2035 LVAM Tables



Appendix 13

Crash Analysis

Auxiliary Lane Analysis

Peak Hour Warrant Analysis

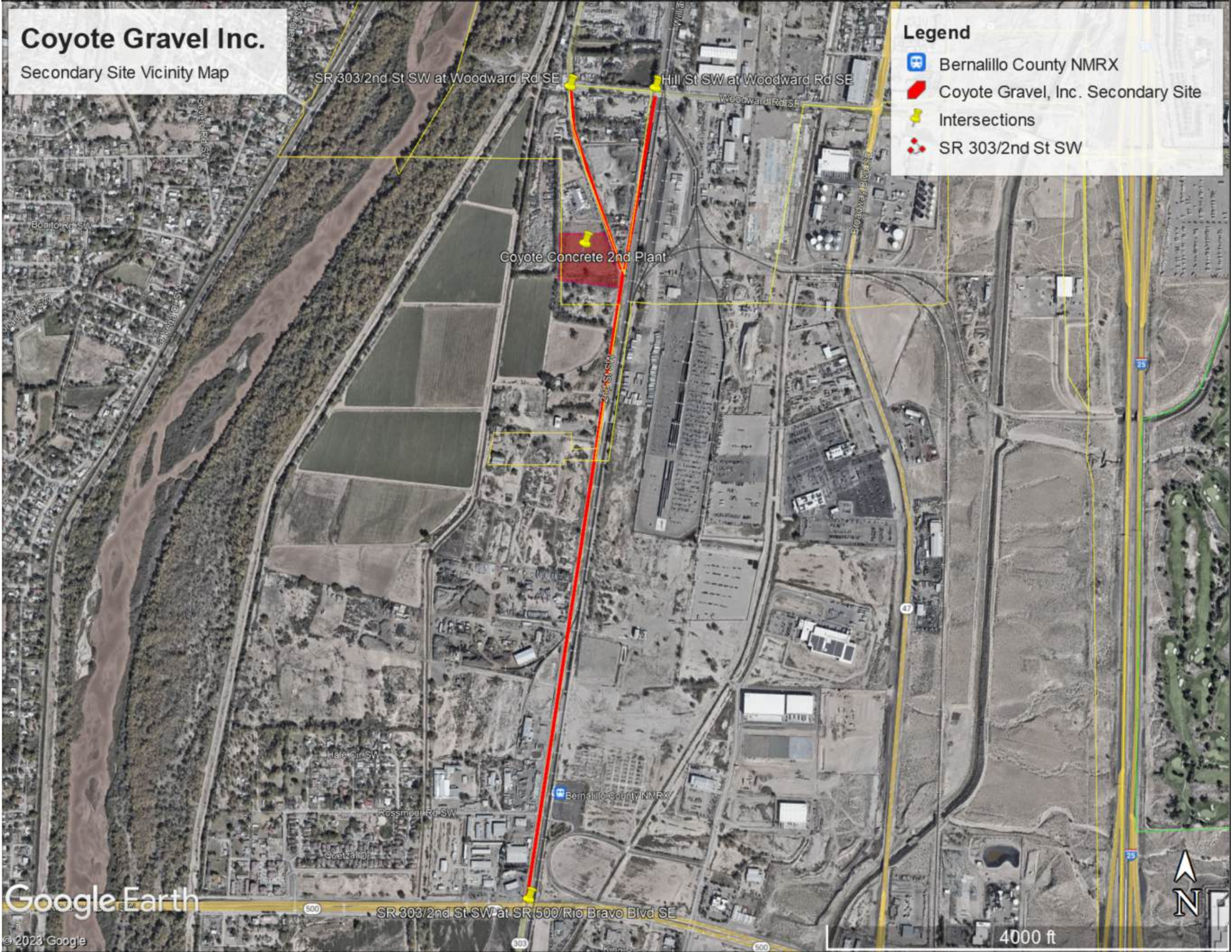


Coyote Gravel Inc.

Secondary Site Vicinity Map

Legend

-  Bernalillo County NMRX
-  Coyote Gravel, Inc. Secondary Site
-  Intersections
-  SR 303/2nd St SW



Intersection of Woodward Rd. at SR 303/2nd St. SW

Coyote Gravel, Inc. Secondary Site

Legend



Intersection of Hill St. SW at SR 303/2nd St. SW

Coyote Gravel, Inc. Secondary Site

Legend



3064

3101

Google Earth

100 ft

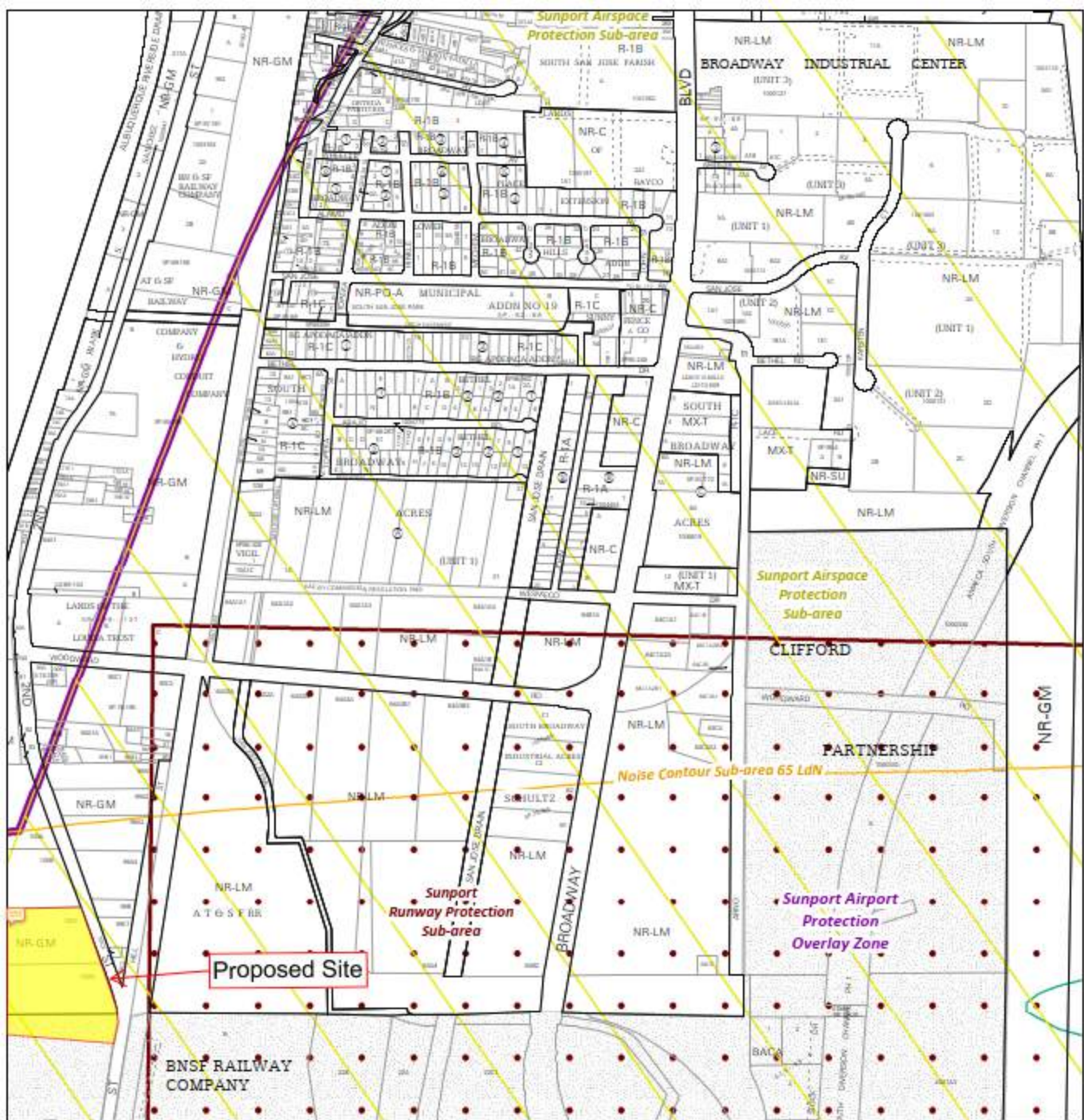
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Intersection of SR 500/Rio Bravo Blvd. SW at SR 303/2nd St. SW

Coyote Gravel, Inc. Secondary Site

Legend



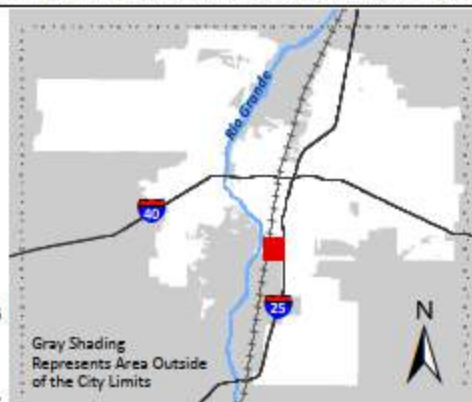


For more details about the Integrated Development Ordinance visit: <http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance>

IDO Zone Atlas May 2018



IDO Zoning information as of May 17, 2018
The Zone Districts and Overlay Zones
are established by the
Integrated Development Ordinance (IDO).



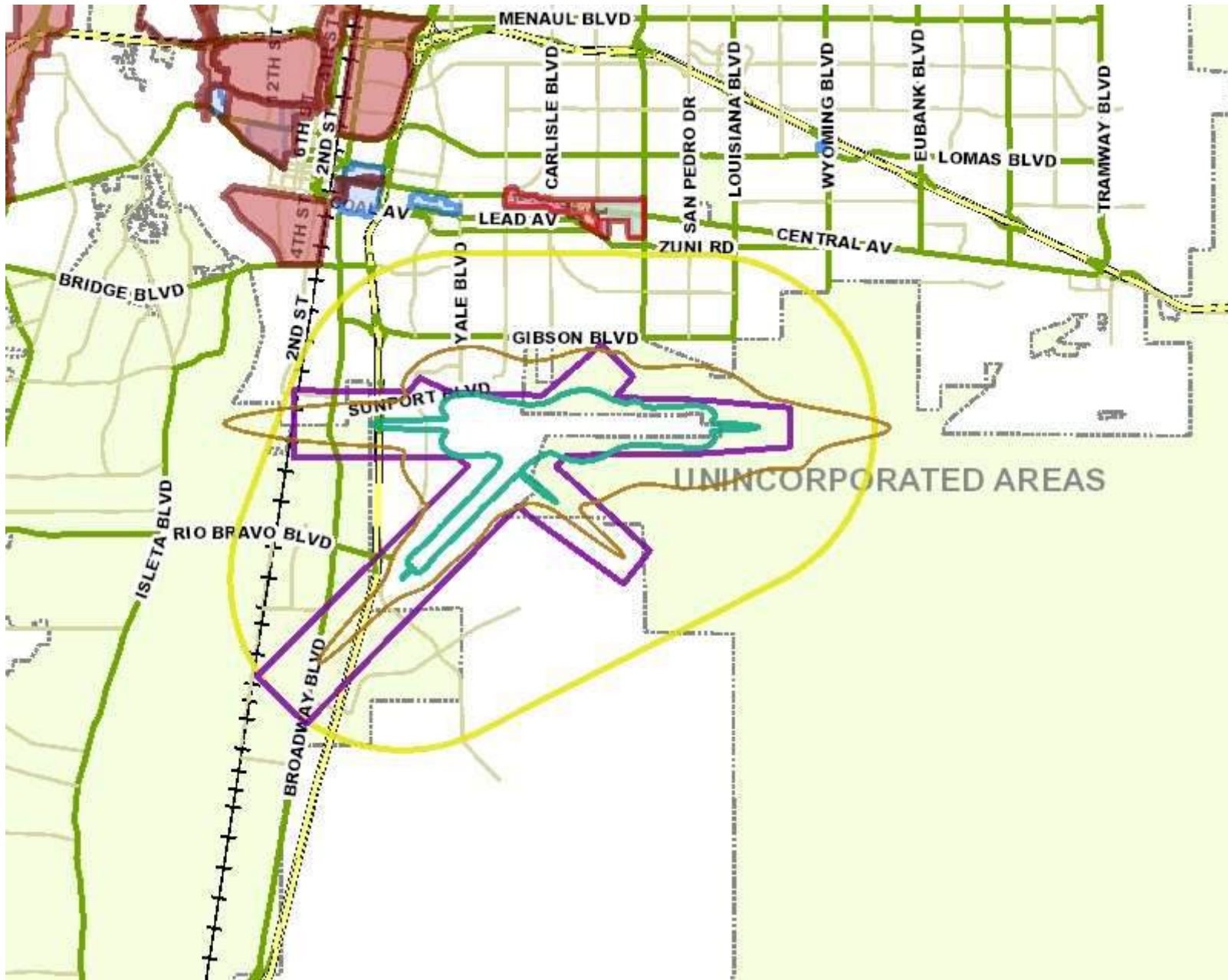
Zone Atlas Page:
M-14-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

0 250 500 1,000 Feet



City of Albuquerque



Legend

(APO) - Airport Protection Over

- Sunport Air Space Protection Sub-ε
- Double Eagle II Air Space Protection
- Runway Protection Sub-area
- Noise Contour Sub-area 75 LdN
- Noise Contour Sub-area 65 LdN

(CPO) - Character Protection C

- Barelas – CPO-1
- Coors Boulevard – CPO-2
- Downtown Neighborhood Area – CI
- East Downtown – CPO-4
- High Desert – CPO-5
- High Desert – CPO-5, Highlands St
- High Desert – CPO-5, Panhandle S
- Los Duranes – CPO-6
- Martineztown/Santa Barbara – CPC
- Nob Hill/Highland – CPO-8
- Nob Hill/Highland – CPO-8, Building
- Nob Hill/Highland – CPO-8, Building
- Nob Hill/Highland – CPO-8, Building
- Nob Hill/Highland – CPO-8, Building
- Nob Hill/Highland – CPO-8, Building
- North 4th Corridor – CPO-9
- North I-25 Area – CPO-10
- North I-25 Area – CPO-10, Building
- North I-25 Area – CPO-10, Building
- North I-25 Area – CPO-10, Building
- North I-25 Area – CPO-10, Building
- North I-25 Area – CPO-10, Alamed:
- Rio Grande Boulevard – CPO-11

Notes

17,157 0 8,579 17,157 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
9/10/2024 © City of Albuquerque

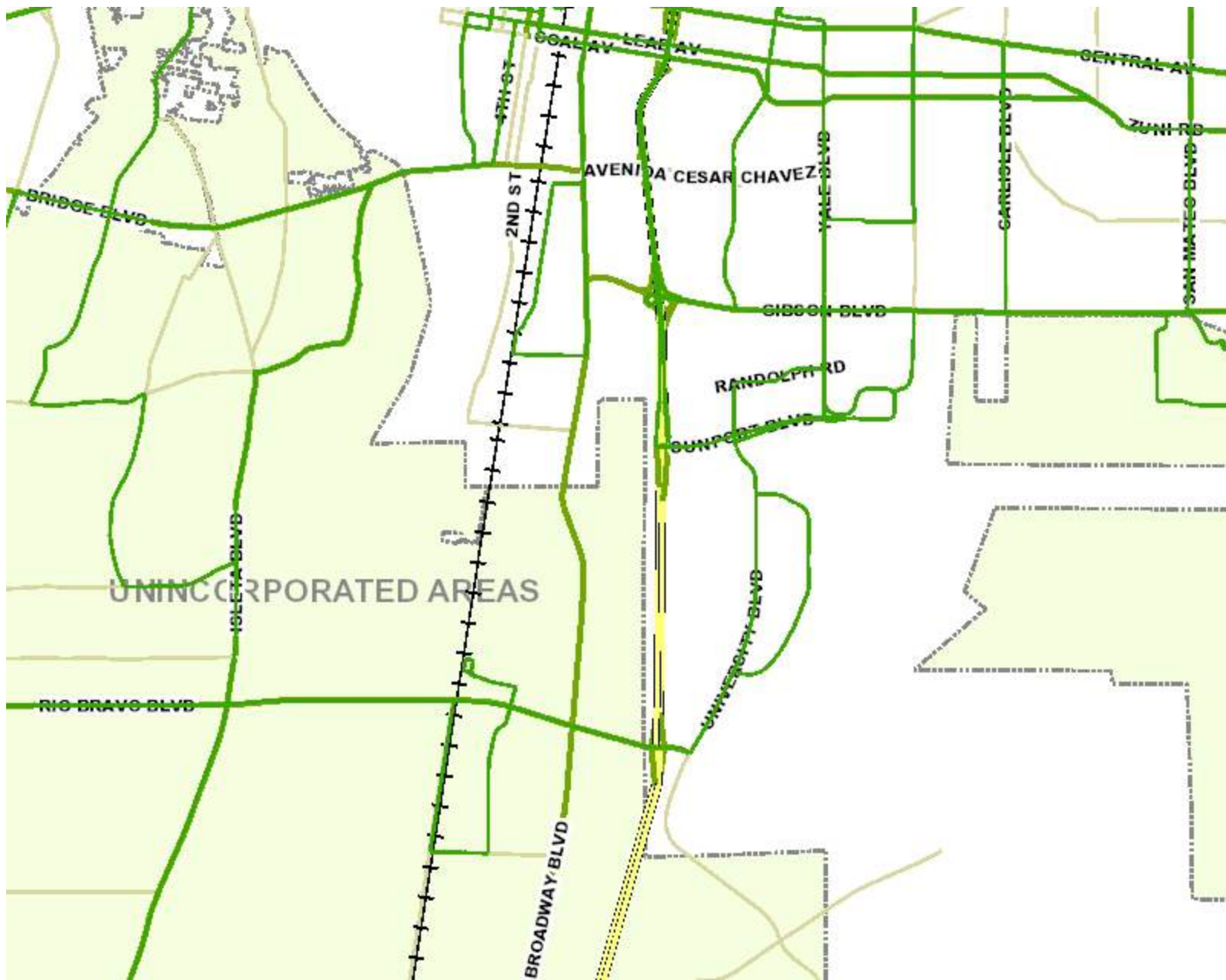
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THIS MAP IS NOT TO BE USED FOR NAVIGATION



City of Albuquerque



Legend

- Bus Routes
- Arterial Streets
 - Freeway
 - Principal Arterial
 - Minor Arterial
- + BN and SF Railroad
- Municipal Limits
 - Corrales
 - Edgewood
 - Los Ranchos
 - Rio Rancho
 - Tijeras
 - UNINCORPORATED

Notes

8,579 0 4,289 8,579 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
9/10/2024 © City of Albuquerque

1: 51,471

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

LONG RANGE ROADWAY SYSTEM (LRRS)

Published April 2020



LRRS Key

Roadway Function

- Interstate
- Regional Principal Arterial
- Community Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector

Future Roadways

- Potential Future Route
- Proposed Regional Arterial
- Proposed Community Arterial
- Proposed Minor Arterial
- Proposed Major Collector
- Proposed Minor Collector

Interchanges

- + Proposed Interchange
- + Proposed Grade-Separated Crossing
- + Proposed Interchange Beyond 2040

The *Long Range Roadway System (LRRS)* describes both existing and future (proposed) roadways in the Albuquerque Metropolitan Planning Area (AMPA). Roadways are classified by their character and their role in regional connectivity. This is in contrast to Functional Classification, which reflects current function and determines eligibility for federal funding.

Proposed facilities include projects beyond the 2040 timeframe. These roadways are included to help identify future need and important regional connections. This system should be viewed as an aspirational network.

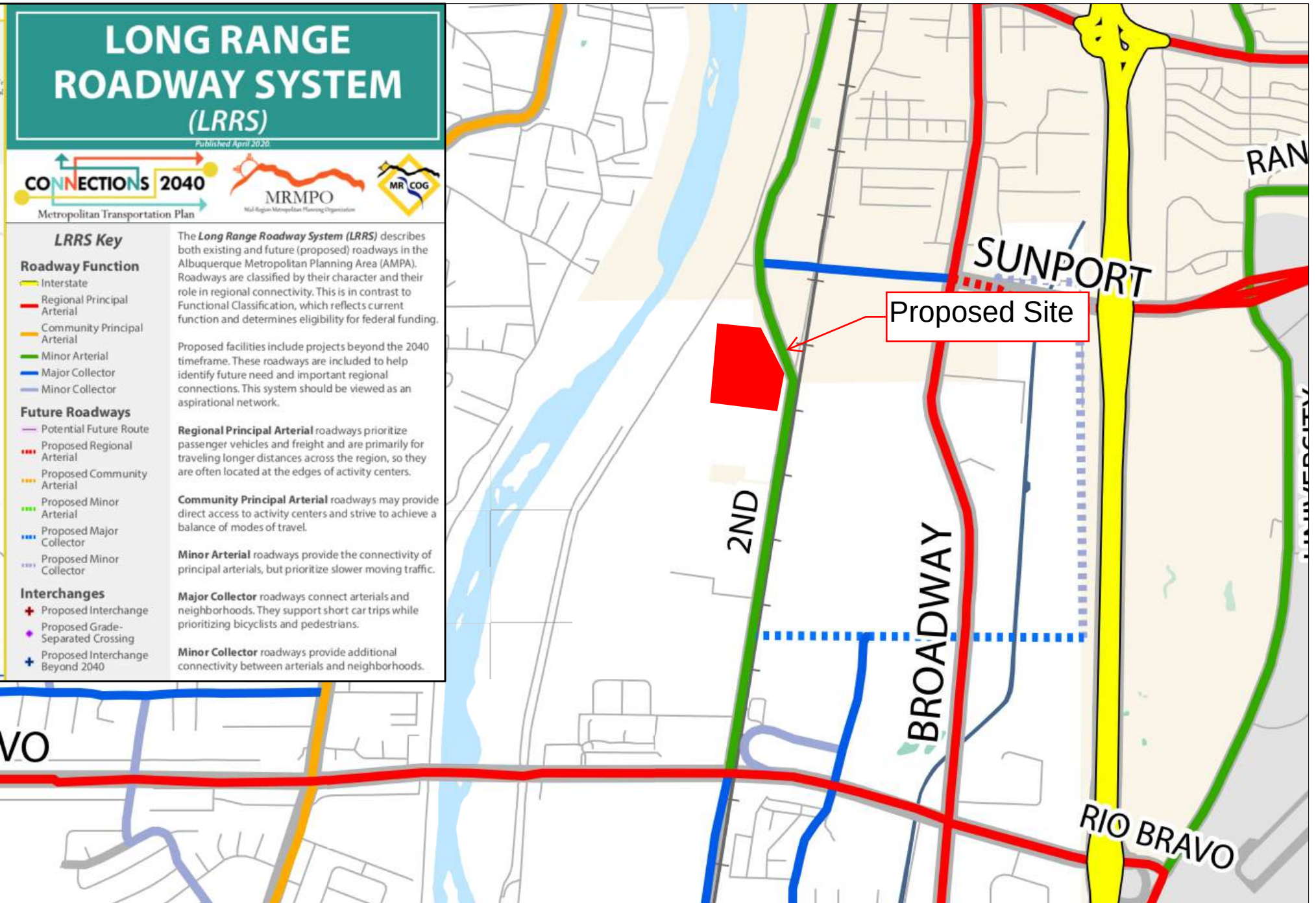
Regional Principal Arterial roadways prioritize passenger vehicles and freight and are primarily for traveling longer distances across the region, so they are often located at the edges of activity centers.

Community Principal Arterial roadways may provide direct access to activity centers and strive to achieve a balance of modes of travel.

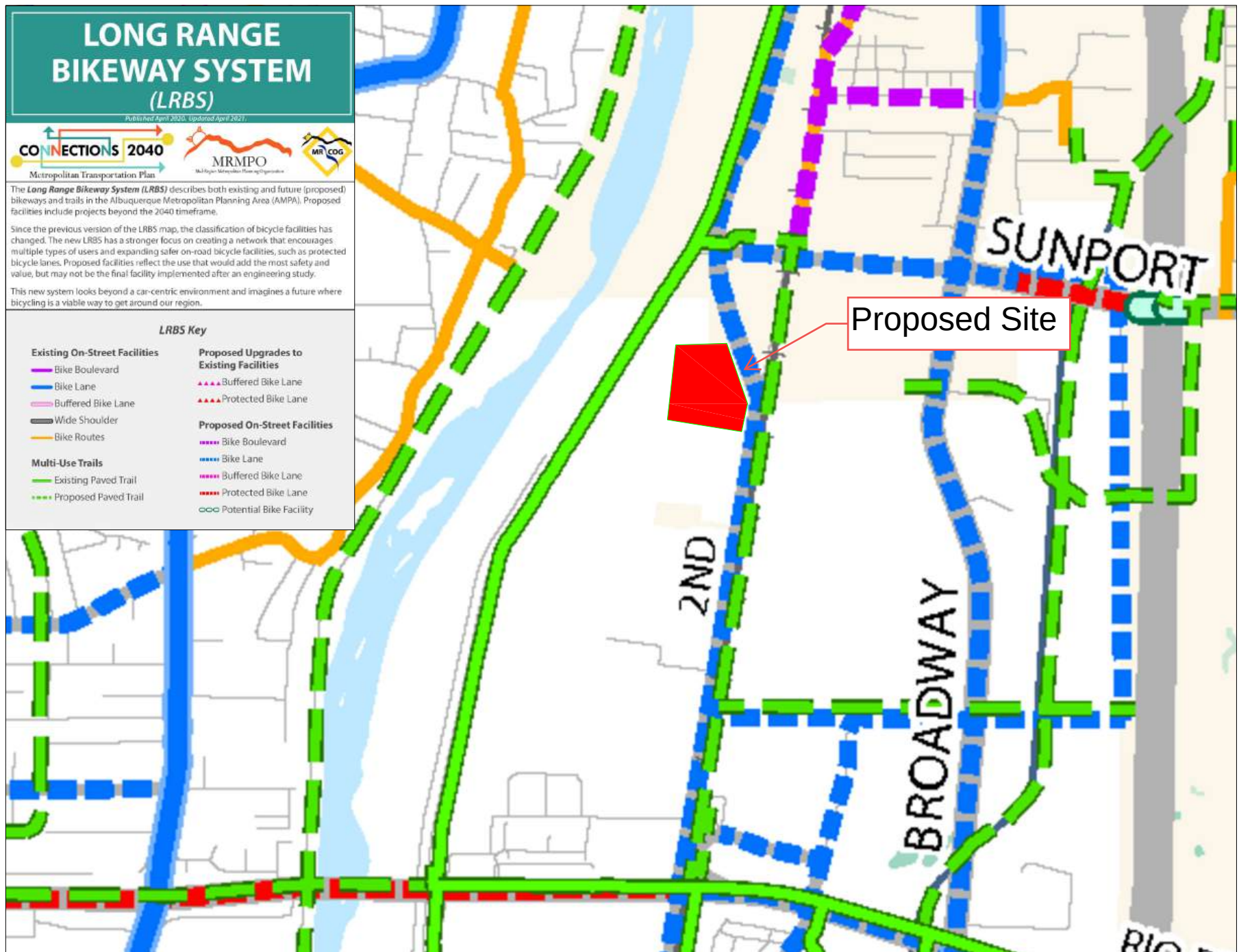
Minor Arterial roadways provide the connectivity of principal arterials, but prioritize slower moving traffic.

Major Collector roadways connect arterials and neighborhoods. They support short car trips while prioritizing bicyclists and pedestrians.

Minor Collector roadways provide additional connectivity between arterials and neighborhoods.



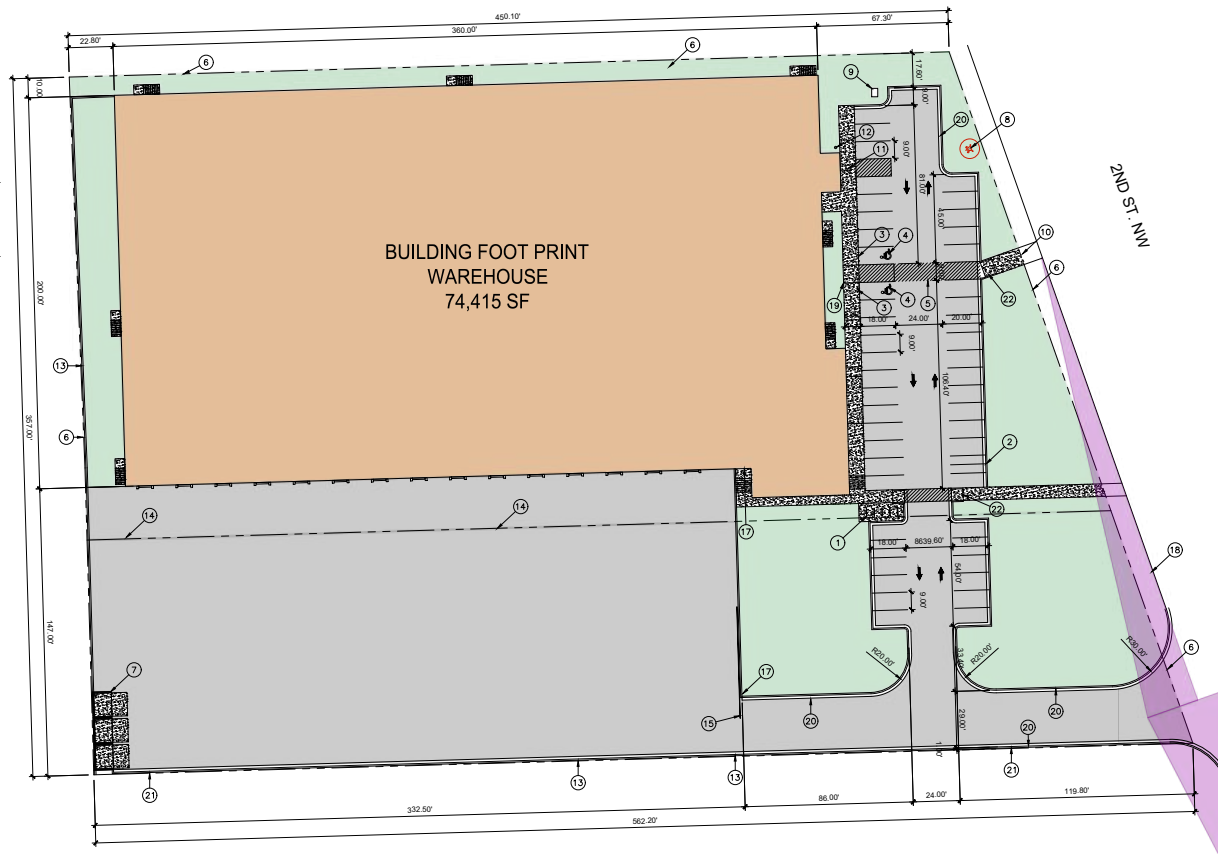
Portion of Futures 2040 Long Range Roadway System
(from Mid-Region Council of Governments)



**Portion of Futures 2040 Long Range Bikeway System
(from Mid-Region Council of Governments)**

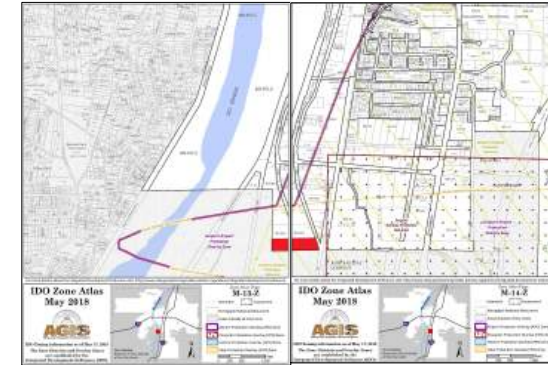
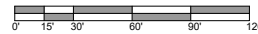
KEYED NOTES

- BIKE RACK, REF DETAIL ON SHEET A-100
- MOTORCYCLE PARKING SIGN REF DETAIL ON SHEET A-100
- H.C. PARKING SIGN, REF DETAIL ON SHEET A-100
- H.C. PARKING SYMBOL
- ACCESSIBLE ROUTE
- EXISTING PROPERTY LINE
- REFUSE CONTAINER, REF DETAIL ON SHEET A-100
- NEW FIRE HYDRANT
- IRRIGATION BOX
- NEW SIDEWALK, 2% MAX CROSS SLOPE, 1.5" PREFERRED CROSS SLOPE, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2430
- FIRE DEPT. CONNECTION
- P.V.
- 6" CMU WALL
- EXISTING PROPERTY LINE TO BE VACATED
- VEHICULAR GATE
- CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2441, NOTE DETAIL 2446 FOR DETECTABLE WARNING SURFACE
- KNOX BOX
- CLEAR SIGHT TRIANGLE, LANDSCAPING, FENCING AND SIGNING WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FT TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE
- CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL 2441, NOTE DETAIL 2446 FOR DETECTABLE WARNING SURFACE
- RED PAINT WITH "FIRE LANE" NOTATION
- NEW PROPERTY LINE
- EGRESS STAIR



SITE PLAN

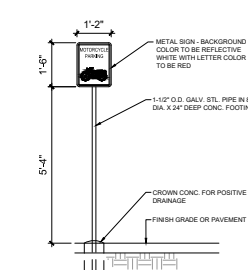
SCALE: 1" = 30'-0"



NOTE:
ALL IMPROVEMENTS LOCATED IN THE RIGHT OF WAY MUST BE INCLUDED IN A PUBLIC WORK ORDER.
LANDSCAPING, FENCING AND SIGNING WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FT TALL AS MEASURED FROM THE GUTTER PAN WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
ALL PARKING SHALL BE SHALL BE ASPHALT UNLESS NOTED OTHERWISE. REF DETAIL ON SHEET A-100.1.
ALL MECHANICAL EQUIPMENT SHALL BE SCREENED IN ACCORDANCE WITH IDO SECTION 54.05.
ALL OUTDOOR LIGHT FIXTURES SHALL BE USED. FIXTURES TO WALLS OR GREATER SHALL BE SHIELDED USING FULL CUTOFF LIGHT FIXTURES.
BUILDING MOUNTED SIGNS SHALL BE EXTERNALLY ILLUMINATED AND SHALL NOT EXTEND MORE THAN 2 FEET ABOVE THE EXTERIOR WALLS OF THE BUILDING.

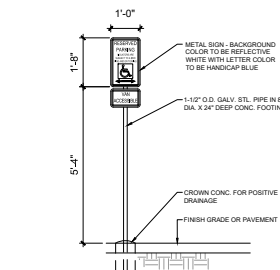
GROSS LOT AREA = 321,348 SF
BUILDINGS = 74,415 SF
NET LOT AREA = 246,933 SF
REQUIRED LANDSCAPE AREA @ 15% = 37,040 SF PROVIDED

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LEGAL: MRGCD MAP #44 TR 100-D
ZONING: NR-GM
ZONE ATLAS PAGE: M-13 & M-14



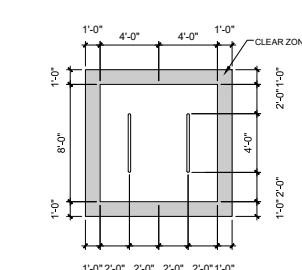
MOTORCYCLE SIGN

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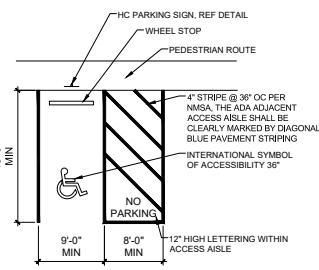
HC SIGN

SCALE: NTS



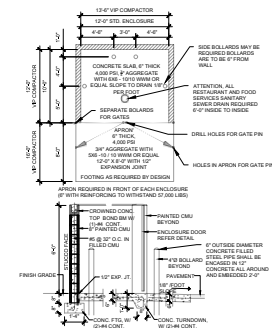
BIKE PARKING

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ADA PARKING

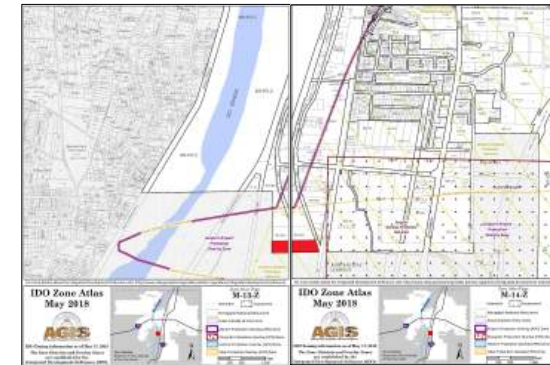
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TRASH ENCLOSURE

SCALE: 1/8" = 1'-0"

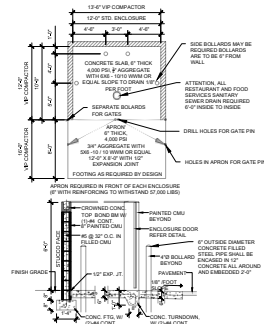
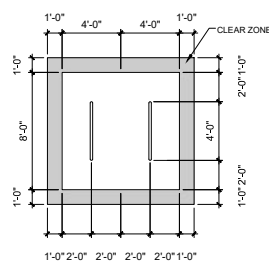
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COYOTE WAREHOUSE 3053 2nd ST NW ALBUQUERQUE, NM 87105			
MASTER PLAN			
REAL	DESIGNED	PROJECT NO	
	DRAWN	SCALE	
	CHECKED	DRAWING NO	
	REVIEWED	DATE	8/17/2023
A-100			



1. BIKE RACK, OFF-ROAD SIGN DETAIL SHEET A-100
2. MOTORCYCLE PARKING SIGN DETAIL SHEET A-100
3. PARKING SIGN, SEE DETAIL ON SHEET A-100
4. HC PARKING SYMBOL
5. ACCESSIBLE ROUTE
6. EXISTING PROPERTY LINE
7. REFUSE CONTAINER, REF DETAIL SHEET A-100
8. NEW FIRE HYDRANT
9. IRRIGATION BUSH
10. NEW SIDEWALK, 2' MAX CROSS SLOPE, 1.5% PREFERRED CROSS SLOPE
11. FIRE PEDEST. CONNECTION
12. 6" CMU WALL
13. EXISTING PROPERTY LINE TO BE VACATED
14. VEHICULAR GATE
15. CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL SHEET A-100, 2446 FOR CUTTER PAN WILL NOT BE ACCEPTABLE
16. KNOX BOX
17. CLEAR SIGN TRIANGLE, LANDSCAPING, FENCING AND SIDING WILL INTERFERE WITH CLEAR SIGN REQUIREMENTS. THEREFORE, TREES, WALLS, TREES AND SHRUBBERY BETWEEN 3 AND 8 FT TALL SHALL BE REMOVED FROM CUTTER PAN WILL NOT BE ACCEPTABLE IN THE CLEAR SIGN TRIANGLE
18. CURB RAMP, REFERENCE CITY OF ALBUQUERQUE STANDARD DETAIL SHEET A-100, 2446 FOR CUTTER PAN WILL NOT BE ACCEPTABLE
19. RED PAINT WITH "FIRE LANE" NOTATION
20. NEW PROPERTY LINE
21. EGRESS STRAIT

GROSS LOT AREA = 321,346 SF
BUILDINGS = SF
NET LOT AREA = SF
REQUIRED LANDSCAPE AREA @ 15% = SF ; SF PROVIDED

UPC: 101405502501930102, 101405502304230103
LEGAL: MRGCD MAP #44 TR 100-D
ZONING: NR-GM
ZONE ATLAS PAGE: M-13 & M-14



SCALE: 1/8" = 1'-0"

No	Revision	Item	Date



SCOTT C. ANDERSON
& associates, architects
1000 W. 15th Ave., Suite 100
 Albuquerque, NM 87102
 505-263-8888 • www.scaarchitects.com

COYOTE BATCH PLANT
3059 2nd ST NW
ALBUQUERQUE, NM 87105

DRAWING TITLE

SITE PLAN

SEAL

DESIGNED	PROJECT NO
DRAWN	SCALE
CHECKED	DRAWING NO.
REVIEWED	A-100
DATE	
	8/17/2023

Signal Timing and Phase Assignments
Rio Bravo & 2nd St.

Direction	W-SB	EB	N-WB	SB	E-NB	WB	S-EB	NB
Camera	3	1	4	2	1	3	2	4
Phase	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
Min. Green	7	15	7	10	7	15	7	10
Max. 1	15	100	40	35	15	100	30	35
Max. 2	20	65	45	40	20	65	35	40
Max. 3	25	75	40	35	25	75	30	35
Veh. Ext.	1.5	3.5	3.0	2.5	2.0	3.5	1.5	2.5
Yellow + Red	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Yellow (3-6)	4.6	4.6	5.6	5.6	4.6	4.6	5.6	5.6
Red Clr. (1-2)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Walk		7		7		0		0
Ped. Clr.		16		32		0		0

Rio Bravo & 2nd St., EW

Yellow + All Red Signal Change Interval				
	English Units		Metric Units	
Input Items In Red Only				
Approach speed V	45	MPH	72	KM/Hr
grade (g)	0.00%		0.00%	
Width of Intersection	95	Feet	28.96	Meters
Length of Vehicle	20	Feet	6	Meters
Perception Time (t) (seconds)	1	Sec	1	Sec
Gravity (G)	32.2	Ft/Sec ²	9.8	M/Sec ²
Deceleration Rate (a)	10	Ft/Sec ²	3.0	M/Sec ²
Change Plus clearance Time at signalized intersections CP=	6.04	Seconds	6.04	Seconds

Source: ITE Traffic Engineering Handbook - 5th Ed. (Page 481)

Formula

$$CP = T + (V/(2a+2gG)) + (W+L)/V$$

Where V is in FEET/SEC in Formula above

Red clearance Interval shall be 1-2 Seconds

Rio Bravo & 2nd St., NS

Yellow + All Red Signal Change Interval				
	English Units		Metric Units	
Input Items In Red Only				
Approach speed V	45	MPH	72	KM/Hr
grade (g)	0.00%		0.00%	
Width of Intersection	159	Feet	48.46	Meters
Length of Vehicle	20	Feet	6	Meters
Perception Time (t) (seconds)	1	Sec	1	Sec
Gravity (G)	32.2	Ft/Sec ²	9.8	M/Sec ²
Deceleration Rate (a)	10	Ft/Sec ²	3.0	M/Sec ²
Change Plus clearance Time at signalized intersections CP=	7.01	Seconds	7.01	Seconds

Source: ITE Traffic Engineering Handbook - 5th Ed. (Page 481)

Formula

$$CP = T + (V/(2a+2gG)) + (W+L)/V$$

Where V is in FEET/SEC in Formula above

Red clearance Interval shall be 1-2 Seconds

Rio Bravo & 2nd St., EW

Minimum Pedestrian Green Time @ Signalized Intersections		
Input Items In Red Only		
Pedestrian Start off Time (P)	7	Seconds
Walking Distance (D)	70	Feet
Walking Speed (S)	3.5	Ft/Sec
Yellow Change Interval (Y)	4.6	Seconds
G _{min} =	15.40	

Source: Toolbox On Intersection Safety And Design

By ITE Dated September, 2004

Formula

$$(D/S) - Y$$

Rio Bravo & 2nd St., NS

Minimum Pedestrian Green Time @ signalized Intersections		
Input Items In Red Only		
Pedestrian Start off Time (P)	7	Seconds
Walking Distance (D)	130	Feet
Walking Speed (S)	3.5	Ft/Sec
Yellow Change Interval (Y)	5.6	Seconds
G _{min} =	31.54	

Source: Toolbox On Intersection Safety And Design

By ITE Dated September, 2004

Formula

$$(D/S) - Y$$

Intersection No.:

System:
Address:

Intersection Name:

Controller Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:		EB	S-E	NB		WB		SB
Min Grn			3	12		8		12
Walk:		7	0	7				0
Ped Clr:		15	0	20				0
Veh Ext:			3.0	3.0		3.0		3.0
Veh Ext2:								
Max 1:			10	34		30		16
Max 2:			15	40		34		20
Max 3:								
Yellow:		3.5	3.0	4.0		3.5		4.0
Red Clr		2.0	0.5	1.5		2.0		1.5

Controller Recall Data

Locking Memory:							
Vehicle Recall:							
Ped Recall:							
Recall To Max:							

Flash Mode:

Start Up Mode:

Time:

First Phases:

Start In:

Overlap Phases:

NOTES:

1. Prepared by: Suresh Parvatoja, P.E, AECOM 2-23-22

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **Woodward Rd.**N-S Street: **SR 303/2nd St**Speed Limit (Woodward Rd.)= **30**Speed Limit (SR 303/2nd St)= **35**

Signalized

4/14/24

Begin Time	End Time	Eastbound (Woodward Rd.)			Westbound (Woodward Rd.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	0	0	0	22	0	13	0	71	28	4	19	0
7:15 AM	7:30 AM	0	0	0	21	0	9	0	72	48	9	19	0
7:30 AM	7:45 AM	0	0	0	34	0	18	0	92	80	10	25	0
7:45 AM	8:00 AM	0	0	0	29	0	15	0	134	84	13	29	0
8:00 AM	8:15 AM	0	0	0	29	0	19	0	100	68	7	25	0
8:15 AM	8:30 AM	0	0	0	30	0	8	0	96	43	13	30	0
8:30 AM	8:45 AM	0	0	0	29	0	20	0	58	28	9	35	0
8:45 AM	9:00 AM	0	0	0	24	0	13	0	40	24	4	23	0

Peak Hour Vol. (AM)	0	0	0	122	0	60	0	422	275	43	109	0
% of Total Traffic	0.0%	0.0%	0.0%	11.8%	0.0%	5.8%	0.0%	40.9%	26.7%	4.2%	10.6%	0.0%
% Directional		0.0%			17.7%	PHF = 0.85		67.6%			14.7%	

Begin Time	End Time	Eastbound (Woodward Rd.)			Westbound (Woodward Rd.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Vol. (Midday)	0	0	0	0	0	0	0	0	0	0	0	0
% of Total Traffic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Directional		0.0%			0.0%	PHF = #DIV/0!		0.0%			0.0%	

Begin Time	End Time	Eastbound (Woodward Rd.)			Westbound (Woodward Rd.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	0	0	0	80	0	43	0	47	20	9	73	0
4:15 PM	4:30 PM	0	0	0	78	0	32	0	38	22	17	74	0
4:30 PM	4:45 PM	0	0	0	82	0	30	0	32	16	31	70	0
4:45 PM	5:00 PM	0	0	0	101	0	29	0	40	23	12	74	0
5:00 PM	5:15 PM	0	0	0	91	0	41	0	33	23	33	71	0
5:15 PM	5:30 PM	0	0	0	60	0	27	0	40	26	12	56	0
5:30 PM	5:45 PM	0	0	0	62	0	36	0	28	17	6	51	0
5:45 PM	6:00 PM	0	0	0	68	0	16	0	27	18	7	49	0

Peak Hour Vol. (PM)	0	0	0	352	0	132	0	143	84	93	289	0
% of Total Traffic	0.0%	0.0%	0.0%	34.1%	0.0%	12.8%	0.0%	13.9%	8.1%	9.0%	28.0%	0.0%
% Directional		0.0%			46.9%	PHF = 0.94		22.0%			37.1%	

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **Woodward Rd.**N-S Street: **SR 303/2nd St**Speed Limit (Woodward Rd.)= **30**Speed Limit (SR 303/2nd St)= **35**

Signalized

4/14/24

Begin Time	End Time	Eastbound (Woodward Rd.)			Westbound (Woodward Rd.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	22	0	13	0	71	28	4	19	0
7:15 AM	7:30 AM	0	0	0	21	0	9	0	72	48	9	19	0
7:30 AM	7:45 AM	0	0	0	34	0	18	0	92	80	10	25	0
7:45 AM	8:00 AM	0	0	0	29	0	15	0	134	84	13	29	0
8:00 AM	8:15 AM	0	0	0	29	0	19	0	100	68	7	25	0
8:15 AM	8:30 AM	0	0	0	30	0	8	0	96	43	13	30	0
8:30 AM	8:45 AM	0	0	0	29	0	20	0	58	28	9	35	0
8:45 AM	9:00 AM	0	0	0	24	0	13	0	40	24	4	23	0
4X Peak 15-Min. Vol. (AM)		0	0	0	116	0	60	0	536	336	52	116	0
% of Total Traffic		0.0%	0.0%	0.0%	9.5%	0.0%	4.9%	0.0%	44.1%	27.6%	4.3%	9.5%	0.0%
% Directional			0.0%			14.5%	Intersection		71.7%			13.8%	

Begin Time	End Time	Eastbound (Woodward Rd.)			Westbound (Woodward Rd.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	0	80	0	43	0	47	20	9	73	0
4:15 PM	4:30 PM	0	0	0	78	0	32	0	38	22	17	74	0
4:30 PM	4:45 PM	0	0	0	82	0	30	0	32	16	31	70	0
4:45 PM	5:00 PM	0	0	0	101	0	29	0	40	23	12	74	0
5:00 PM	5:15 PM	0	0	0	91	0	41	0	33	23	33	71	0
5:15 PM	5:30 PM	0	0	0	60	0	27	0	40	26	12	56	0
5:30 PM	5:45 PM	0	0	0	62	0	36	0	28	17	6	51	0
5:45 PM	6:00 PM	0	0	0	68	0	16	0	27	18	7	49	0
4X Peak 15-Min. Vol. (PM)		0	0	0	364	0	164	0	132	92	132	284	0
% of Total Traffic		0.0%	0.0%	0.0%	31.2%	0.0%	14.0%	0.0%	11.3%	7.9%	11.3%	24.3%	0.0%
% Directional			0.0%			45.2%	Intersection		19.2%			35.6%	

Traffic Count Data Sheet (Bicycles / Pedestrians)

Year Counts Taken: **2024**E-W Street: **Woodward Rd.**
N-S Street: **SR 303/2nd St**Speed Limit (Woodward Rd.)= **30** MPHSpeed Limit (SR 303/2nd St)= **35** MPH

Signalized

4/14/24

Begin Time	End Time	Eastbound (Woodward Rd.)				Westbound (Woodward Rd.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	s	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Volumes		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

Begin Time	End Time	Eastbound (Woodward Rd.)				Westbound (Woodward Rd.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noon Peak Hour Volume		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Begin Time	End Time	Eastbound (Woodward Rd.)				Westbound (Woodward Rd.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Volumes		1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **Hill St.**N-S Street: **SR 303/2nd St**Speed Limit (Hill St.)= **30**Speed Limit (SR 303/2nd St)= **35**

Signalized

4/14/24

Begin Time	End Time	Eastbound (Hill St.)			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	0	0	0	0	0	0	0	100	1	0	41	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	131	0	0	29	0
7:30 AM	7:45 AM	0	0	0	1	0	0	0	168	0	0	58	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	213	0	0	57	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	161	0	0	44	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	144	0	0	59	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	84	1	0	67	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	61	0	1	42	0

Peak Hour Vol. (AM)	0	0	0	1	0	0	0	686	0	0	218	0
% of Total Traffic	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	75.8%	0.0%	0.0%	24.1%	0.0%
% Directional		0.0%			0.1%		PHF = 0.84	75.8%			24.1%	

Begin Time	End Time	Eastbound (Hill St.)			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Vol. (Midday)	0	0	0	0	0	0	0	0	0	0	0	0
% of Total Traffic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Directional		0.0%			0.0%		PHF = #DIV/0!	0.0%			0.0%	

Begin Time	End Time	Eastbound (Hill St.)			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	0	0	0	0	0	0	0	59	0	0	158	0
4:15 PM	4:30 PM	0	0	0	0	0	1	0	60	0	0	153	0
4:30 PM	4:45 PM	0	0	0	0	0	0	0	43	0	0	148	0
4:45 PM	5:00 PM	0	0	0	0	0	1	0	58	1	0	170	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	57	0	0	163	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	61	0	0	123	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	42	0	0	117	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	44	0	0	121	0

Peak Hour Vol. (PM)	0	0	0	0	0	2	0	218	1	0	634	0
% of Total Traffic	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	24.1%	0.1%	0.0%	70.1%	0.0%
% Directional		0.0%			0.2%		PHF = 0.93	24.2%			70.1%	

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **Hill St.**N-S Street: **SR 303/2nd St**Speed Limit (Hill St.)= **30**Speed Limit (SR 303/2nd St)= **35**
4/14/24

Signalized

Begin Time	End Time	Eastbound (Hill St.)			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	0	0	0	0	100	1	0	41	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	131	0	0	29	0
7:30 AM	7:45 AM	0	0	0	1	0	0	0	168	0	0	58	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	213	0	0	57	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	161	0	0	44	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	144	0	0	59	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	84	1	0	67	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	61	0	1	42	0
4X Peak 15-Min. Vol. (AM)		0	0	0	0	0	0	0	852	0	0	228	0
% of Total Traffic		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	78.9%	0.0%	0.0%	21.1%	0.0%
% Directional			0.0%			0.0%	Intersection			78.9%		21.1%	

Begin Time	End Time	Eastbound (Hill St.)			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	0	0	0	0	0	59	0	0	158	0
4:15 PM	4:30 PM	0	0	0	0	0	1	0	60	0	0	153	0
4:30 PM	4:45 PM	0	0	0	0	0	0	0	43	0	0	148	0
4:45 PM	5:00 PM	0	0	0	0	0	1	0	58	1	0	170	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	57	0	0	163	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	61	0	0	123	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	42	0	0	117	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	44	0	0	121	0
4X Peak 15-Min. Vol. (PM)		0	0	0	0	0	4	0	232	4	0	680	0
% of Total Traffic		0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	25.2%	0.4%	0.0%	73.9%	0.0%
% Directional			0.0%			0.4%	Intersection			25.7%		73.9%	

Traffic Count Data Sheet (Bicycles / Pedestrians)

Year Counts Taken: **2024**E-W Street: **Hill St.**
N-S Street: **SR 303/2nd St**

Signalized

Speed Limit (Hill St.)= **30** MPH
Speed Limit (SR 303/2nd St)= **35** MPH
4/14/24

Begin Time	End Time	Eastbound (Hill St.)				Westbound (Hill St.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Volumes		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Begin Time	End Time	Eastbound (Hill St.)				Westbound (Hill St.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noon Peak Hour Volume		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Begin Time	End Time	Eastbound (Hill St.)				Westbound (Hill St.)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Volumes		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **SR 500/Rio Bravo**N-S Street: **SR 303/2nd St**Speed Limit (SR 500/Rio Bravo)= **45**Speed Limit (SR 303/2nd St)= **45**

Signalized

4/14/24

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	52	379	43	13	120	16	40	19	8	13	10	21
7:15 AM	7:30 AM	57	355	36	8	115	11	43	24	14	12	15	16
7:30 AM	7:45 AM	71	378	53	9	195	13	31	13	15	14	23	29
7:45 AM	8:00 AM	97	364	65	10	174	18	56	31	14	15	19	31
8:00 AM	8:15 AM	64	401	52	12	155	11	57	24	11	15	14	30
8:15 AM	8:30 AM	72	381	54	17	177	5	51	10	10	13	7	37
8:30 AM	8:45 AM	50	359	46	6	148	16	48	14	16	13	10	41
8:45 AM	9:00 AM	42	305	38	20	192	11	45	7	8	11	12	26

Peak Hour Vol. (AM)	304	1524	224	48	701	47	195	78	50	57	63	127
% of Total Traffic	8.9%	44.6%	6.6%	1.4%	20.5%	1.4%	5.7%	2.3%	1.5%	1.7%	1.8%	3.7%
% Directional		60.0%			23.3%	PHF = 0.96		9.4%			7.2%	

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Vol. (Midday)	0	0	0	0	0	0	0	0	0	0	0	0
% of Total Traffic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Directional		0.0%			0.0%	PHF = #DIV/0!		0.0%			0.0%	

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	35	189	38	6	369	5	78	20	20	15	16	111
4:15 PM	4:30 PM	28	203	54	7	464	7	45	11	14	13	26	87
4:30 PM	4:45 PM	29	198	36	3	408	12	48	10	15	20	15	116
4:45 PM	5:00 PM	31	176	40	1	376	5	61	23	6	14	15	113
5:00 PM	5:15 PM	26	169	35	5	441	4	55	11	9	16	10	70
5:15 PM	5:30 PM	26	177	39	3	422	9	53	11	7	7	9	85
5:30 PM	5:45 PM	31	160	31	2	382	4	60	5	5	12	7	105
5:45 PM	6:00 PM	33	191	33	3	388	3	53	10	5	12	11	92

Peak Hour Vol. (PM)	123	766	168	17	1617	29	232	64	55	62	72	427
% of Total Traffic	3.6%	22.4%	4.9%	0.5%	47.3%	0.8%	6.8%	1.9%	1.6%	1.8%	2.1%	12.5%
% Directional		30.9%			48.7%	PHF = 0.95		10.3%			16.4%	

Traffic Count Data Sheet

Year Counts Taken: **2024**E-W Street **SR 500/Rio Bravo**N-S Street: **SR 303/2nd St**Speed Limit (SR 500/Rio Bravo)= **45**Speed Limit (SR 303/2nd St)= **45**

Signalized

4/14/24

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	52	379	43	13	120	16	40	19	8	13	10	21
7:15 AM	7:30 AM	57	355	36	8	115	11	43	24	14	12	15	16
7:30 AM	7:45 AM	71	378	53	9	195	13	31	13	15	14	23	29
7:45 AM	8:00 AM	97	364	65	10	174	18	56	31	14	15	19	31
8:00 AM	8:15 AM	64	401	52	12	155	11	57	24	11	15	14	30
8:15 AM	8:30 AM	72	381	54	17	177	5	51	10	10	13	7	37
8:30 AM	8:45 AM	50	359	46	6	148	16	48	14	16	13	10	41
8:45 AM	9:00 AM	42	305	38	20	192	11	45	7	8	11	12	26
4X Peak 15-Min. Vol. (AM)		388	1456	260	40	696	72	224	124	56	60	76	124
% of Total Traffic		10.9%	40.7%	7.3%	1.1%	19.5%	2.0%	6.3%	3.5%	1.6%	1.7%	2.1%	3.5%
% Directional			58.8%			22.6%	Intersection			11.3%		7.3%	

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	35	189	38	6	369	5	78	20	20	15	16	111
4:15 PM	4:30 PM	28	203	54	7	464	7	45	11	14	13	26	87
4:30 PM	4:45 PM	29	198	36	3	408	12	48	10	15	20	15	116
4:45 PM	5:00 PM	31	176	40	1	376	5	61	23	6	14	15	113
5:00 PM	5:15 PM	26	169	35	5	441	4	55	11	9	16	10	70
5:15 PM	5:30 PM	26	177	39	3	422	9	53	11	7	7	9	85
5:30 PM	5:45 PM	31	160	31	2	382	4	60	5	5	12	7	105
5:45 PM	6:00 PM	33	191	33	3	388	3	53	10	5	12	11	92
4X Peak 15-Min. Vol. (PM)		112	812	216	28	1856	28	180	44	56	52	104	348
% of Total Traffic		2.9%	21.2%	5.6%	0.7%	48.4%	0.7%	4.7%	1.1%	1.5%	1.4%	2.7%	9.1%
% Directional			29.7%			49.8%	Intersection			7.3%		13.1%	

Traffic Count Data Sheet (Bicycles / Pedestrians)

Year Counts Taken: **2024**E-W Street: **SR 500/Rio Bravo**
N-S Street: **SR 303/2nd St**Speed Limit (SR 500/Rio Bravo)= **45** MPHSpeed Limit (SR 303/2nd St)= **45** MPH

Signalized

4/14/24

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)				Westbound (SR 500/Rio Bravo)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
6:00 AM	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Volumes		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)				Westbound (SR 500/Rio Bravo)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
11:00 AM	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noon Peak Hour Volume		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Begin Time	End Time	Eastbound (SR 500/Rio Bravo)				Westbound (SR 500/Rio Bravo)				Northbound (SR 303/2nd St)				Southbound (SR 303/2nd St)			
		L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians	L	T	R	Pedestrians
2:00 PM	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	4:30 PM	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0
4:30 PM	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Volumes		0	0	0	2	0	0	0	1	1	0	0	2	0	0	0	0

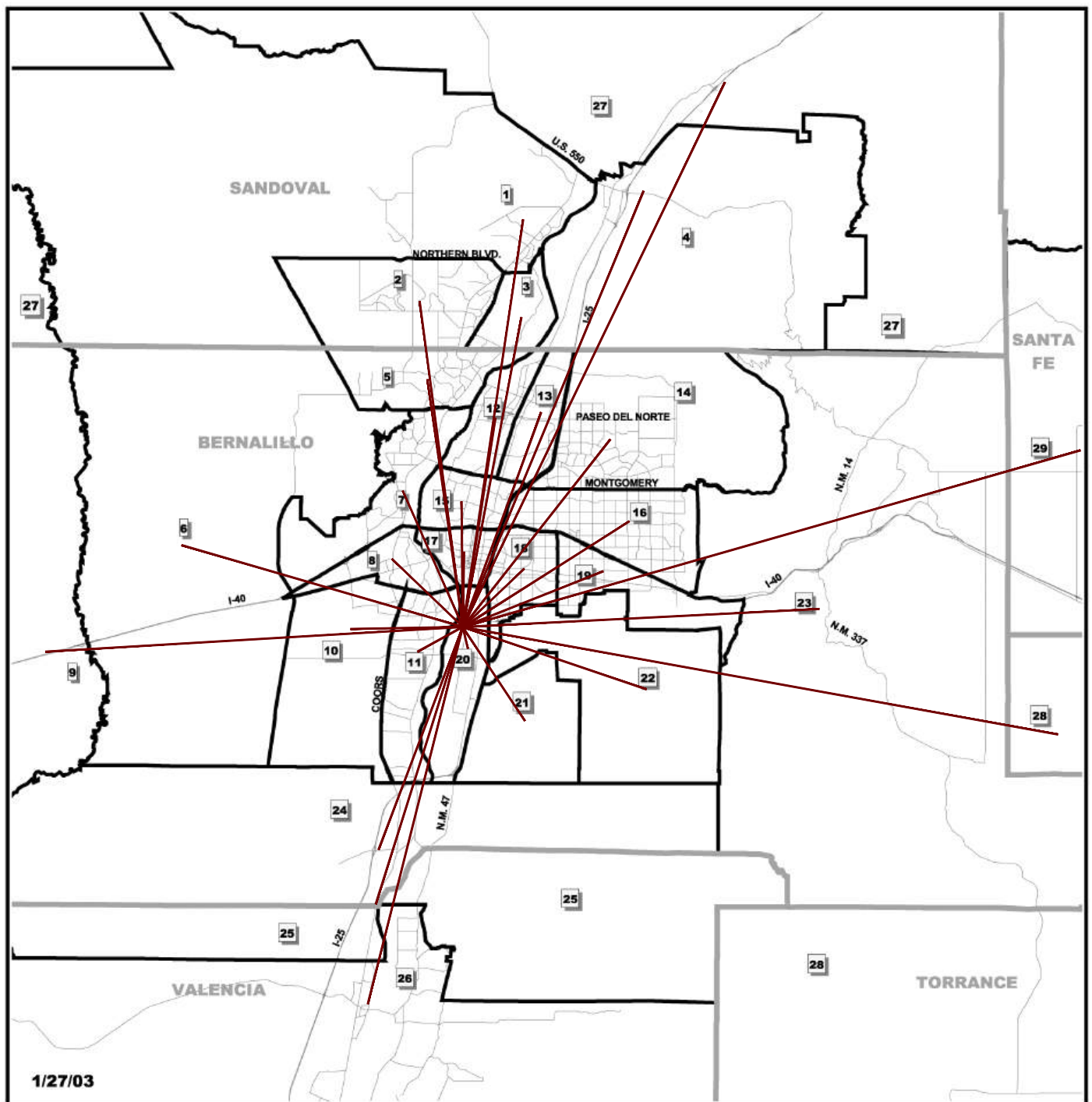


Figure 6

22 Subarea Identification Number

Subareas of the MRCOG Region

**Mid-Region
Council of Governments**
317 Commercial NE, Suite 104
Albuquerque, NM 87102
505-247-1750

Subarea boundaries extend to county boundary
where full extent of subarea not shown except for Subarea 29
which only includes southern Santa Fe County.

**Coyote Gravel, Inc. Secondary Site
(SR 303/2nd St SW)
Trip Distribution Subarea Map**

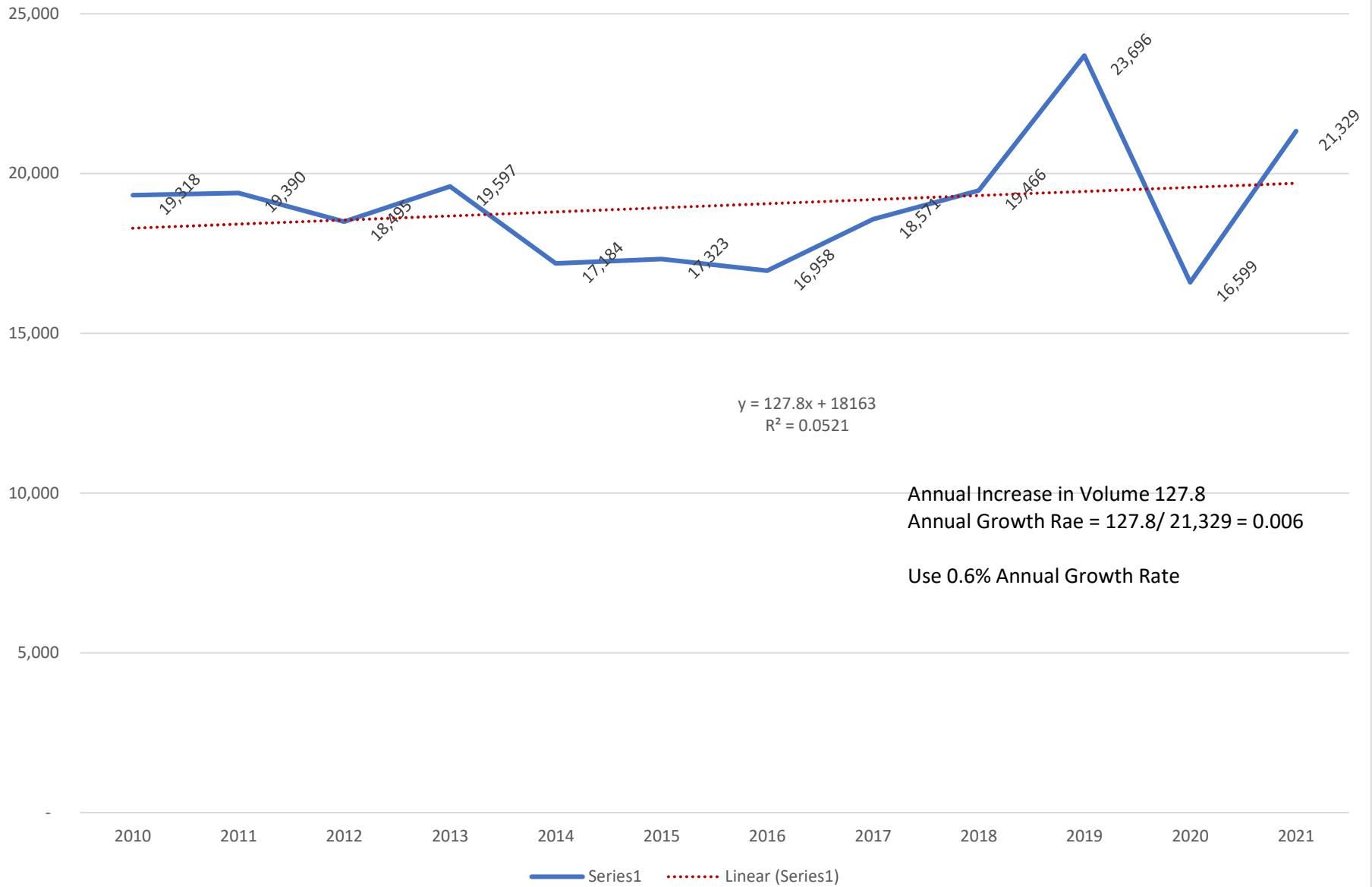
Historic Growth Data Table
Coyote Gravel Inc. - Secondary Site
(SR 303/2nd St SW)

Traffic Flows (AWDT) from Mid-Region Council of Governments

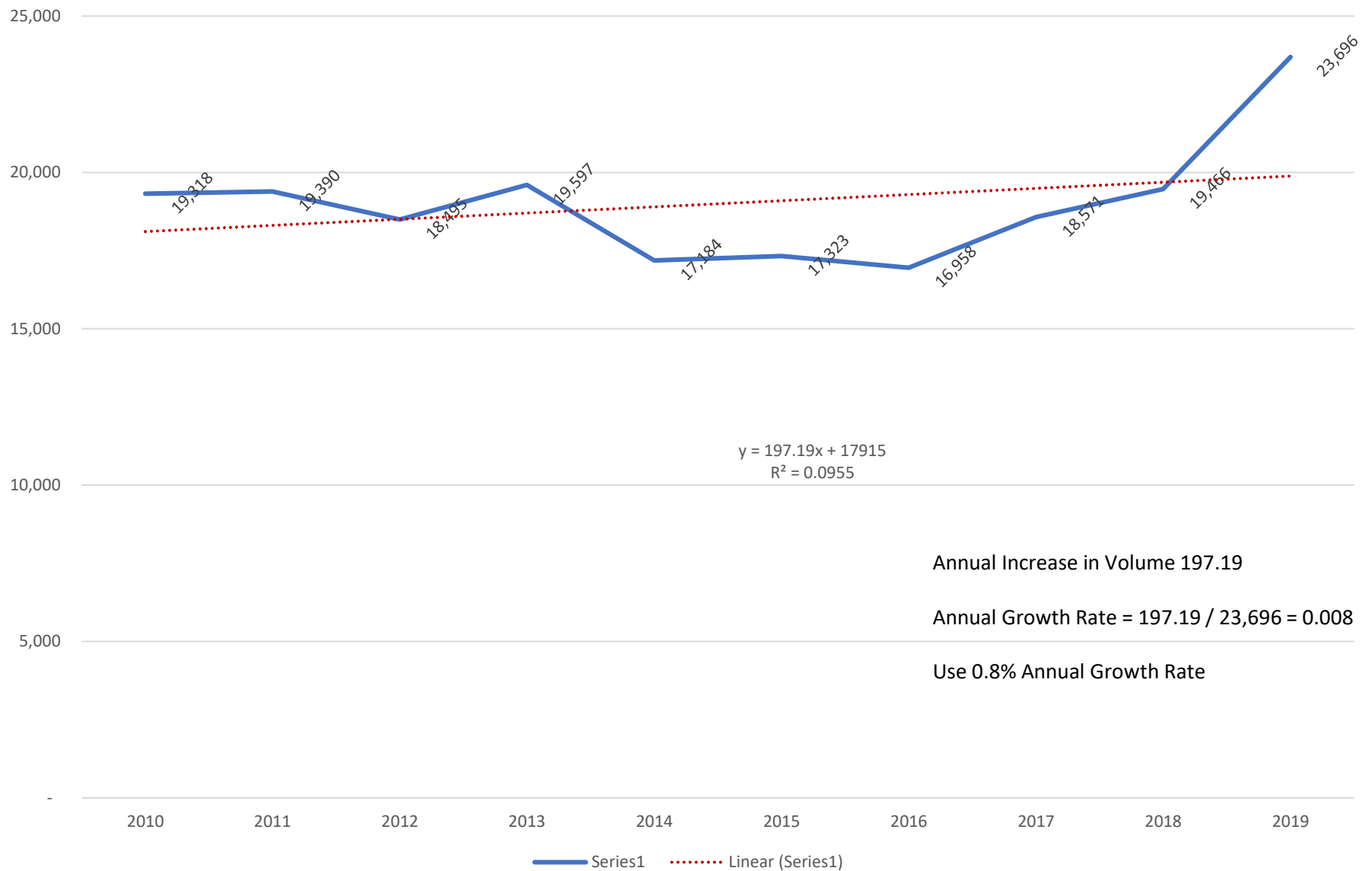
COG ID	Location		SR 303/2nd St and Woodward Rd											
Intersection #1:	2ND STREET / WOODWARD													
Street:	From:		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
26652 2ND STREET	NORTH OF RIO BRAVO - SOUTH OF WOODWARD		8,952	8,738	7,981	7,800	7,722	7,823	9,033	9,166	10,075	11,215	7,856	10,095
26604 2ND STREET	NORTH OF WOODWARD - SOUTH OF AVENIDA CESAR CHAV		4,757	4,643	4,583	5,943	5,884	5,908	4,308	4,371	4,364	7,421	5,198	6,679
26612 WOODWARD	EAST OF 2ND ST. - WEST OF BROADWAY		5,609	6,009	5,931	5,854	3,578	3,592	3,617	5,034	5,027	5,060	3,545	4,555
Total Intersection Traffic Flows			19,318	19,390	18,495	19,597	17,184	17,323	16,958	18,571	19,466	23,696	16,599	21,329

COG ID	Location		SR 303/2nd St and SR 500/Rio Bravo Blvd											
Intersection #1:	2ND STREET / RIO BRAVO BLVD.													
Street:	From:		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
26652 2ND STREET	NORTH OF RIO BRAVO - SOUTH OF WOODWARD		8,952	8,738	7,981	7,800	7,722	7,823	9,033	9,166	10,075	11,215	7,856	10,095
26698 RIO BRAVO BLVD.	EAST OF 2ND ST. - WEST OF SUNPORT RR FACILITY		29,429	22,799	22,503	25,776	25,518	25,620	29,474	29,905	29,861	30,436	13,245	17,020
26656 RIO BRAVO BLVD.	EAST OF ISLETA BLVD. - WEST OF 2ND ST.		35,220	34,119	33,729	34,121	33,780	33,915	34,152	30,305	30,260	30,456	21,335	30,200
26812 2ND STREET	NORTH OF EASTVIEW - SOUTH OF RIO BRAVO		8,600	8,330	8,221	6,515	6,595	6,643	6,690	8,110	7,409	7,457	5,224	6,713
Total Intersection Traffic Flows			82,201	73,986	72,434	74,212	73,615	74,001	79,349	77,486	77,605	79,564	47,660	64,028

Historic AWDT Volumes (SR 303/2nd St. and Woodward Rd.)



Historic AWDT Volumes (SR 303/2nd St and SR 500/Rio Bravo)



Trip Distribution Table

Coyote Gravel, Inc.

Sub Area Employment Data:

For determination of Trip Distribution for Proposed Office / Warehouse Development Trips

2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set

Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

									(2N) SR 303/2nd St SW (North)			(WE) Woodward Rd. SW (East)			(HE) Hill St. (East)		
Sub Area I.D.#	% Sub Area in Study	2016 Employment	2040 Employment	Interpolated Employment for the Year 2025	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
1	100%	44,711	62,255	51,290	51,290	17.6	2,914	2.08%	0%	0.00%	0	100%	2.08%	2,914	0%	0.00%	0
2	100%	54,828	62,222	57,601	57,601	14	4,114	2.93%	0%	0.00%	0	100%	2.93%	4,114	0%	0.00%	0
3	100%	8,510	10,377	9,210	9,210	13.5	682	0.49%	0%	0.00%	0	100%	0.49%	682	0%	0.00%	0
4	100%	13,817	17,784	15,305	15,305	20.2	758	0.54%	0%	0.00%	0	100%	0.54%	758	0%	0.00%	0
5	100%	59,285	58,890	59,137	59,137	10.7	5,527	3.94%	0%	0.00%	0	100%	3.94%	5,527	0%	0.00%	0
6	100%	5,988	9,663	7,366	7,366	12.5	589	0.42%	0%	0.00%	0	100%	0.42%	589	0%	0.00%	0
7	100%	59,485	71,484	63,985	63,985	6.4	9,998	7.13%	0%	0.00%	0	100%	7.13%	9,998	0%	0.00%	0
8	100%	31,699	34,678	32,816	32,816	4.2	7,813	5.57%	20%	1.11%	1,563	80%	4.46%	6,251	0%	0.00%	0
9	100%	2,158	3,112	2,516	2,516	17.9	141	0.10%	0%	0.00%	0	100%	0.10%	141	0%	0.00%	0
10	100%	64,323	61,537	63,278	63,278	4.8	13,183	9.40%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
11	100%	33,210	40,174	35,822	35,822	2.2	16,283	11.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
12	100%	15,936	22,087	18,243	18,243	9.1	2,005	1.43%	0%	0.00%	0	100%	1.43%	2,005	0%	0.00%	0
13	100%	9,888	12,530	10,879	10,879	9.8	1,110	0.79%	0%	0.00%	0	100%	0.79%	1,110	0%	0.00%	0
14	100%	73,684	84,299	77,665	77,665	10.2	7,614	5.43%	0%	0.00%	0	100%	5.43%	7,614	0%	0.00%	0
15	100%	24,829	33,670	28,144	28,144	5.4	5,212	3.72%	0%	0.00%	0	100%	3.72%	5,212	0%	0.00%	0
16	100%	82,412	94,137	86,809	86,809	8.4	10,334	7.37%	0%	0.00%	0	100%	7.37%	10,334	0%	0.00%	0
17	100%	22,270	37,540	27,996	27,996	3.2	8,749	6.24%	20%	1.25%	1,750	80%	4.99%	6,999	0%	0.00%	0
18	100%	41,643	56,762	47,313	47,313	3.6	13,142	9.37%	0%	0.00%	0	100%	9.37%	13,142	0%	0.00%	0
19	100%	65,540	81,066	71,362	71,362	6.5	10,979	7.83%	0%	0.00%	0	100%	7.83%	10,979	0%	0.00%	0
20*	100%	9,636	10,794	10,070	10,070	1	10,070	7.18%	50%	3.59%	5,035	0%	0.00%	0	0%	0.00%	0
21	100%	559	17,783	7,018	7,018	4.8	1,462	1.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
22	100%	3,511	3,820	3,627	3,627	8.3	437	0.31%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
23	100%	19,163	27,184	22,171	22,171	15.3	1,449	1.03%	0%	0.00%	0	100%	1.03%	1,449	0%	0.00%	0
24	100%	2,531	3,352	2,839	2,839	10.2	278	0.20%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
25	100%	863	1,161	975	975	12.4	79	0.06%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
26	100%	56,155	59,697	57,483	57,483	16.6	3,463	2.47%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
27	100%	19,926	24,499	21,641	21,641	25.9	836	0.60%	0%	0.00%	0	100%	0.60%	836	0%	0.00%	0
28	100%	15,662	18,407	16,691	16,691	25.9	644	0.46%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
29	100%	10,397	11,564	10,835	10,835	27.5	394	0.28%	0%	0.00%	0	100%	0.28%	394	0%	0.00%	0
		852,619	1,032,528	920,085	920,085		140,259	100.00%		5.95%	8,348		64.91%	91,047		0.00%	0
											5.95%			64.91%			0.00%
									Use 6%					Use 65%			Use 1%

* - Subarea in which the site it located.

Trip Distribution Table

Coyote Gravel, Inc.

Sub Area Employment Data:

For determination of Trip Distribution for Proposed Office / Warehouse Development Trips

2016 and 2040 Data Taken from Mid-Region Council of Governments' 2040 Data Set

Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

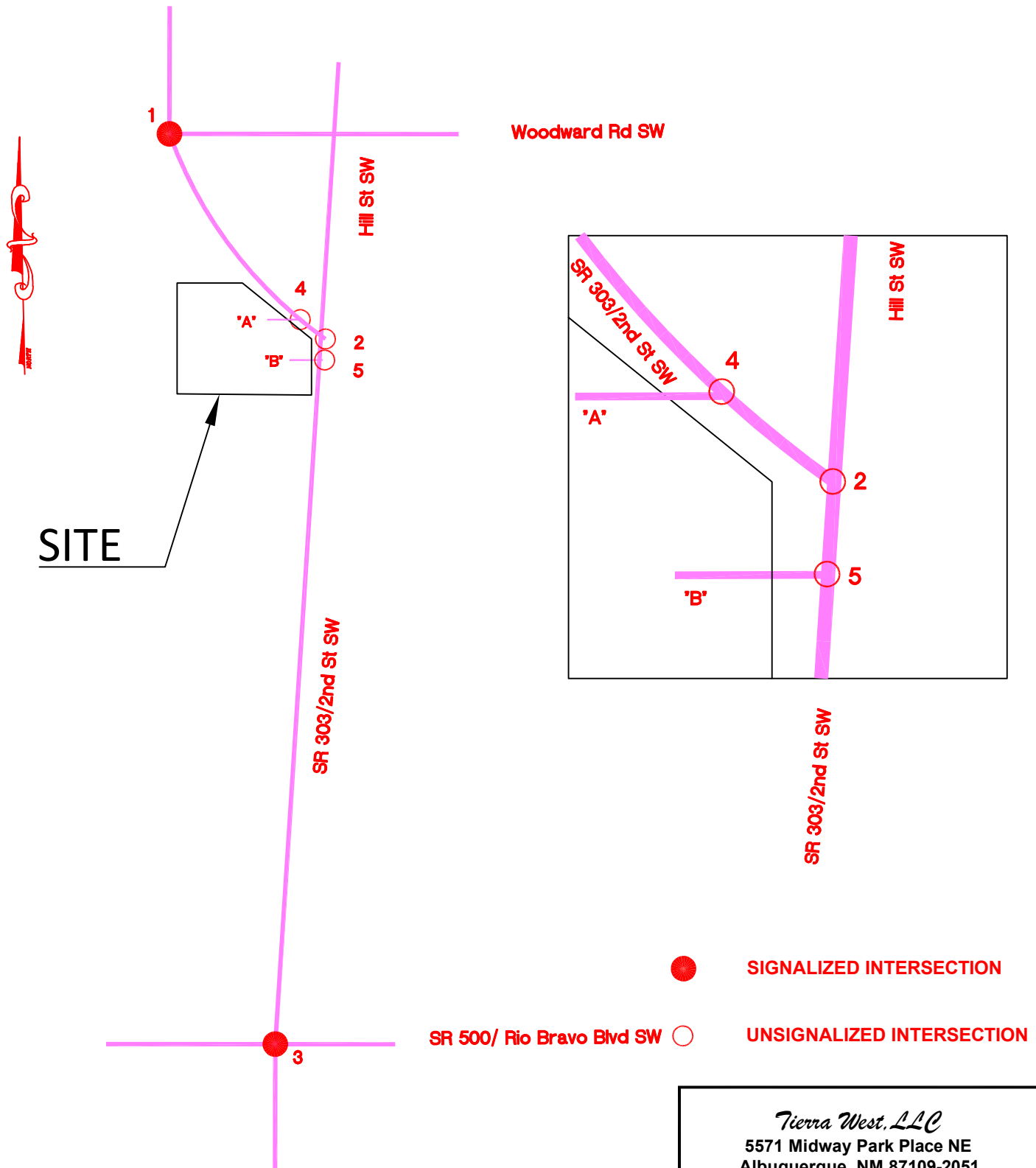
									(RE) SR 500/ Rio Bravo Blvd (East)			(2S) SR 303/2nd St SW (South)			(RW) SR 500/ Rio Bravo Blvd (West)		
Sub Area I.D.#	% Sub Area in Study	2016 Employment	2040 Employment	Interpolated Employment for the Year 2025	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
1	100%	44,711	62,255	51,290	51,290	17.6	2,914	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
2	100%	54,828	62,222	57,601	57,601	14	4,114	2.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
3	100%	8,510	10,377	9,210	9,210	13.5	682	0.49%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
4	100%	13,817	17,784	15,305	15,305	20.2	758	0.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
5	100%	59,285	58,890	59,137	59,137	10.7	5,527	3.94%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6	100%	5,988	9,663	7,366	7,366	12.5	589	0.42%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7	100%	59,485	71,484	63,985	63,985	6.4	9,998	7.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
8	100%	31,699	34,678	32,816	32,816	4.2	7,813	5.57%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
9	100%	2,158	3,112	2,516	2,516	17.9	141	0.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
10	100%	64,323	61,537	63,278	63,278	4.8	13,183	9.40%	0%	0.00%	0	0%	0.00%	0	100%	9.40%	13,183
11	100%	33,210	40,174	35,822	35,822	2.2	16,283	11.61%	0%	0.00%	0	0%	0.00%	0	100%	11.61%	16,283
12	100%	15,936	22,087	18,243	18,243	9.1	2,005	1.43%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
13	100%	9,888	12,530	10,879	10,879	9.8	1,110	0.79%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
14	100%	73,684	84,299	77,665	77,665	10.2	7,614	5.43%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
15	100%	24,829	33,670	28,144	28,144	5.4	5,212	3.72%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
16	100%	82,412	94,137	86,809	86,809	8.4	10,334	7.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
17	100%	22,270	37,540	27,996	27,996	3.2	8,749	6.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
18	100%	41,643	56,762	47,313	47,313	3.6	13,142	9.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
19	100%	65,540	81,066	71,362	71,362	6.5	10,979	7.83%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
20*	100%	9,636	10,794	10,070	10,070	1	10,070	7.18%	0%	0.00%	0	50%	3.59%	5,035	0%	0.00%	0
21	100%	559	17,783	7,018	7,018	4.8	1,462	1.04%	0%	0.00%	0	100%	1.04%	1,462	0%	0.00%	0
22	100%	3,511	3,820	3,627	3,627	8.3	437	0.31%	100%	0.31%	437	0%	0.00%	0	0%	0.00%	0
23	100%	19,163	27,184	22,171	22,171	15.3	1,449	1.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
24	100%	2,531	3,352	2,839	2,839	10.2	278	0.20%	100%	0.20%	278	0%	0.00%	0	0%	0.00%	0
25	100%	863	1,161	975	975	12.4	79	0.06%	100%	0.06%	79	0%	0.00%	0	0%	0.00%	0
26	100%	56,155	59,697	57,483	57,483	16.6	3,463	2.47%	100%	2.47%	3,463	0%	0.00%	0	0%	0.00%	0
27	100%	19,926	24,499	21,641	21,641	25.9	836	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
28	100%	15,662	18,407	16,691	16,691	25.9	644	0.46%	100%	0.46%	644	0%	0.00%	0	0%	0.00%	0
29	100%	10,397	11,564	10,835	10,835	27.5	394	0.28%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
		852,619	1,032,528	920,085	920,085		140,259	100.00%		3.49%	4,901		4.63%	6,497		21.01%	29,465
										3.49%			4.63%				21.01%
									Use 3%			Use 5%					Use 21%

* - Subarea in which the site it located.

Coyote Gravel, Inc. - Albuquerque, NM

(SR 303/2nd St. SW)

Intersection Sheet



SIGNALIZED INTERSECTION



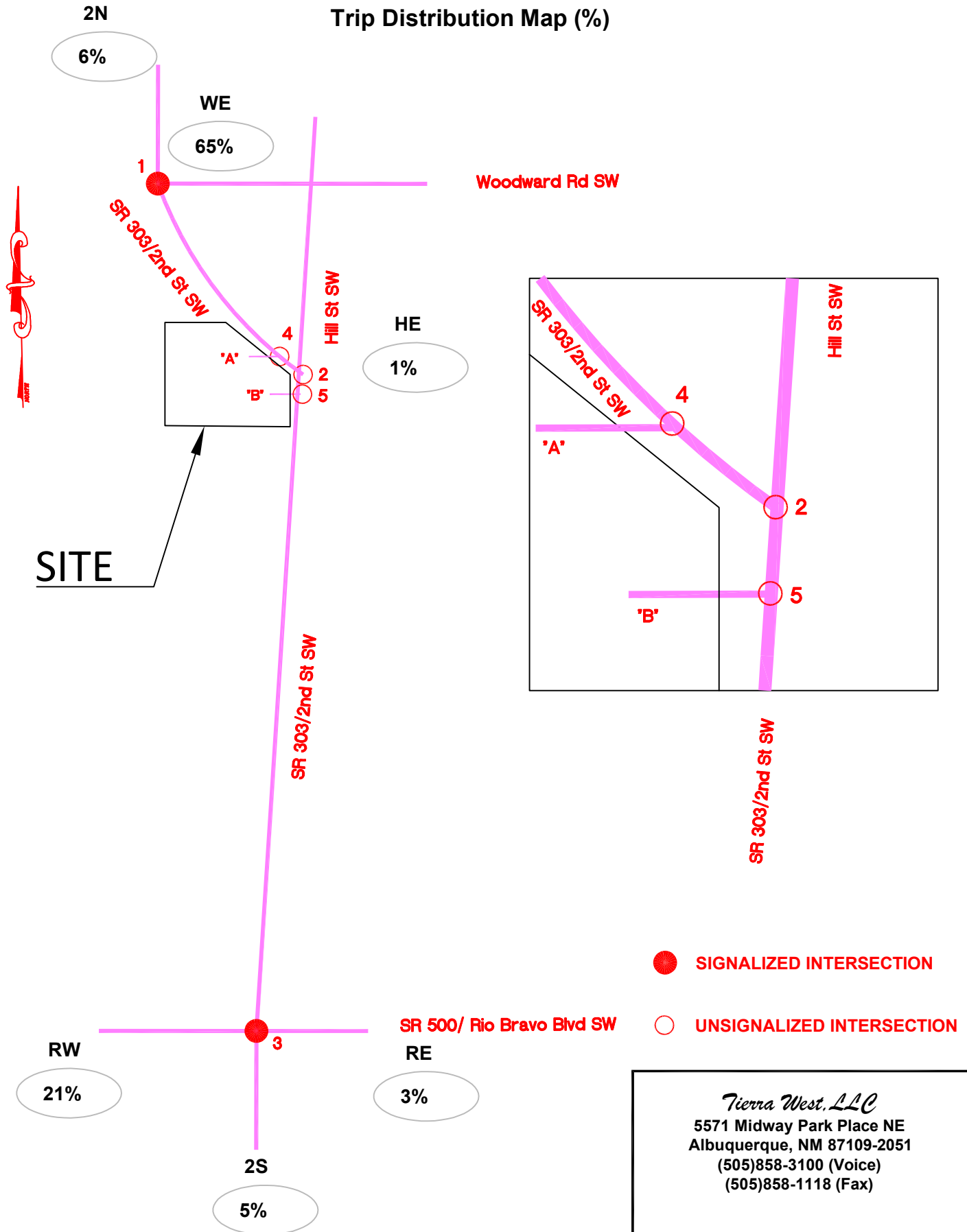
UNSIGNALIZED INTERSECTION

Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109-2051
(505)858-3100 (Voice)
(505)858-1118 (Fax)

Coyote Gravel, Inc. - Albuquerque, NM

(SR 303/2nd St. SW)

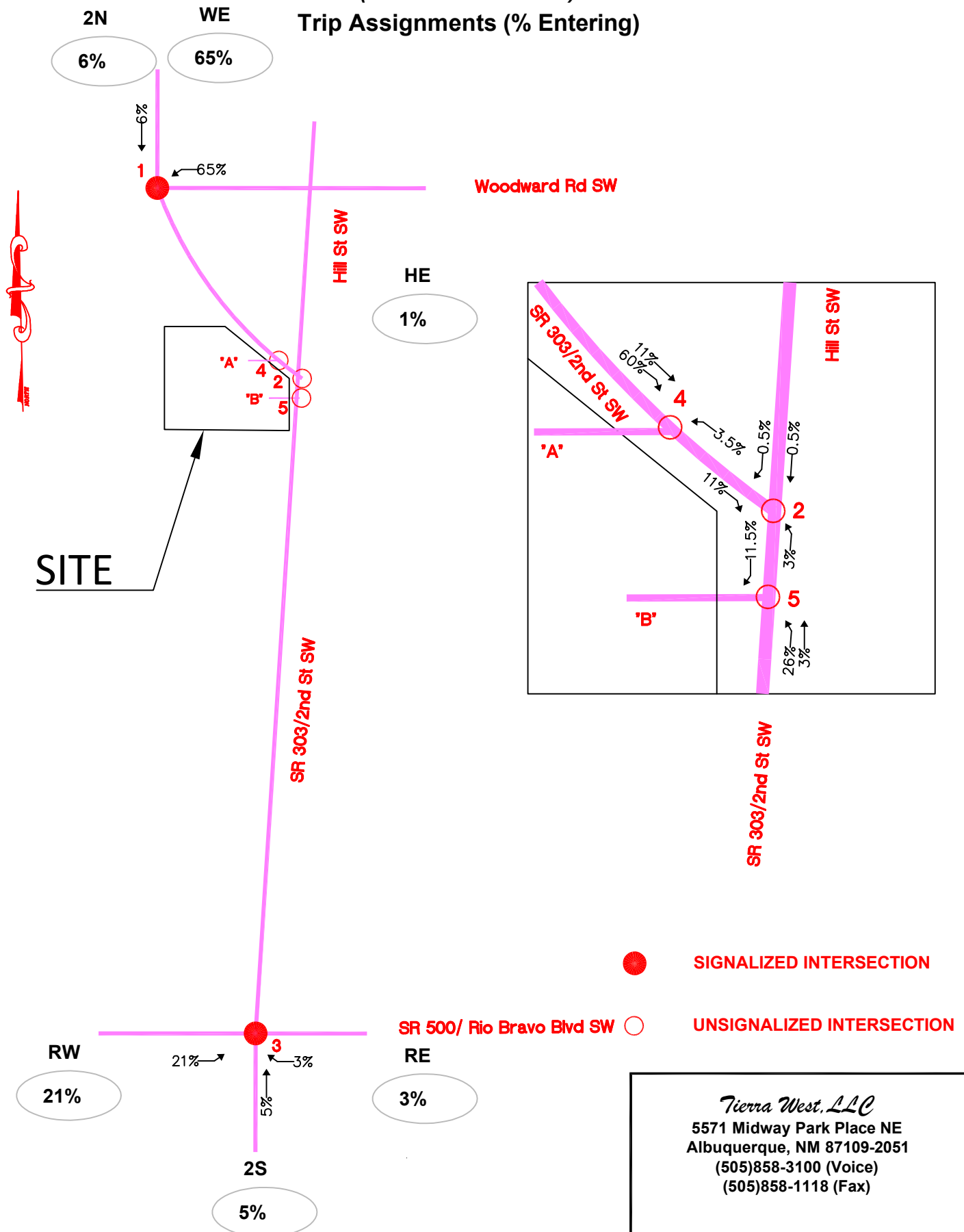
Trip Distribution Map (%)



Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109-2051
(505)858-3100 (Voice)
(505)858-1118 (Fax)

(SR 303/2nd St. SW)

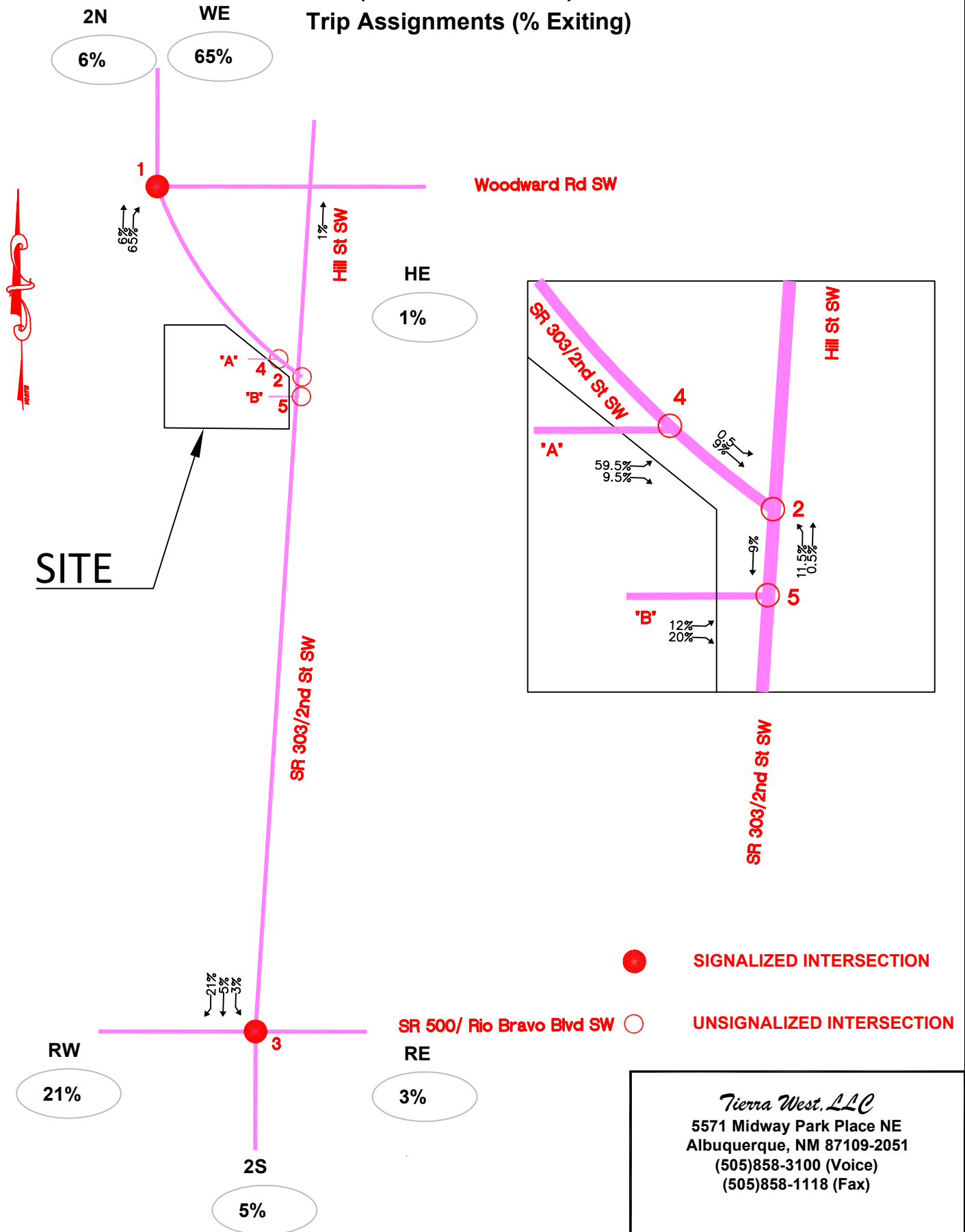
Trip Assignments (% Entering)



Coyote Gravel, Inc. - Albuquerque, NM

(SR 303/2nd St. SW)

Trip Assignments (% Exiting)



Coyote Gravel Products, Inc. (3053 2nd Street NW)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

COMMENT	USE (ITE CODE)	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.		
	DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT	
<u>Summary Sheet</u>		Units					
Specialty Trade Contractor		85.00	792	104	37	52	112

Coyote Gravel Products, Inc. (3053 2nd Street NW)
Trip Generation Data (ITE Trip Generation Manual - 11th Edition)

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		GROSS	ENTER	EXIT	ENTER	EXIT
Specialty Trade Contractor	Units 85.00 1,000 S.F.	792	104	37	52	112

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

$$T = \frac{9.32}{50\%} (X) + \frac{0}{50\%} \text{ Exit}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR)

$$T = \frac{1.66}{74\%} (X) + \frac{0}{26\%} \text{ Exit}$$

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR)

$$T = \frac{1.93}{32\%} (X) + \frac{0}{68\%} \text{ Exit}$$

Comments:

Tract No.

Based on ITE Trip Generation Manual - 11th Edition

Coyote Gravel Inc. (SR 303/2nd St., NM)

Projected Turning Movements SUMMARY PROPOSED DEVELOPMENT (2025) - 100% Development

INTERSECTION: Summary

Woodward Rd. SW / SR 303/2nd St													0.85	0.85	0.85	0.85	PHF
(1)	3% Truck			Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	116	0	60	0	536	336	52	116	0					
2025 (NO BUILD - A.M.)	0	0	0	117	0	60	0	539	338	52	117	0					
2025 (BUILD - A.M.)	0	0	0	185	0	60	0	541	362	52	123	0					
													0.94	0.94	0.94	0.94	PHF
	3% Truck			Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	364	0	164	0	132	92	132	284	0					
2025 (NO BUILD - P.M.)	0	0	0	366	0	165	0	133	93	133	286	0					
2025 (BUILD - P.M.)	0	0	0	400	0	165	0	140	166	133	289	0					
Hill St/Driveway "B" / SR 303/2nd St													0.84	0.84	0.84	0.84	PHF
(2)	3% Truck			Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	0	0	0	0	852	0	0	228	0					
2025 (NO BUILD - A.M.)	0	0	0	0	0	0	0	857	0	0	229	0					
2025 (BUILD - A.M.)	4	0	7	0	1	1	27	860	0	0	232	11					
													0.93	0.93	0.93	0.93	PHF
	3% Truck			Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	0	0	4	0	232	4	0	680	0					
2025 (NO BUILD - P.M.)	0	0	0	0	0	4	0	233	4	0	684	0					
2025 (BUILD - P.M.)	13	1	22	0	0	4	14	235	4	1	694	6					
SR 500/Rio Bravo / SR 303/2nd St													0.96	0.96	0.96	0.96	PHF
(3)	3% Truck			Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	388	1,456	260	40	696	72	224	124	56	60	76	124					
2025 (NO BUILD - A.M.)	391	1,468	262	40	702	73	226	125	56	60	77	125					
2025 (BUILD - A.M.)	413	1,468	262	40	702	76	226	130	56	61	79	133					
													0.95	0.95	0.95	0.95	PHF
	3% Truck			Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	112	812	216	28	1,856	28	180	44	56	52	104	348					
2025 (NO BUILD - P.M.)	113	818	218	28	1,871	28	181	44	56	52	105	351					
2025 (BUILD - P.M.)	124	818	218	28	1,871	30	181	47	56	55	111	375					

Coyote Gravel Inc. (SR 303/2nd St., NM)
Projected Turning Movements Worksheet
Woodward Rd. SW / SR 303/2nd St

INTERSECTION :E-W Street: **Woodward Rd. SW** (1)N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2025**

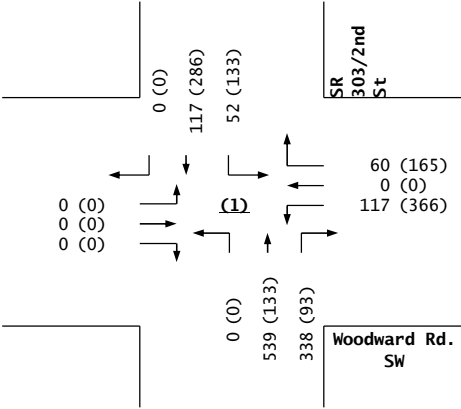
Growth Rates

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	116	0	60	0	536	336	52	116	0
Background Traffic Growth	0	0	0	1	0	0	0	3	2	0	1	0
Subtotal (NO BUILD - A.M.)	0	0	0	117	0	60	0	539	338	52	117	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	65.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	65.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	68	0	0	0	2	24	0	6	0
Total AM Peak Hour BUILD Volumes	0	0	0	185	0	60	0	541	362	52	123	0

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	364	0	164	0	132	92	132	284	0
Background Traffic Growth	0	0	0	2	0	1	0	1	1	1	2	0
Subtotal (NO BUILD - P.M.)	0	0	0	366	0	165	0	133	93	133	286	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	65.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	65.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	34	0	0	0	7	73	0	3	0
Total PM Peak Hour BUILD Volumes	0	0	0	400	0	165	0	140	166	133	289	0

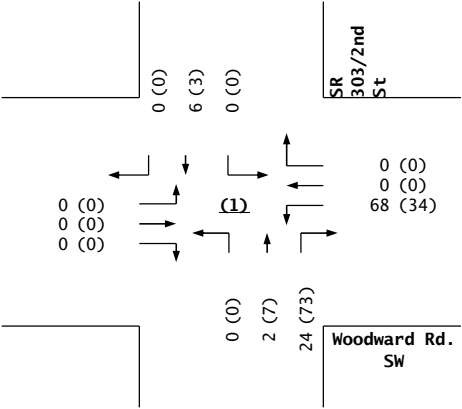
	Entering	Exiting	
Number of Office Trips Generated	104	37	A.M. 100% Office Development
	52	112	P.M.

2025
NO BUILD

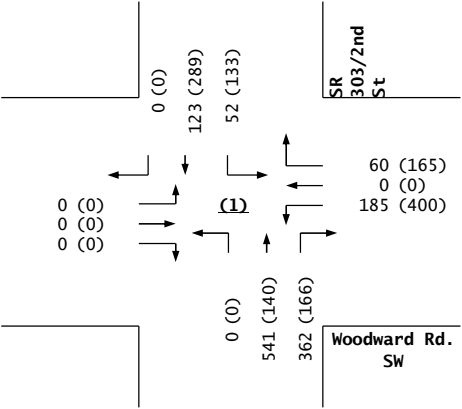


Trips

2025
BUILD



Woodward Rd. SW / SR 303/2nd St



Coyote Gravel Inc. (SR 303/2nd St., NM)
 Projected Turning Movements Worksheet
Hill St/Driveway "B" / SR 303/2nd St

INTERSECTION : E-W Street: **Hill St/Driveway "B"** (2)
 N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024
 Horizon Year **2025**
 Growth Rates

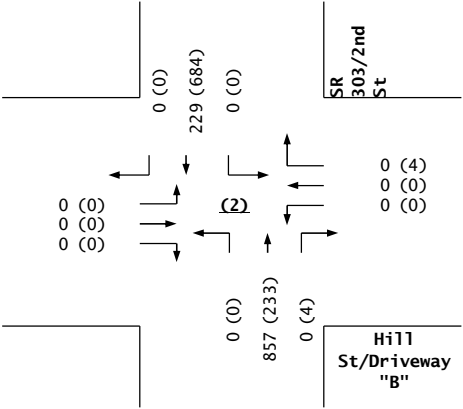
	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	852	0	0	228	0
Background Traffic Growth	0	0	0	0	0	0	0	5	0	0	1	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	857	0	0	229	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.50%	0.50%	26.00%	3.00%	0.00%	0.00%	0.00%	11.00%
Percent Office Trips Generated(Exiting)	11.50%	0.50%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	9.00%	0.00%
Total Trips Generated	4	0	7	0	1	1	27	3	0	0	3	11
Subtotal AM Pk Hr. BUILD Volumes	4	0	7	0	1	1	27	860	0	0	232	11
Total AM Peak Hour BUILD Volumes	4	0	7	0	1	1	27	860	0	0	232	11

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	4	0	232	4	0	680	0
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	4	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	4	0	233	4	0	684	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.50%	0.50%	26.00%	3.00%	0.00%	0.00%	0.00%	11.00%
Percent Office Trips Generated(Exiting)	11.50%	0.50%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	9.00%	0.00%
Total Trips Generated	13	1	22	0	0	0	14	2	0	1	10	6
Subtotal PM Pk Hr. BUILD Volumes	13	1	22	0	0	4	14	235	4	1	694	6
Total PM Peak Hour BUILD Volumes	13	1	22	0	0	4	14	235	4	1	694	6

Number of Office Trips Generated

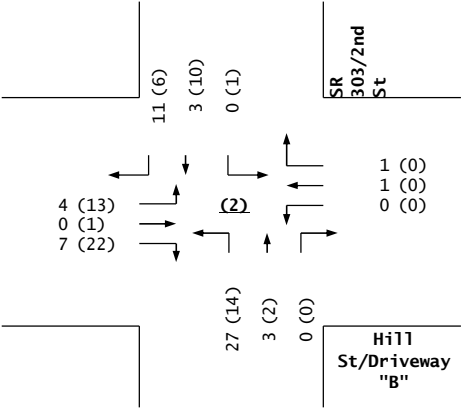
Entering	104	37	A.M.	100% Office Development
Exiting	52	112	P.M.	

2025
NO BUILD

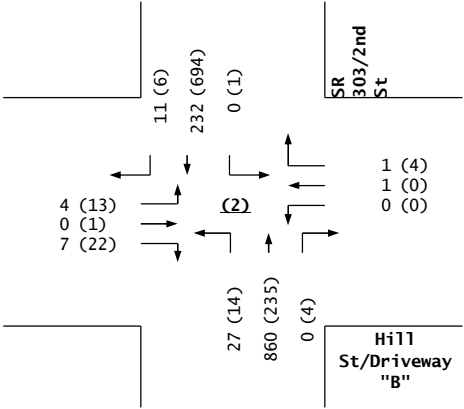


Trips

2025
BUILD



Hill St/Driveway "B" / SR 303/2nd St



Coyote Gravel Inc. (SR 303/2nd St., NM)

Projected Turning Movements Worksheet

SR 500/Rio Bravo / SR 303/2nd St

INTERSECTION :

E-W Street: **SR 500/Rio Bravo** (3)N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2025**

Growth Rates

0.80%

0.80%

0.80%

0.80%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
388	1,456	260	40	696	72	224	124	56	60	76	124
3	12	2	0	6	1	2	1	0	0	1	1
391	1,468	262	40	702	73	226	125	56	60	77	125
21.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	5.00%	21.00%
22	0	0	0	0	3	0	5	0	1	2	8
413	1,468	262	40	702	76	226	130	56	61	79	133

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
112	812	216	28	1,856	28	180	44	56	52	104	348
1	6	2	0	15	0	1	0	0	0	1	3
113	818	218	28	1,871	28	181	44	56	52	105	351
21.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	5.00%	21.00%
11	0	0	0	0	2	0	3	0	3	6	24
124	818	218	28	1,871	30	181	47	56	55	111	375

Entering Exiting

Number of Office Trips Generated

104**37**

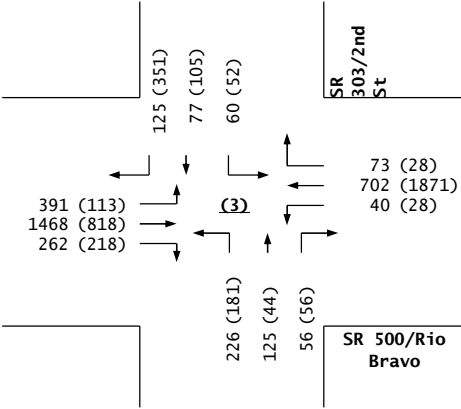
A.M.

100% Office Development

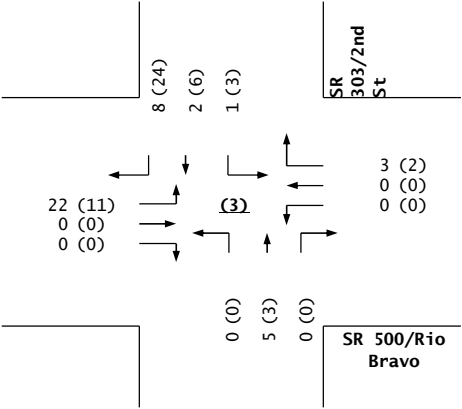
52**112**

P.M.

2025
NO BUILD

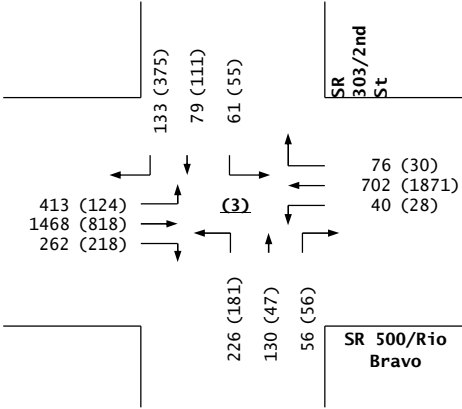


Trips



SR 500/Rio Bravo / SR 303/2nd St

2025
BUILD



Coyote Gravel Inc. (SR 303/2nd St., NM)
 Projected Turning Movements Worksheet
Diveway "A" / SR 303/2nd St

INTERSECTION:

E-W Street: **Diveway "A"** (4)
 N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024
 Horizon Year **2025**

Growth Rates

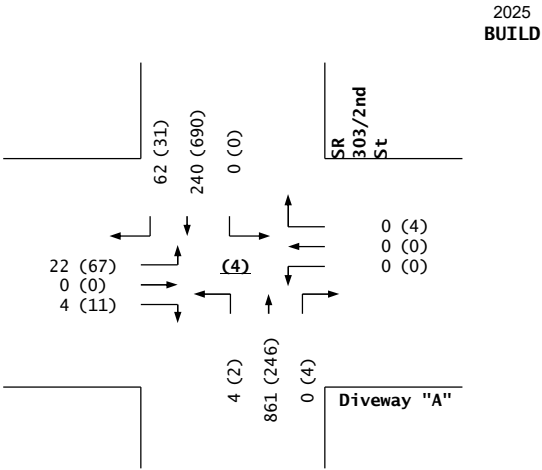
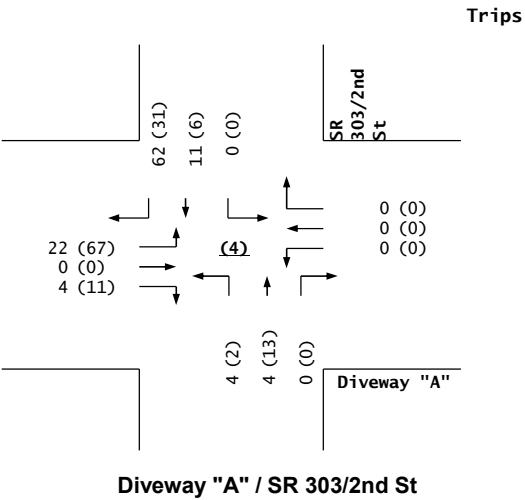
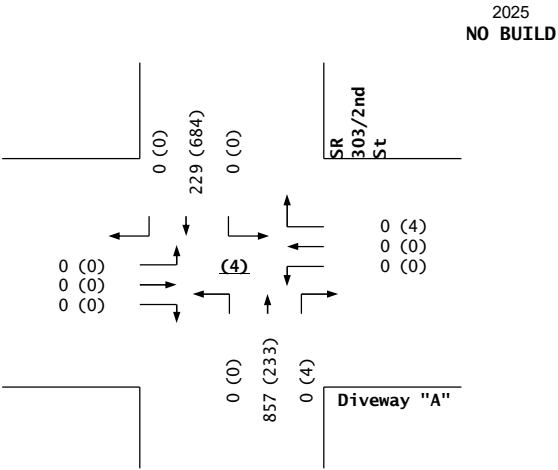
	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	852	0	0	228	0
Background Traffic Growth	0	0	0	0	0	0	0	5	0	0	1	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	857	0	0	229	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00%	0.00%	11.00%	60.00%
Percent Office Trips Generated(Exiting)	59.50%	0.00%	9.50%	0.00%	0.00%	0.00%	0.00%	11.50%	0.00%	0.00%	0.00%	0.00%
Total AM Peak Hour BUILD Volumes	22	0	4	0	0	0	4	861	0	0	240	62

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	4	0	232	4	0	680	0
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	4	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	4	0	233	4	0	684	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00%	0.00%	11.00%	60.00%
Percent Office Trips Generated(Exiting)	59.50%	0.00%	9.50%	0.00%	0.00%	0.00%	0.00%	11.50%	0.00%	0.00%	0.00%	0.00%
Total PM Peak Hour BUILD Volumes	67	0	11	0	0	4	2	246	4	0	690	31

Number of Office Trips Generated

Entering	Exiting	
104	37	A.M.
52	112	P.M.

100% Office Development



Coyote Gravel Inc. (SR 303/2nd St., NM)

Projected Turning Movements SUMMARY PROPOSED DEVELOPMENT (2035) - 100% Development

INTERSECTION: Summary

Woodward Rd. SW / SR 303/2nd St													0.85	PHF
(1)	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
3% Truck														
Existing (2024)	0	0	0	116	0	60	0	536	336	52	116	0		
2035 (NO BUILD - A.M.)	0	0	0	124	0	64	0	571	358	55	124	0		
2035 (BUILD - A.M.)	0	0	0	192	0	64	0	573	382	55	130	0		

													0.94	PHF
	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	364	0	164	0	132	92	132	284	0		
2035 (NO BUILD - P.M.)	0	0	0	388	0	175	0	141	98	141	303	0		
2035 (BUILD - P.M.)	0	0	0	422	0	175	0	148	171	141	306	0		

Hill St/Driveway "B" / SR 303/2nd St													0.84	PHF
(2)	Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
3% Truck														
Existing (2024)	0	0	0	0	0	0	0	852	0	0	228	0		
2035 (NO BUILD - A.M.)	0	0	0	0	0	0	0	908	0	0	243	0		
2035 (BUILD - A.M.)	4	0	7	0	1	1	27	911	0	0	246	11		

													0.93	PHF
	Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	0	0	4	0	232	4	0	680	0		
2035 (NO BUILD - P.M.)	0	0	0	0	0	4	0	247	4	0	725	0		
2035 (BUILD - P.M.)	13	1	22	0	0	4	14	249	4	1	735	6		

SR 500/Rio Bravo / SR 303/2nd St													0.96	PHF
(3)	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
3% Truck														
Existing (2024)	388	1,456	260	40	696	72	224	124	56	60	76	124		
2035 (NO BUILD - A.M.)	422	1,584	283	44	757	78	244	135	61	65	83	135		
2035 (BUILD - A.M.)	444	1,584	283	44	757	81	244	140	61	66	85	143		

													0.95	PHF
	Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	112	812	216	28	1,856	28	180	44	56	52	104	348		
2035 (NO BUILD - P.M.)	122	883	235	30	2,019	30	196	48	61	57	113	379		
2035 (BUILD - P.M.)	133	883	235	30	2,019	32	196	51	61	60	119	403		

Diveway "A" / SR 303/2nd St													1.00	PHF
(4)	Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
3% Truck														
Existing (2024)	0	0	0	0	0	0	0	852	0	0	228	0		
2035 (NO BUILD - A.M.)	0	0	0	0	0	0	0	908	0	0	243	0		
2035 (BUILD - A.M.)	22	0	4	0	0	0	4	912	0	0	254	62		

													1.00	PHF
	Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing (2024)	0	0	0	0	0	0	0	232	0	0	680	0		
2035 (NO BUILD - P.M.)	0	0	0	0	0	0	0	247	0	0	725	0		
2035 (BUILD - P.M.)	67	0	11	0	0	0	2	260	0	0	731	31		

Coyote Gravel Inc. (SR 303/2nd St., NM)
Projected Turning Movements Worksheet
Woodward Rd. SW / SR 303/2nd St

INTERSECTION :E-W Street: **Woodward Rd. SW** (1)N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2035**

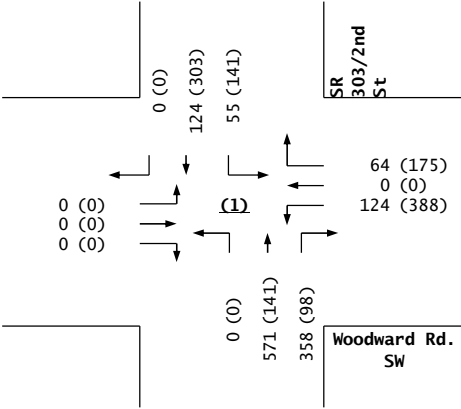
Growth Rates

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	116	0	60	0	536	336	52	116	0
Background Traffic Growth	0	0	0	8	0	4	0	35	22	3	8	0
Subtotal (NO BUILD - A.M.)	0	0	0	124	0	64	0	571	358	55	124	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	65.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	65.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	68	0	0	0	2	24	0	6	0
Total AM Peak Hour BUILD Volumes	0	0	0	192	0	64	0	573	382	55	130	0

	0.60%			0.60%			0.60%			0.60%		
	Eastbound (Woodward Rd. SW)			Westbound (Woodward Rd. SW)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	364	0	164	0	132	92	132	284	0
Background Traffic Growth	0	0	0	24	0	11	0	9	6	9	19	0
Subtotal (NO BUILD - P.M.)	0	0	0	388	0	175	0	141	98	141	303	0
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	65.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	65.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	34	0	0	0	7	73	0	3	0
Total PM Peak Hour BUILD Volumes	0	0	0	422	0	175	0	148	171	141	306	0

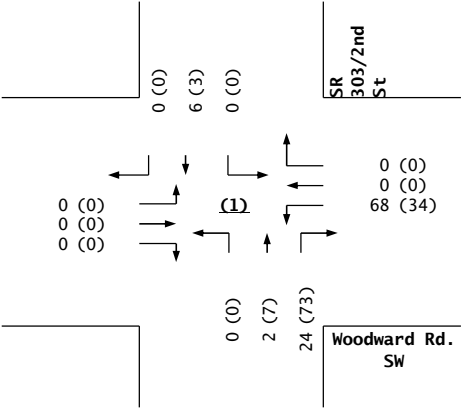
	Entering	Exiting	
Number of Office Trips Generated	104	37	A.M. 100% Office Development
	52	112	P.M.

2035
NO BUILD



Trips

2035
BUILD



Woodward Rd. SW / SR 303/2nd St

Coyote Gravel Inc. (SR 303/2nd St., NM)
Projected Turning Movements Worksheet
Hill St/Driveway "B" / SR 303/2nd St

INTERSECTION:E-W Street: **Hill St/Driveway "B"** (2)N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2035**

Growth Rates

0.60%

0.60%

0.60%

0.60%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	852	0	0	228	0
0	0	0	0	0	0	0	56	0	0	15	0
0	0	0	0	0	0	0	908	0	0	243	0
0.00%	0.00%	0.00%	0.00%	0.50%	0.50%	26.00%	3.00%	0.00%	0.00%	0.00%	11.00%
11.50%	0.50%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	9.00%	0.00%
4	0	7	0	1	1	27	3	0	0	3	11
4	0	7	0	1	1	27	911	0	0	246	11

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway "B")			Westbound (Hill St.)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	4	0	232	4	0	680	0
0	0	0	0	0	0	0	15	0	0	45	0
0	0	0	0	0	4	0	247	4	0	725	0
0.00%	0.00%	0.00%	0.00%	0.50%	0.50%	26.00%	3.00%	0.00%	0.00%	0.00%	11.00%
11.50%	0.50%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	9.00%	0.00%
13	1	22	0	0	0	14	2	0	1	10	6
13	1	22	0	0	4	14	249	4	1	735	6

Entering Exiting

Number of Office Trips Generated

104**37**

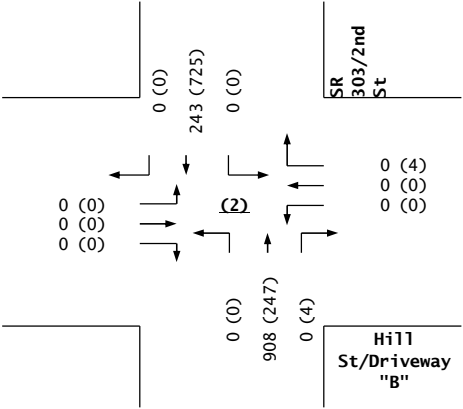
A.M.

100% Office Development

52**112**

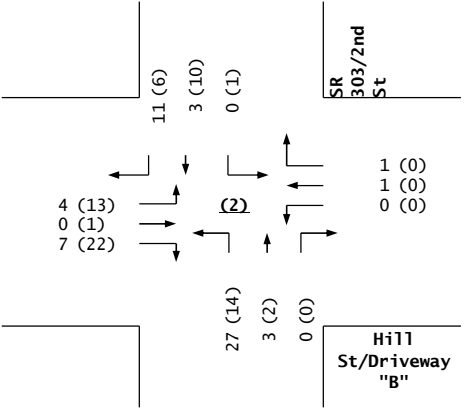
P.M.

2035
NO BUILD

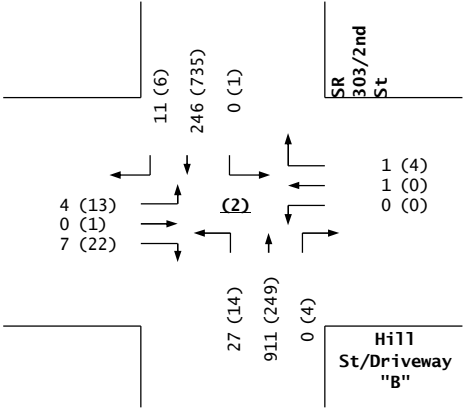


Trips

2035
BUILD



Hill St/Driveway "B" / SR 303/2nd St



Coyote Gravel Inc. (SR 303/2nd St., NM)

Projected Turning Movements Worksheet

SR 500/Rio Bravo / SR 303/2nd St

INTERSECTION :

E-W Street: **SR 500/Rio Bravo** (3)N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2035**

Growth Rates

0.80%

0.80%

0.80%

0.80%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
388	1,456	260	40	696	72	224	124	56	60	76	124
34	128	23	4	61	6	20	11	5	5	7	11
422	1,584	283	44	757	78	244	135	61	65	83	135
21.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	5.00%	21.00%
22	0	0	0	0	3	0	5	0	1	2	8
444	1,584	283	44	757	81	244	140	61	66	85	143

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (SR 500/Rio Bravo)			Westbound (SR 500/Rio Bravo)			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
112	812	216	28	1,856	28	180	44	56	52	104	348
10	71	19	2	163	2	16	4	5	5	9	31
122	883	235	30	2,019	30	196	48	61	57	113	379
21.00%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%	5.00%	21.00%
11	0	0	0	0	2	0	3	0	3	6	24
133	883	235	30	2,019	32	196	51	61	60	119	403

Entering Exiting

Number of Office Trips Generated

104**37**

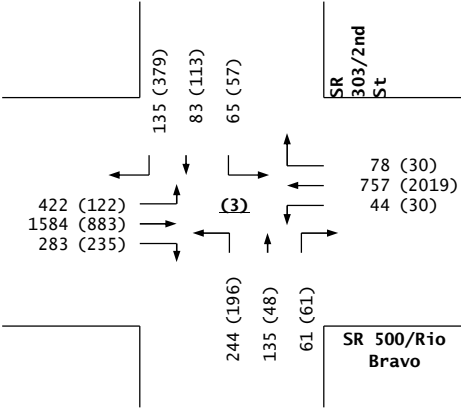
A.M.

100% Office Development

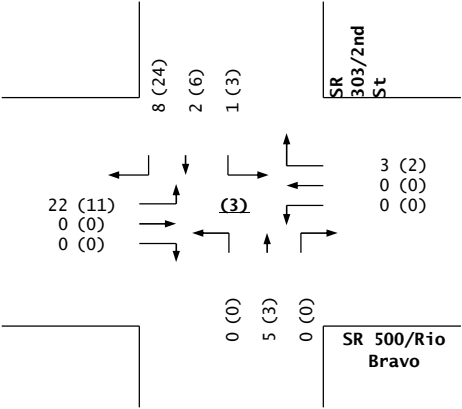
52**112**

P.M.

2035
NO BUILD

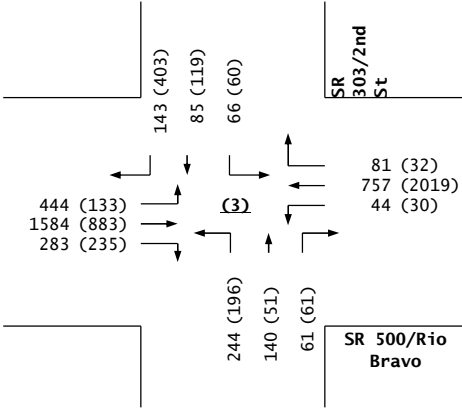


Trips



SR 500/Rio Bravo / SR 303/2nd St

2035
BUILD



Coyote Gravel Inc. (SR 303/2nd St., NM)

Projected Turning Movements Worksheet

Diveway "A" / SR 303/2nd St

INTERSECTION:

E-W Street: **Diveway "A"** (4)

N-S Street: **SR 303/2nd St**

Year of Existing Counts 2024

Horizon Year **2035**

Growth Rates

0.60%

0.60%

0.60%

0.60%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total AM Peak Hour BUILD Volumes

Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	852	0	0	228	0
0	0	0	0	0	0	0	56	0	0	15	0
0	0	0	0	0	0	0	908	0	0	243	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00%	0.00%	11.00%	60.00%
59.50%	0.00%	9.50%	0.00%	0.00%	0.00%	0.00%	11.50%	0.00%	0.00%	0.00%	0.00%
22	0	4	0	0	0	4	912	0	0	254	62

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting)

Total PM Peak Hour BUILD Volumes

Eastbound (Diveway "A")			Westbound (Diveway "A")			Northbound (SR 303/2nd St)			Southbound (SR 303/2nd St)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	0	0	232	0	0	680	0
0	0	0	0	0	0	0	15	0	0	45	0
0	0	0	0	0	0	0	247	0	0	725	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	0.00%	0.00%	0.00%	11.00%	60.00%
59.50%	0.00%	9.50%	0.00%	0.00%	0.00%	0.00%	11.50%	0.00%	0.00%	0.00%	0.00%
67	0	11	0	0	0	2	260	0	0	731	31

Number of Office Trips Generated

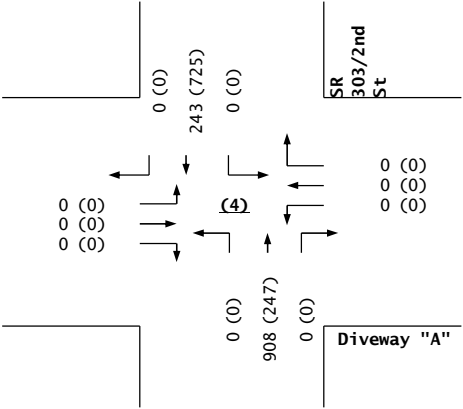
Entering Exiting

104 37 A.M.

52 112 P.M.

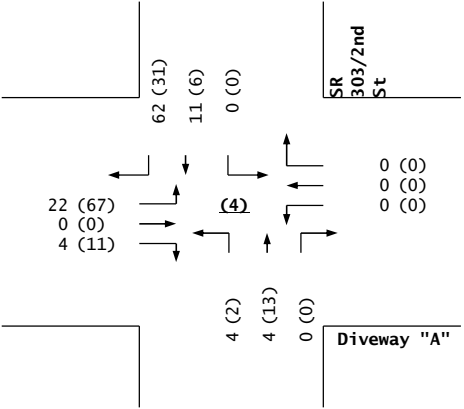
100% Office Development

2035
NO BUILD

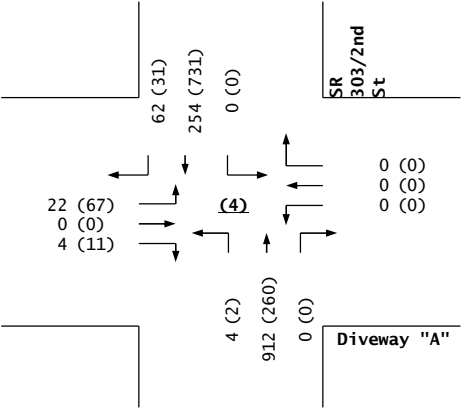


Trips

2035
BUILD



Diveway "A" / SR 303/2nd St



Synchro Results Summary Sheet

1: Woodward Rd. & SR 303/2nd St.

2025_Conditions

Woodward Rd.

SR 303/2nd St.

Signalized

Woodward Rd. / SR 303/2nd St. 2025_Conditions	WB (Woodward Rd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1		1		1>		1	1	
AM Peak Hour									
2025_NO BUILD Volumes	117		60		539	338	52	117	
V/C Ratio	0.15		0.09		0.00	0.91	0.14	0.09	
Level-of-Service	B		B			D	B	A	
Control Delay (Seconds)	18.4		17.9		0.0	39.8	15.8	9.0	
Intersection LOS	C - 32.7								
95th Percentile Queue (veh)									
2025_BUILD Volumes	185		60		541	362	52	123	
V/C Ratio	0.23		0.09		0.00	0.81	0.17	0.09	
Level-of-Service	B		B			C	B	A	
Control Delay (Seconds)	19.4		17.9		0.0	26.6	14.7	9.0	
Intersection LOS	C - 23.1								
95th Percentile Queue (veh)	1.7		0.5		0.0	9.8	0.3	0.6	

PM Peak Hour

2025_NO BUILD Volumes	366		165		133	93	133	286	
V/C Ratio	0.39		0.21		0.00	0.20	0.14	0.18	
Level-of-Service	C		B			B	B	A	
Control Delay (Seconds)	21.6		19.2		0.0	15.7	10.4	9.7	
Intersection LOS	B - 16.0								
95th Percentile Queue (veh)	3.1		1.3		0.0	1.5	0.7	1.4	
2025_BUILD Volumes	400		165		140	166	133	289	
V/C Ratio	0.50		0.24		0.00	0.31	0.19	0.22	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	23.6		19.7		0.0	15.5	10.7	10.0	
Intersection LOS	B - 16.8								
95th Percentile Queue (veh)	4.3		1.6		0.0	2.3	0.7	1.6	

Synchro Results Summary Sheet

2: Hill St./Driveway "B" & SR 303/2nd St.

2025_Conditions

Hill St/Driveway B

SR 303/2nd St.

Unsignalized

Hill St/Driveway B / SR 303/2nd St. 2025_Conditions	EB (Hill St/Driveway B)			WB (Hill St/Driveway B)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry					<1>			1>			<1	
AM Peak Hour												
2025_NO BUILD Volumes				0	0	0		857	0	0	229	
V/C Ratio												
Level-of-Service					A					A		
Control Delay (Seconds)					0.0					0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			<1>			<1>	
2025_BUILD Volumes	4	0	7	0	1	1	27	860	0	0	232	11
V/C Ratio		0.02			0.01		0.02					
Level-of-Service		C			C		A	A		A		
Control Delay (Seconds)		15.3			18.7		8.8	0.0		0.0		
Intersection LOS	A - 0.4											
95th Percentile Queue (veh)		0.1			0.0		0.1			0.0		

PM Peak Hour

Existing Lane Geometry					<1>			1>			<1	
2025_NO BUILD Volumes				0	0	0	0	233	4	0	684	
V/C Ratio					0.00					0.00		
Level-of-Service					A					A		
Control Delay (Seconds)					9.0					0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)					0.0					0.0		
Build Lane Geometry		<1>			<1>			<1>			<1>	
2025_BUILD Volumes	13	1	22	0	0	4	14	235	4	1	694	6
V/C Ratio		0.08			0.00		0.01			0.00		
Level-of-Service		C			B		B	A		A	A	
Control Delay (Seconds)		16.6			10.4		10.2	0.0		7.5	0.0	
Intersection LOS	A - 0.8											
95th Percentile Queue (veh)		0.2			0.0		0.0			0.0		

Synchro Results Summary Sheet

3: . SR 500/ Rio Bravo Blvd. & SR 303/2nd St

2025_Conditions

Rio Bravo Blvd.

SR 303/2nd St.

Signalized

Rio Bravo Blvd. / SR 303/2nd St. 2025_Conditions	EB (Rio Bravo Blvd.)			WB (Rio Bravo Blvd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2	1	1	2	1	1	1>		1	1	1
AM Peak Hour												
2025_NO BUILD Volumes	413	1,468	262	40	702	76	226	130		61	79	133
V/C Ratio	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Level-of-Service	C	D	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
Intersection LOS	C - 30.9											
95th Percentile Queue (veh)	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0
2025_BUILD Volumes	413	1,468	262	40	702	76	226	130	56	61	79	133
V/C Ratio	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Level-of-Service	C	D	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
Intersection LOS	C - 30.9											
95th Percentile Queue (veh)	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0

PM Peak Hour

2025_NO BUILD Volumes	113	818	218	28	1,871	28	181	44	56	52	105	351
V/C Ratio	0.47	0.40	0.24	0.06	0.98	0.04	0.39	0.00	0.26	0.13	0.31	
Level-of-Service	C	B	B	B	D	B	C		C	C	D	
Control Delay (Seconds)	23.1	17.6	16.2	14.9	47.0	16.3	31.8	0.0	34.8	32.8	38.3	0.0
Intersection LOS	D - 35.4											
95th Percentile Queue (veh)	1.0	4.5	2.2	0.3	19.8	0.3	2.8	0.0	1.6	0.8	1.8	0.0
2025_BUILD Volumes	124	818	218	28	1,871	30	181	47	56	55	111	375
V/C Ratio	0.54	0.42	0.25	0.07	1.03	0.04	0.41	0.00	0.28	0.14	0.34	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	23.6	18.0	16.5	15.2	59.6	16.6	31.9	0.0	35.2	32.9	38.9	0.0
Intersection LOS	D - 42.2											
95th Percentile Queue (veh)	1.2	4.8	2.4	0.3	22.8	0.3	2.9	0.0	1.8	0.9	2.0	0.0

Synchro Results Summary Sheet

4: Driveway A & SR 303/2nd St.

2025_Conditions

Driveway A

SR 303/2nd St.

Unsignalized

Driveway A / SR 303/2nd St. 2025_Conditions	EB (Driveway A)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1>			<1>			<1>	
AM Peak Hour									
2025_BUILD Volumes	22		4	4	861			240	62
V/C Ratio	0.06			0.00					
Level-of-Service	C			A	A				
Control Delay (Seconds)	17.7			8.8	0.0				
Intersection LOS	A - 0.4								
95th Percentile Queue (veh)	0.2			0.0					

PM Peak Hour

2025_BUILD Volumes	67		11	2	246			690	31
V/C Ratio	0.15			0.00					
Level-of-Service	C			A	A				
Control Delay (Seconds)	17.4			9.9	0.0				
Intersection LOS	A - 1.3								
95th Percentile Queue (veh)	0.5			0.0					

Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	SBL	SBT
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↰	↱
Traffic Volume (vph)	117	60	539	52	117
Future Volume (vph)	117	60	539	52	117
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	23.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	3.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)	24.5	24.5	29.5	41.5	39.5
Actuated g/C Ratio	0.33	0.33	0.39	0.55	0.53
v/c Ratio	0.15	0.08	0.87	0.16	0.09
Control Delay (s/veh)	18.9	6.7	34.4	9.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.9	6.7	34.4	9.3	9.2
LOS	B	A	C	A	A
Approach Delay (s/veh)	14.8		34.4		9.2
Approach LOS	B		C		A

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 28.1

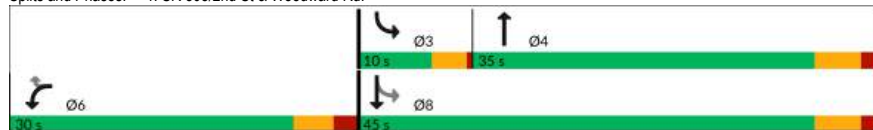
Intersection LOS: C

Intersection Capacity Utilization 45.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



A - 2025 AM Peak No Build
Implementation Year 2025

Synchro 12 Report
2024017_Synchro.syn

HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰		↰	↱
Traffic Volume (veh/h)	117	60	539	338	52	117
Future Volume (veh/h)	117	60	539	338	52	117
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	83	42	380	239	37	83
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	418	263	262	946
Arrive On Green	0.33	0.33	0.39	0.39	0.09	0.53
Sat Flow, veh/h	1711	1459	1063	668	1485	1796
Grp Volume(v), veh/h	83	42	0	619	37	83
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1731	1485	1796
Q Serve(g_s), s	2.6	1.5	0.0	25.3	0.9	1.7
Cycle Q Clear(g_c), s	2.6	1.5	0.0	25.3	0.9	1.7
Prop In Lane	1.00	1.00		0.39	1.00	
Lane Grp Cap(c), veh/h	559	477	0	681	262	946
V/C Ratio(X)	0.15	0.09	0.00	0.91	0.14	0.09
Avail Cap(c_a), veh/h	559	477	0	681	262	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	17.5	0.0	21.5	14.6	8.8
Incr Delay (d2), s/veh	0.6	0.4	0.0	18.3	1.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.5	0.0	12.6	0.4	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.4	17.9	0.0	39.8	15.8	9.0
LnGrp LOS	B	B		D	B	A
Approach Vol, veh/h	125		619			120
Approach Delay, s/veh	18.2		39.8			11.1
Approach LOS	B		D			B

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	10.0	35.0	30.0	45.0
Change Period (Y+Rc), s	3.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.5	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s	2.9	27.3	4.6	3.7
Green Ext Time (p_c), s	0.0	0.7	0.3	0.2

Intersection Summary

HCM 7th Control Delay, s/veh

32.7

HCM 7th LOS

C

A - 2025 AM Peak No Build
Implementation Year 2025

Synchro 12 Report
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HCM 7th TWSC

2: SR 303/2nd St./SR 303/2nd St & Hill St.

11/23/2024

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	857	0	0	229
Future Vol, veh/h	0	0	857	0	0	229
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	6	0	2	100	100	0
Mvmt Flow	0	0	553	0	0	148
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	701	553	0	0	553	0
Stage 1	553	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.46	6.2	-	-	5.1	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.3	-	-	3.1	-
Pot Cap-1 Maneuver	399	537	-	-	667	-
Stage 1	568	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	399	537	-	-	667	-
Mov Cap-2 Maneuver	399	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s/v	0		0		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	667	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s/veh)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Timings

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↰	↱	↱
Traffic Volume (vph)	413	1468	262	40	702	76	226	130	61	79	133
Future Volume (vph)	413	1468	262	40	702	76	226	130	61	79	133
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	50.4	42.5	42.5	29.1	21.9	21.9	33.7	23.6	23.1	15.5	15.5
Actuated g/C Ratio	0.51	0.43	0.43	0.30	0.22	0.22	0.34	0.24	0.24	0.16	0.16
v/c Ratio	0.68	0.81	0.29	0.17	0.75	0.16	0.43	0.37	0.17	0.23	0.29
Control Delay (s/veh)	22.4	30.4	8.0	17.1	42.6	2.4	29.0	35.5	26.7	42.5	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 (s/veh)	22.4	30.4	8.0	17.1	42.6	2.4	29.0	35.5	26.7	42.5	4.3
LOS	C	C	A	B	D	A	C	D	C	D	A
Approach Delay (s/veh)		26.1			37.6			31.9		20.4	
Approach LOS		C			D			C		C	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 98

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 28.9

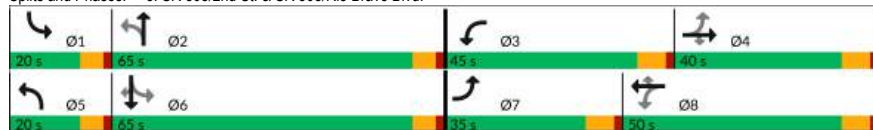
Intersection LOS: C

Intersection Capacity Utilization 82.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

A - 2025 AM Peak No Build
Implementation Year 2025Synchro 12 Report
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HCM 7th Signalized Intersection Summary

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	413	1468	262	40	702	76	226	130	56	61	79	133
Future Volume (veh/h)	413	1468	262	40	702	76	226	130	56	61	79	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	344	1223	218	33	585	63	188	108	47	51	66	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	454	1311	580	173	907	369	461	267	116	345	315	
Arrive On Green	0.16	0.37	0.37	0.04	0.26	0.26	0.11	0.22	0.22	0.06	0.17	0.00
Sat Flow, veh/h	1795	3526	1560	1739	3526	1434	1767	1197	521	1654	1826	1585
Grp Volume(v), veh/h	344	1223	218	33	585	63	188	0	155	51	66	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1560	1739	1763	1434	1767	0	1717	1654	1826	1585
Q Serve(g_s), s	11.6	29.0	8.9	1.2	12.8	3.0	7.4	0.0	6.7	2.1	2.7	0.0
Cycle Q Clear(g_c), s	11.6	29.0	8.9	1.2	12.8	3.0	7.4	0.0	6.7	2.1	2.7	0.0
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.30	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	454	1311	580	173	907	369	461	0	384	345	315	
V/C Ratio(X)	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Avail Cap(c_a), veh/h	745	1334	590	855	1739	708	552	0	1163	515	1237	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.1	26.3	19.9	23.9	28.8	25.1	25.0	0.0	28.8	26.7	30.9	0.0
Incr Delay (d2), s/veh	1.0	11.8	0.3	0.5	0.6	0.2	0.2	0.0	0.8	0.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
LnGrp LOS	C	D	C	C	C	C	C		C	C	C	
Approach Vol, veh/h		1785			681			343			117	
Approach Delay, s/veh		32.5			28.7			27.2			29.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	25.5	10.9	39.4	15.5	21.1	20.9	29.5
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.1	8.7	3.2	31.0	9.4	4.7	13.6	14.8
Green Ext Time (p_c), s	0.0	1.1	0.1	1.3	0.1	0.4	0.2	3.2

Intersection Summary

HCM 7th Control Delay, s/veh

30.9

HCM 7th LOS

C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

A - 2025 AM Peak No Build
Implementation Year 2025Synchro 12 Report
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Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	SBL	SBT
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↰	↱
Traffic Volume (vph)	185	60	541	52	123
Future Volume (vph)	185	60	541	52	123
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	17.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.5	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	None	Max
Act Effct Green (s)	24.5	24.5	33.5	41.0	39.5
Actuated g/C Ratio	0.33	0.33	0.45	0.55	0.53
v/c Ratio	0.24	0.09	0.79	0.15	0.09
Control Delay (s/veh)	19.9	6.7	27.5	9.5	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.9	6.7	27.5	9.5	9.2
LOS	B	A	C	A	A
Approach Delay (s/veh)	16.7		27.5		9.3
Approach LOS	B		C		A

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 23.1

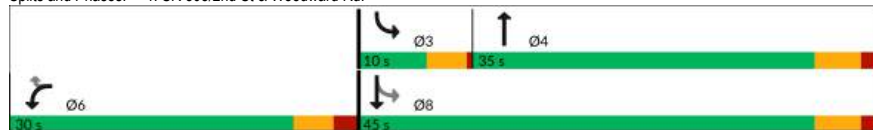
Intersection LOS: C

Intersection Capacity Utilization 46.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



B - 2025 AM Peak Build
Implementation Year 2025

Synchro 12 Report
2024017_Synchro.syn

HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰		↰	↱
Traffic Volume (veh/h)	185	60	541	362	52	123
Future Volume (veh/h)	185	60	541	362	52	123
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	131	42	382	256	37	87
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	472	316	217	946
Arrive On Green	0.33	0.33	0.45	0.45	0.02	0.53
Sat Flow, veh/h	1711	1459	1044	700	1485	1796
Grp Volume(v), veh/h	131	42	0	638	37	87
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1744	1485	1796
Q Serve(g_s), s	4.2	1.5	0.0	23.7	1.0	1.8
Cycle Q Clear(g_c), s	4.2	1.5	0.0	23.7	1.0	1.8
Prop In Lane	1.00	1.00		0.40	1.00	
Lane Grp Cap(c), veh/h	559	477	0	788	217	946
V/C Ratio(X)	0.23	0.09	0.00	0.81	0.17	0.09
Avail Cap(c_a), veh/h	559	477	0	788	304	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	17.5	0.0	17.8	14.3	8.8
Incr Delay (d2), s/veh	1.0	0.4	0.0	8.8	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.5	0.0	9.8	0.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.4	17.9	0.0	26.6	14.7	9.0
LnGrp LOS	B	B		C	B	A
Approach Vol, veh/h	173		638			124
Approach Delay, s/veh	19.0		26.6			10.7
Approach LOS	B		C			B

Timer - Assigned Phs 3 4 6 8

Phs Duration (G+Y+Rc), s 5.6 39.4 30.0 45.0

Change Period (Y+Rc), s 4.0 5.5 5.5 5.5

Max Green Setting (Gmax), s 6.0 29.5 24.5 39.5

Max Q Clear Time (g_c+I1), s 3.0 25.7 6.2 3.8

Green Ext Time (p_c), s 0.0 1.4 0.4 0.4

Intersection Summary

HCM 7th Control Delay, s/veh 23.1

HCM 7th LOS C

B - 2025 AM Peak Build
Implementation Year 2025

Synchro 12 Report
2024017_Synchro.syn

HCM 7th TWSC
2: SR 303/2nd St & Driveway "B"/Hill St

11/23/2024

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	7	0	1	1	27	860	0	0	232	11
Future Vol, veh/h	4	0	7	0	1	1	27	860	0	0	232	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	100	0	100	100	100	100	100	2	100	0	6	100
Mvmt Flow	3	0	5	0	1	1	19	614	0	0	166	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	823	823	170	819	826	614	174	0	0	614	0	0
Stage 1	170	170	-	653	653	-	-	-	-	-	-	-
Stage 2	653	653	-	166	174	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.5	7.2	8.1	7.5	7.2	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4	4.2	4.4	4.9	4.2	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	204	311	673	205	219	351	978	-	-	975	-	-
Stage 1	648	762	-	328	341	-	-	-	-	-	-	-
Stage 2	328	467	-	652	603	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	197	302	673	198	212	351	978	-	-	975	-	-
Mov Cap-2 Maneuver	197	302	-	198	212	-	-	-	-	-	-	-
Stage 1	648	762	-	318	331	-	-	-	-	-	-	-
Stage 2	316	453	-	647	603	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v15.29			18.68		0.27		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	55	-	-	358 265	975	-	-
HCM Lane V/C Ratio	0.02	-	-	0.022 0.005	-	-	-
HCM Control Delay (s/veh)	8.8	0	-	15.3 18.7	0	-	-
HCM Lane LOS	A	A	-	C C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1 0	0	-	-

Timings

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↰	↱	↱
Traffic Volume (vph)	413	1468	262	40	702	76	226	130	61	79	133
Future Volume (vph)	413	1468	262	40	702	76	226	130	61	79	133
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	50.4	42.5	42.5	29.1	21.9	21.9	33.7	23.6	23.1	15.5	15.5
Actuated g/C Ratio	0.51	0.43	0.43	0.30	0.22	0.22	0.34	0.24	0.24	0.16	0.16
v/c Ratio	0.68	0.81	0.29	0.17	0.75	0.16	0.43	0.37	0.17	0.23	0.29
Control Delay (s/veh)	22.4	30.4	8.0	17.1	42.6	2.4	29.0	35.5	26.7	42.5	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 (s/veh)	22.4	30.4	8.0	17.1	42.6	2.4	29.0	35.5	26.7	42.5	4.3
LOS	C	C	A	B	D	A	C	D	C	D	A
Approach Delay (s/veh)	26.1			37.6			31.9		20.4		
Approach LOS	C			D			C		C		

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 98

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 28.9

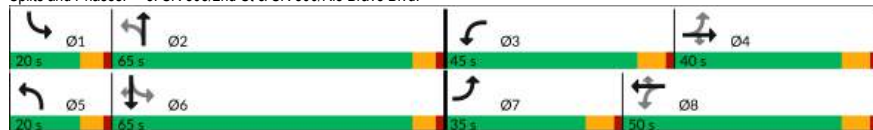
Intersection LOS: C

Intersection Capacity Utilization 82.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

B - 2025 AM Peak Build
Implementation Year 2025Synchro 12 Report
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HCM 7th Signalized Intersection Summary

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	413	1468	262	40	702	76	226	130	56	61	79	133
Future Volume (veh/h)	413	1468	262	40	702	76	226	130	56	61	79	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	344	1223	218	33	585	63	188	108	47	51	66	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	454	1311	580	173	907	369	461	267	116	345	315	
Arrive On Green	0.16	0.37	0.37	0.04	0.26	0.26	0.11	0.22	0.22	0.06	0.17	0.00
Sat Flow, veh/h	1795	3526	1560	1739	3526	1434	1767	1197	521	1654	1826	1585
Grp Volume(v), veh/h	344	1223	218	33	585	63	188	0	155	51	66	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1560	1739	1763	1434	1767	0	1717	1654	1826	1585
Q Serve(g_s), s	11.6	29.0	8.9	1.2	12.8	3.0	7.4	0.0	6.7	2.1	2.7	0.0
Cycle Q Clear(g_c), s	11.6	29.0	8.9	1.2	12.8	3.0	7.4	0.0	6.7	2.1	2.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	454	1311	580	173	907	369	461	0	384	345	315	
V/C Ratio(X)	0.76	0.93	0.38	0.19	0.65	0.17	0.41	0.00	0.40	0.15	0.21	
Avail Cap(c_a), veh/h	745	1334	590	855	1739	708	552	0	1163	515	1237	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.1	26.3	19.9	23.9	28.8	25.1	25.0	0.0	28.8	26.7	30.9	0.0
Incr Delay (d2), s/veh	1.0	11.8	0.3	0.5	0.6	0.2	0.2	0.0	0.8	0.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	13.0	3.0	0.5	5.1	1.0	2.9	0.0	2.7	0.8	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.1	38.1	20.2	24.4	29.3	25.2	25.2	0.0	29.6	26.7	31.3	0.0
LnGrp LOS	C	D	C	C	C	C	C		C	C	C	
Approach Vol, veh/h	1785			681			343			117		
Approach Delay, s/veh	32.5			28.7			27.2			29.3		
Approach LOS	C			C			C			C		

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	25.5	10.9	39.4	15.5	21.1	20.9	29.5
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.1	8.7	3.2	31.0	9.4	4.7	13.6	14.8
Green Ext Time (p_c), s	0.0	1.1	0.1	1.3	0.1	0.4	0.2	3.2

Intersection Summary

HCM 7th Control Delay, s/veh

30.9

HCM 7th LOS

C

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

B - 2025 AM Peak Build
Implementation Year 2025Synchro 12 Report
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HCM 7th TWSC
4: Driveway "A" & SR 303/2nd St

11/23/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	4	4	861	240	62
Future Vol, veh/h	22	4	4	861	240	62
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	100	100	100	4	7	100
Mvmt Flow	14	3	3	555	155	40

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	735	175	195	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Critical Hdwy	7.4	7.2	5.1	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	273	668	957	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	272	668	957	-	-	-
Mov Cap-2 Maneuver	272	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	417	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.72	0.04	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	8	-	300	-	-
HCM Lane V/C Ratio	0.003	-	0.056	-	-
HCM Control Delay (s/veh)	8.8	0	17.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	←	↖	↑	↗	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑	↖	↗
Traffic Volume (vph)	422	175	148	141	306
Future Volume (vph)	422	175	148	141	306
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	17.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.5	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	None	Max
Act Effct Green (s)	24.5	24.5	31.5	41.0	39.5
Actuated g/C Ratio	0.33	0.33	0.42	0.55	0.53
v/c Ratio	0.54	0.23	0.30	0.20	0.23
Control Delay (s/veh)	25.1	5.1	10.3	9.4	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.1	5.1	10.3	9.4	10.4
LOS	C	A	B	A	B
Approach Delay (s/veh)	19.2		10.3		10.1
Approach LOS	B		B		B

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.54

Intersection Signal Delay (s/veh): 14.1

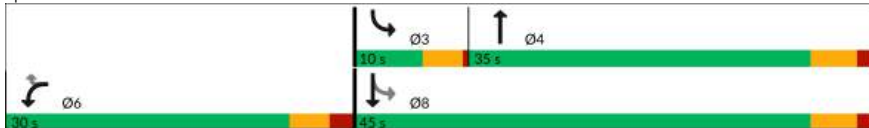
Intersection LOS: B

Intersection Capacity Utilization 53.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



D - 2035 PM Peak Build
Horizon Year 2035

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2035.syn

HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	422	175	148	171	141	306
Future Volume (veh/h)	422	175	148	171	141	306
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	298	124	104	121	100	216
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	325	378	494	946
Arrive On Green	0.33	0.33	0.42	0.42	0.06	0.53
Sat Flow, veh/h	1711	1459	778	905	1485	1796
Grp Volume(v), veh/h	298	124	0	225	100	216
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1682	1485	1796
Q Serve(g_s), s	10.7	4.7	0.0	6.7	2.7	4.9
Cycle Q Clear(g_c), s	10.7	4.7	0.0	6.7	2.7	4.9
Prop In Lane	1.00	1.00		0.54	1.00	
Lane Grp Cap(c), veh/h	559	477	0	703	494	946
V/C Ratio(X)	0.53	0.26	0.00	0.32	0.20	0.23
Avail Cap(c_a), veh/h	559	477	0	703	531	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	18.6	0.0	14.7	10.6	9.6
Incr Delay (d2), s/veh	3.6	1.3	0.0	1.2	0.2	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.7	0.0	2.5	0.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.2	19.9	0.0	15.9	10.8	10.1
LnGrp LOS	C	B		B	B	B
Approach Vol, veh/h	422		225			316
Approach Delay, s/veh	22.9		15.9			10.3
Approach LOS	C		B			B

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	8.1	36.9	30.0	45.0
Change Period (Y+Rc), s	4.0	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.0	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s	4.7	8.7	12.7	6.9
Green Ext Time (p_c), s	0.0	1.1	1.1	1.1

Intersection Summary

HCM 7th Control Delay, s/veh 17.1

HCM 7th LOS B

D - 2035 PM Peak Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th TWSC
2: SR 303/2nd St & Driveway "B"/Hill St

11/23/2024

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	13	1	22	0	0	4	14	249	4	1	735	6
Future Vol, veh/h	13	1	22	0	0	4	14	249	4	1	735	6
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	100	0	100	100	100	100	100	2	100	0	6	100
Mvmt Flow	9	1	16	0	0	3	10	178	3	1	525	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	726	729	527	726	730	179	529	0	0	181	0	0
Stage 1	529	529	-	199	199	-	-	-	-	-	-	-
Stage 2	198	201	-	527	531	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.5	7.2	8.1	7.5	7.2	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4	4.2	4.4	4.9	4.2	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	241	352	400	241	253	664	683	-	-	1407	-	-
Stage 1	392	531	-	622	585	-	-	-	-	-	-	-
Stage 2	623	739	-	393	396	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	236	346	400	227	249	664	683	-	-	1407	-	-
Mov Cap-2 Maneuver	236	346	-	227	249	-	-	-	-	-	-	-
Stage 1	391	530	-	612	576	-	-	-	-	-	-	-
Stage 2	611	727	-	376	395	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.3	10.45	0.54	0.01
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	94	-	-	318	664	2	-
HCM Lane V/C Ratio	0.015	-	-	0.081	0.004	0.001	-
HCM Control Delay (s/veh)	10.3	0	-	17.3	10.4	7.6	0
HCM Lane LOS	B	A	-	C	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-

Timings

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↰	↱	↱
Traffic Volume (vph)	133	883	235	30	2019	32	196	51	60	119	403
Future Volume (vph)	133	883	235	30	2019	32	196	51	60	119	403
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	56.1	50.4	50.4	50.0	42.9	42.9	32.6	22.7	22.7	15.3	15.3
Actuated g/C Ratio	0.53	0.48	0.48	0.47	0.41	0.41	0.31	0.22	0.22	0.15	0.15
v/c Ratio	0.52	0.44	0.24	0.07	1.18	0.04	0.43	0.25	0.17	0.38	0.65
Control Delay (s/veh)	24.5	20.7	4.8	12.0	117.9	0.1	31.1	24.9	27.8	46.3	11.2
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 (s/veh)	24.5	20.7	4.8	12.0	117.9	0.1	31.1	24.9	27.8	46.3	11.2
LOS	C	C	A	B	F	A	C	C	C	D	B
Approach Delay (s/veh)		18.1			114.6			28.8		20.1	
Approach LOS		B			F			C		C	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 105.3

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay (s/veh): 66.7

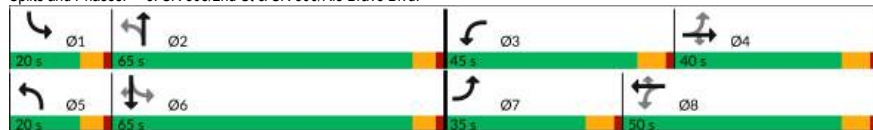
Intersection LOS: E

Intersection Capacity Utilization 89.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

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HCM 7th Signalized Intersection Summary

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	133	883	235	30	2019	32	196	51	61	60	119	403
Future Volume (veh/h)	133	883	235	30	2019	32	196	51	61	60	119	403
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00			1.00	1.00	0.98	1.00			1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	111	736	196	25	1682	27	163	42	51	50	99	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	191	1614	713	317	1503	598	370	143	174	332	272	
Arrive On Green	0.07	0.46	0.46	0.03	0.43	0.43	0.10	0.19	0.19	0.05	0.15	0.00
Sat Flow, veh/h	1795	3526	1557	1739	3526	1403	1767	743	902	1654	1826	1585
Grp Volume(v), veh/h	111	736	196	25	1682	27	163	0	93	50	99	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1557	1739	1763	1403	1767	0	1645	1654	1826	1585
Q Serve(g_s), s	3.4	14.4	7.9	0.8	42.9	1.1	7.7	0.0	4.9	2.5	4.9	0.0
Cycle Q Clear(g_c), s	3.4	14.4	7.9	0.8	42.9	1.1	7.7	0.0	4.9	2.5	4.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	191	1614	713	317	1503	598	370	0	317	332	272	
V/C Ratio(X)	0.58	0.46	0.28	0.08	1.12	0.05	0.44	0.00	0.29	0.15	0.36	
Avail Cap(c_a), veh/h	569	1614	713	911	1503	598	444	0	963	474	1069	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	18.7	16.9	15.5	28.9	16.9	31.5	0.0	34.8	33.1	38.5	0.0
Incr Delay (d2), s/veh	1.0	0.1	0.2	0.1	63.2	0.0	0.3	0.0	0.6	0.1	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.4	2.6	0.3	29.5	0.3	3.2	0.0	1.9	1.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	18.8	17.1	15.6	92.0	16.9	31.8	0.0	35.4	33.2	39.5	0.0
LnGrp LOS	C	B	B	B	F	B	C		D	C	D	
Approach Vol, veh/h		1043			1734			256			149	
Approach Delay, s/veh		19.1			89.8			33.1			37.4	
Approach LOS		B			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	25.5	10.6	53.2	15.8	21.1	13.8	50.0
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.5	6.9	2.8	16.4	9.7	6.9	5.4	44.9
Green Ext Time (p_c), s	0.0	0.6	0.0	4.0	0.1	0.6	0.1	0.0

Intersection Summary

HCM 7th Control Delay, s/veh

59.6

HCM 7th LOS

E

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

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HCM 7th TWSC
4: Driveway "A" & SR 303/2nd St

11/23/2024

Intersection

Int Delay, s/veh 1.3

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations 

Traffic Vol, veh/h 67 11 2 260 731 31

Future Vol, veh/h 67 11 2 260 731 31

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 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 93 93 93 93 93 93

Heavy Vehicles, % 100 100 100 4 7 100

Mvmt Flow 43 7 1 168 472 20

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 652 482 492 0 - 0

Stage 1 482 - - - - -

Stage 2 170 - - - - -

Critical Hdwy 7.4 7.2 5.1 - - -

Critical Hdwy Stg 1 6.4 - - - - -

Critical Hdwy Stg 2 6.4 - - - - -

Follow-up Hdwy 4.4 4.2 3.1 - - -

Pot Cap-1 Maneuver 311 428 710 - - -

Stage 1 460 - - - - -

Stage 2 670 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 310 428 710 - - -

Mov Cap-2 Maneuver 310 - - - - -

Stage 1 459 - - - - -

Stage 2 670 - - - - -

Approach EB NB SB

HCM Control Delay, s/v18.21 0.08 0

HCM LOS C

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 14 - 323 - -

HCM Lane V/C Ratio 0.002 - 0.156 - -

HCM Control Delay (s/veh) 10.1 0 18.2 - -

HCM Lane LOS B A C - -

HCM 95th %tile Q(veh) 0 - 0.5 - -

Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	SBL	SBT
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↰	↱
Traffic Volume (vph)	400	165	140	133	289
Future Volume (vph)	400	165	140	133	289
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	17.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.5	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	None	Max
Act Effct Green (s)	24.5	24.5	31.5	41.0	39.5
Actuated g/C Ratio	0.33	0.33	0.42	0.55	0.53
v/c Ratio	0.44	0.19	0.24	0.15	0.19
Control Delay (s/veh)	22.9	5.3	8.7	9.0	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	5.3	8.7	9.0	10.0
LOS	C	A	A	A	A
Approach Delay (s/veh)	17.8		8.7		9.7
Approach LOS	B		A		A

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.44

Intersection Signal Delay (s/veh): 13.0

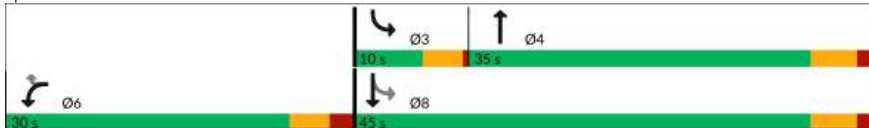
Intersection LOS: B

Intersection Capacity Utilization 52.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



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HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰		↰	↱
Traffic Volume (veh/h)	400	165	140	166	133	289
Future Volume (veh/h)	400	165	140	166	133	289
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	240	99	84	100	80	173
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	329	391	520	946
Arrive On Green	0.33	0.33	0.43	0.43	0.04	0.53
Sat Flow, veh/h	1711	1459	767	913	1485	1796
Grp Volume(v), veh/h	240	99	0	184	80	173
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1680	1485	1796
Q Serve(g_s), s	8.2	3.7	0.0	5.3	2.1	3.8
Cycle Q Clear(g_c), s	8.2	3.7	0.0	5.3	2.1	3.8
Prop In Lane	1.00	1.00		0.54	1.00	
Lane Grp Cap(c), veh/h	559	477	0	720	520	946
V/C Ratio(X)	0.43	0.21	0.00	0.26	0.15	0.18
Avail Cap(c_a), veh/h	559	477	0	720	572	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	18.2	0.0	13.8	10.3	9.3
Incr Delay (d2), s/veh	2.4	1.0	0.0	0.9	0.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.3	0.0	1.9	0.6	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.2	19.2	0.0	14.6	10.4	9.7
LnGrp LOS	C	B		B	B	A
Approach Vol, veh/h	339		184			253
Approach Delay, s/veh	21.3		14.6			9.9
Approach LOS	C		B			A

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	7.4	37.6	30.0	45.0
Change Period (Y+Rc), s	4.0	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.0	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s	4.1	7.3	10.2	5.8
Green Ext Time (p_c), s	0.0	0.9	0.9	0.9

Intersection Summary

HCM 7th Control Delay, s/veh

16.0

HCM 7th LOS

B

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Implementation Year 2025

Synchro 12 Report
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HCM 7th TWSC
2: SR 303/2nd St & Driveway "B"/Hill St

11/23/2024

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	1	22	0	0	4	14	235	4	1	694	6
Future Vol, veh/h	13	1	22	0	0	4	14	235	4	1	694	6
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	100	0	100	100	100	100	100	2	100	0	6	100
Mvmt Flow	8	1	13	0	0	2	8	141	2	1	416	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	577	580	418	577	580	142	420	0	0	143	0	0
Stage 1	419	419	-	159	159	-	-	-	-	-	-	-
Stage 2	158	160	-	418	421	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.5	7.2	8.1	7.5	7.2	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4	4.2	4.4	4.9	4.2	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	311	429	469	311	317	700	763	-	-	1452	-	-
Stage 1	457	593	-	658	613	-	-	-	-	-	-	-
Stage 2	659	769	-	458	451	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	306	423	469	298	313	700	763	-	-	1452	-	-
Mov Cap-2 Maneuver	306	423	-	298	313	-	-	-	-	-	-	-
Stage 1	457	593	-	650	606	-	-	-	-	-	-	-
Stage 2	649	760	-	445	451	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	14.7		10.16		0.54		0.01	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	99	-	-	393	700	3	-
HCM Lane V/C Ratio	0.011	-	-	0.055	0.003	0	-
HCM Control Delay (s/veh)	9.8	0	-	14.7	10.2	7.5	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-

Timings

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Traffic Volume (vph)	124	818	218	28	1871	30	181	47	55	111	375
Future Volume (vph)	124	818	218	28	1871	30	181	47	55	111	375
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	57.1	53.2	53.2	50.0	43.0	43.0	31.4	21.9	22.4	15.1	15.1
Actuated g/C Ratio	0.55	0.51	0.51	0.48	0.41	0.41	0.30	0.21	0.21	0.14	0.14
v/c Ratio	0.47	0.37	0.20	0.05	1.04	0.04	0.39	0.22	0.15	0.34	0.62
Control Delay (s/veh)	22.0	17.7	3.6	11.5	65.5	0.1	30.4	23.4	27.6	45.2	11.1
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 (s/veh)	22.0	17.7	3.6	11.5	65.5	0.1	30.4	23.4	27.6	45.2	11.1
LOS	C	B	A	B	E	A	C	C	C	D	B
Approach Delay (s/veh)		15.5			63.8			27.9		19.8	
Approach LOS		B			E			C		B	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 104.4

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay (s/veh): 40.8

Intersection LOS: D

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St & SR 500/Rio Bravo Blvd.



D - 2025 PM Peak Build
Implementation Year 2025

Synchro 12 Report
2024017_Synchro.syn

HCM 7th Signalized Intersection Summary

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Traffic Volume (veh/h)	124	818	218	28	1871	30	181	47	56	55	111	375
Future Volume (veh/h)	124	818	218	28	1871	30	181	47	56	55	111	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00			1.00	1.00	0.98	1.00			1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	99	654	174	22	1497	24	145	38	45	44	89	0
Peak Hour 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
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	194	1639	724	350	1520	605	365	142	168	331	275	
Arrive On Green	0.07	0.46	0.46	0.03	0.43	0.43	0.09	0.19	0.19	0.05	0.15	0.00
Sat Flow, veh/h	1795	3526	1557	1739	3526	1403	1767	754	893	1654	1826	1585
Grp Volume(v), veh/h	99	654	174	22	1497	24	145	0	83	44	89	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1557	1739	1763	1403	1767	0	1647	1654	1826	1585
Q Serve(g_s), s	2.9	12.1	6.7	0.7	41.8	1.0	6.8	0.0	4.3	2.2	4.3	0.0
Cycle Q Clear(g_c), s	2.9	12.1	6.7	0.7	41.8	1.0	6.8	0.0	4.3	2.2	4.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	194	1639	724	350	1520	605	365	0	310	331	275	
V/C Ratio(X)	0.51	0.40	0.24	0.06	0.98	0.04	0.40	0.00	0.27	0.13	0.32	
Avail Cap(c_a), veh/h	580	1639	724	956	1520	605	458	0	975	480	1081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.6	17.5	16.0	14.9	28.0	16.4	31.6	0.0	34.5	32.7	37.8	0.0
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.1	19.5	0.0	0.3	0.0	0.6	0.1	0.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.5	2.2	0.3	20.0	0.3	2.8	0.0	1.7	0.8	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.3	17.6	16.2	15.0	47.4	16.4	31.9	0.0	35.1	32.8	38.6	0.0
LnGrp LOS	C	B	B	B	D	B	C		D	C	D	
Approach Vol, veh/h		927			1543			228			133	
Approach Delay, s/veh		17.9			46.5			33.0			36.7	
Approach LOS		B			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	24.8	10.3	53.4	14.8	21.1	13.6	50.0
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.2	6.3	2.7	14.1	8.8	6.3	4.9	43.8
Green Ext Time (p_c), s	0.0	0.6	0.0	3.6	0.1	0.6	0.1	0.0

Intersection Summary

HCM 7th Control Delay, s/veh

35.6

HCM 7th LOS

D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

D - 2025 PM Peak Build
Implementation Year 2025

Synchro 12 Report
2024017_Synchro.syn

HCM 7th TWSC
4: Driveway "A" & SR 303/2nd St

11/23/2024

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	11	2	246	690	31
Future Vol, veh/h	67	11	2	246	690	31
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	100	100	100	4	7	100
Mvmt Flow	40	7	1	148	414	19

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	573	423	433	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	150	-	-	-	-	-
Critical Hdwy	7.4	7.2	5.1	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	350	466	754	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	466	754	-	-	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	686	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	16.4	0.08	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	15	-	362	-	-
HCM Lane V/C Ratio	0.002	-	0.129	-	-
HCM Control Delay (s/veh)	9.8	0	16.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Synchro Results Summary Sheet

1: Woodward Rd. & SR 303/2nd St.

2035_Conditions

Woodward Rd.

SR 303/2nd St.

Signalized

Woodward Rd. / SR 303/2nd St. 2035_Conditions	WB (Woodward Rd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1		1		1>		1	1	
AM Peak Hour									
2025_NO BUILD Volumes	124		64		571	358	55	124	
V/C Ratio	0.16		0.09		0.00	0.96	0.16	0.09	
Level-of-Service	B		B			D	B	A	
Control Delay (Seconds)	18.5		17.9		0.0	48.8	17.1	9.0	
Intersection LOS	D - 39.2								
95th Percentile Queue (veh)	1.1		0.6		0.0	15.1	0.4	0.7	
2025_BUILD Volumes	192		64		573	382	55	130	
V/C Ratio	0.24		0.09		0.00	0.86	0.20	0.10	
Level-of-Service	B		B			C	B	A	
Control Delay (Seconds)	19.5		17.9		0.0	30.1	15.7	9.1	
Intersection LOS	C - 25.5								
95th Percentile Queue (veh)	1.8		0.6		0.0	11.2	0.3	0.7	

PM Peak Hour

2025_NO BUILD Volumes	388		175		141	98	141	303	
V/C Ratio	0.49		0.26		0.00	0.25	0.18	0.23	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	23.3		19.9		0.0	16.2	10.9	10.1	
Intersection LOS	B - 16.8								
95th Percentile Queue (veh)	4.1		1.7		0.0	1.9	0.9	1.8	
2025_BUILD Volumes	422		175		148	171	141	306	
V/C Ratio	0.53		0.26		0.00	0.32	0.20	0.23	
Level-of-Service	C		B			B	B	B	
Control Delay (Seconds)	24.2		19.9		0.0	15.9	10.8	10.1	
Intersection LOS	B - 17.1								
95th Percentile Queue (veh)	4.6		1.7		0.0	2.5	0.8	1.7	

Synchro Results Summary Sheet

2: Hill St./Driveway "B" & SR 303/2nd St.

2035_Conditions

Hill St/Driveway B

SR 303/2nd St.

Unsignalized

Hill St/Driveway B / SR 303/2nd St. 2035_Conditions	EB (Hill St/Driveway B)			WB (Hill St/Driveway B)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry					<1>			1>			<1	
AM Peak Hour												
2025_NO BUILD Volumes				0	0	0		908	0	0	243	
V/C Ratio												
Level-of-Service									A	A		
Control Delay (Seconds)									0.0	0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			1>			<1	
2025_BUILD Volumes	4	0	7	0	1	1	27	911	0	0	246	11
V/C Ratio		0.02			0.01		0.02					
Level-of-Service		C			C		A	A		A		
Control Delay (Seconds)		15.9			19.6		8.8	0.0		0.0		
Intersection LOS	A - 0.4											
95th Percentile Queue (veh)		0.1			0.0		0.1			0.0		

PM Peak Hour

Existing Lane Geometry					<1>			1>			<1	
2025_NO BUILD Volumes				0	0	4	0	247	4	0	725	0
V/C Ratio										0.00		
Level-of-Service									A	A		
Control Delay (Seconds)									0.0	0.0		
Intersection LOS	A - 0.0											
95th Percentile Queue (veh)										0.0		
Build Lane Geometry		<1>			<1>			1>			<1	
2025_BUILD Volumes	13	1	22	0	0	4	14	249	4	1	735	6
V/C Ratio		0.08			0.00		0.01			0.00		
Level-of-Service		C			B		B	A		A	A	
Control Delay (Seconds)		17.3			10.4		10.3	0.0		7.6	0.0	
Intersection LOS	A - 0.8											
95th Percentile Queue (veh)		0.3			0.0		0.0			0.0		

Synchro Results Summary Sheet

3: . SR 500/ Rio Bravo Blvd. & SR 303/2nd St

2035_Conditions

Rio Bravo Blvd.

SR 303/2nd St.

Signalized

Rio Bravo Blvd. / SR 303/2nd St. 2035_Conditions	EB (Rio Bravo Blvd.)			WB (Rio Bravo Blvd.)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Lane Geometry	1	2	1	1	2	1	1	1>		1	1	1
AM Peak Hour												
2025_NO BUILD Volumes	422	1,584	283	44	757	78	244	135	61	65	83	135
V/C Ratio	0.79	1.01	0.41	0.23	0.70	0.18	0.44	0.00	0.42	0.16	0.22	
Level-of-Service	C	F	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	21.1	54.8	21.0	25.5	30.5	25.8	25.3	0.0	30.2	27.5	32.2	0.0
Intersection LOS	D - 38.5											
95th Percentile Queue (veh)	4.6	17.3	3.4	0.5	5.7	1.0	3.2	0.0	2.9	0.9	1.2	0.0
2025_BUILD Volumes	444	1,584	283	44	757	81	244	140	61	66	85	143
V/C Ratio	0.82	1.01	0.41	0.23	0.72	0.19	0.44	0.00	0.43	0.16	0.23	
Level-of-Service	C	F	C	C	C	C	C		C	C	C	
Control Delay (Seconds)	22.2	54.9	21.0	25.9	31.4	26.5	25.3	0.0	30.4	27.5	32.3	0.0
Intersection LOS	D - 38.7											
95th Percentile Queue (veh)	5.0	17.3	3.4	0.6	5.8	1.1	3.2	0.0	3.0	0.9	1.3	0.0

PM Peak Hour

2025_NO BUILD Volumes	122	883	235	30	2,019	30	196	48	61	57	113	379
V/C Ratio	0.54	0.46	0.28	0.08	1.12	0.04	0.44	0.00	0.29	0.14	0.35	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	23.8	18.9	17.1	15.5	91.5	16.8	31.7	0.0	35.2	33.2	39.3	0.0
Intersection LOS	E - 59.4											
95th Percentile Queue (veh)	1.2	5.4	2.6	0.3	29.4	0.3	3.2	0.0	1.9	0.9	2.1	0.0
2025_BUILD Volumes	133	883	235	30	2,019	32	196	51	61	60	119	403
V/C Ratio	0.58	0.46	0.28	0.08	1.12	0.05	0.44	0.00	0.29	0.15	0.36	
Level-of-Service	C	B	B	B	F	B	C		D	C	D	
Control Delay (Seconds)	24.0	18.8	17.1	15.6	92.0	16.9	31.8	0.0	35.4	33.2	39.5	0.0
Intersection LOS	E - 59.6											
95th Percentile Queue (veh)	1.3	5.4	2.6	0.3	29.5	0.3	3.2	0.0	1.9	1.0	2.2	0.0

Synchro Results Summary Sheet

4: Driveway A & SR 303/2nd St.

2035_Conditions

Driveway A

SR 303/2nd St.

Unsignalized

Driveway A / SR 303/2nd St. 2035_Conditions	EB (Driveway A)			NB (SR 303/2nd St.)			SB (SR 303/2nd St.)		
	L	T	R	L	T	R	L	T	R
Existing Lane Geometry		<1>			<1>			<1>	
AM Peak Hour									
2025_BUILD Volumes	22	0	4	4	912	0	0	254	62
V/C Ratio		0.06		0.00					
Level-of-SERVICE		C		A	A				
Control Delay (Seconds)		18.6		8.8	0.0				
Intersection LOS	A - 0.4								
95th Percentile Queue (veh)		0.2		0.0					

PM Peak Hour

2025_BUILD Volumes	67	0	11	2	260	0	0	731	31
V/C Ratio		0.15		0.00					
Level-of-SERVICE		C		B	A				
Control Delay (Seconds)		18.2		10.1	0.0				
Intersection LOS	A - 1.3								
95th Percentile Queue (veh)		0.5		0.0					

Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	←	↖	↑	↗	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑	↖	↗
Traffic Volume (vph)	124	64	571	55	124
Future Volume (vph)	124	64	571	55	124
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	23.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	3.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)	24.5	24.5	29.5	41.5	39.5
Actuated g/C Ratio	0.33	0.33	0.39	0.55	0.53
v/c Ratio	0.16	0.09	0.92	0.18	0.09
Control Delay (s/veh)	19.0	6.5	41.1	9.7	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.0	6.5	41.1	9.7	9.2
LOS	B	A	D	A	A
Approach Delay (s/veh)	14.8		41.1		9.4
Approach LOS	B		D		A

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 32.9

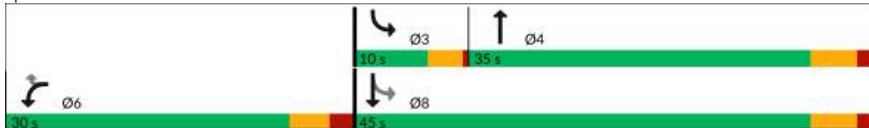
Intersection LOS: C

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



A - 2035 AM Peak No Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	124	64	571	358	55	124
Future Volume (veh/h)	124	64	571	358	55	124
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	88	45	403	253	39	88
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	418	263	240	946
Arrive On Green	0.33	0.33	0.39	0.39	0.09	0.53
Sat Flow, veh/h	1711	1459	1064	668	1485	1796
Grp Volume(v), veh/h	88	45	0	656	39	88
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1731	1485	1796
Q Serve(g_s), s	2.7	1.6	0.0	27.8	1.0	1.8
Cycle Q Clear(g_c), s	2.7	1.6	0.0	27.8	1.0	1.8
Prop In Lane	1.00	1.00		0.39	1.00	
Lane Grp Cap(c), veh/h	559	477	0	681	240	946
V/C Ratio(X)	0.16	0.09	0.00	0.96	0.16	0.09
Avail Cap(c_a), veh/h	559	477	0	681	240	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	17.5	0.0	22.2	15.7	8.8
Incr Delay (d2), s/veh	0.6	0.4	0.0	26.6	1.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.6	0.0	15.1	0.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.5	17.9	0.0	48.8	17.1	9.0
LnGrp LOS	B	B		D	B	A
Approach Vol, veh/h	133		656		127	
Approach Delay, s/veh	18.3		48.8		11.5	
Approach LOS	B		D		B	

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	10.0	35.0	30.0	45.0
Change Period (Y+Rc), s	3.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.5	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s	3.0	29.8	4.7	3.8
Green Ext Time (p_c), s	0.0	0.0	0.3	0.3

Intersection Summary

HCM 7th Control Delay, s/veh

39.2

HCM 7th LOS

D

A - 2035 AM Peak No Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th TWSC

2: SR 303/2nd St./SR 303/2nd St & Hill St.

11/23/2024

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	908	0	0	243
Future Vol, veh/h	0	0	908	0	0	243
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	6	0	2	100	100	0
Mvmt Flow	0	0	586	0	0	157

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	743	586	0
Stage 1	586	-	-
Stage 2	157	-	-
Critical Hdwy	6.46	6.2	-
Critical Hdwy Stg 1	5.46	-	-
Critical Hdwy Stg 2	5.46	-	-
Follow-up Hdwy	3.554	3.3	-
Pot Cap-1 Maneuver	377	514	-
Stage 1	549	-	-
Stage 2	862	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	377	514	-
Mov Cap-2 Maneuver	377	-	-
Stage 1	549	-	-
Stage 2	862	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	645
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Timings

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↰	↱	↱
Traffic Volume (vph)	422	1584	283	44	757	78	244	135	65	83	135
Future Volume (vph)	422	1584	283	44	757	78	244	135	65	83	135
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	55.2	47.1	47.1	31.4	24.2	24.2	34.7	24.3	23.5	15.8	15.8
Actuated g/C Ratio	0.53	0.45	0.45	0.30	0.23	0.23	0.33	0.23	0.23	0.15	0.15
v/c Ratio	0.68	0.83	0.30	0.20	0.77	0.16	0.48	0.40	0.19	0.25	0.30
Control Delay (s/veh)	23.8	31.5	8.6	18.0	44.6	2.5	31.9	37.8	28.6	44.8	4.5
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 (s/veh)	23.8	31.5	8.6	18.0	44.6	2.5	31.9	37.8	28.6	44.8	4.5
LOS	C	C	A	B	D	A	C	D	C	D	A
Approach Delay (s/veh)		27.2			39.5			34.6		21.8	
Approach LOS		C			D			C		C	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 103.6

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay (s/veh): 30.4

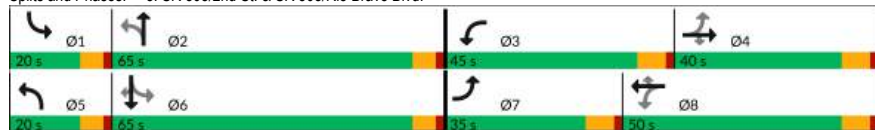
Intersection LOS: C

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

A - 2035 AM Peak No Build
Horizon Year 2035Synchro 12 Report
2035.syn

HCM 7th Signalized Intersection Summary

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	422	1584	283	44	757	78	244	135	61	65	83	135
Future Volume (veh/h)	422	1584	283	44	757	78	244	135	61	65	83	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	352	1320	236	37	631	65	203	112	51	54	69	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	443	1309	579	163	905	368	464	266	121	341	309	
Arrive On Green	0.16	0.37	0.37	0.05	0.26	0.26	0.11	0.23	0.23	0.06	0.17	0.00
Sat Flow, veh/h	1795	3526	1560	1739	3526	1434	1767	1178	536	1654	1826	1585
Grp Volume(v), veh/h	352	1320	236	37	631	65	203	0	163	54	69	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1560	1739	1763	1434	1767	0	1715	1654	1826	1585
Q Serve(g_s), s	12.1	32.9	9.9	1.3	14.4	3.1	8.1	0.0	7.2	2.3	2.9	0.0
Cycle Q Clear(g_c), s	12.1	32.9	9.9	1.3	14.4	3.1	8.1	0.0	7.2	2.3	2.9	0.0
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.31	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	443	1309	579	163	905	368	464	0	387	341	309	
V/C Ratio(X)	0.79	1.01	0.41	0.23	0.70	0.18	0.44	0.00	0.42	0.16	0.22	
Avail Cap(c_a), veh/h	718	1309	579	825	1707	694	539	0	1140	504	1214	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.8	27.9	20.6	24.9	29.8	25.6	25.1	0.0	29.4	27.4	31.8	0.0
Incr Delay (d2), s/veh	1.2	27.0	0.3	0.7	0.7	0.2	0.2	0.0	0.9	0.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	17.3	3.4	0.5	5.7	1.0	3.2	0.0	2.9	0.9	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.1	54.8	21.0	25.5	30.5	25.8	25.3	0.0	30.2	27.5	32.2	0.0
LnGrp LOS	C	F	C	C	C	C	C		C	C	C	
Approach Vol, veh/h		1908			733			366			123	
Approach Delay, s/veh		44.4			29.9			27.5			30.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	26.1	11.3	40.0	16.2	21.1	21.4	29.9
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.3	9.2	3.3	34.9	10.1	4.9	14.1	16.4
Green Ext Time (p_c), s	0.0	1.1	0.1	0.0	0.1	0.4	0.2	3.4

Intersection Summary

HCM 7th Control Delay, s/veh

38.5

HCM 7th LOS

D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

A - 2035 AM Peak No Build
Horizon Year 2035Synchro 12 Report
2035.syn

Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	SBL	SBT
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↰	↱	↰	↰	↱
Traffic Volume (vph)	192	64	573	55	130
Future Volume (vph)	192	64	573	55	130
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	23.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	3.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)	24.5	24.5	29.5	41.5	39.5
Actuated g/C Ratio	0.33	0.33	0.39	0.55	0.53
v/c Ratio	0.25	0.09	0.95	0.18	0.10
Control Delay (s/veh)	20.0	6.6	45.2	9.7	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	6.6	45.2	9.7	9.3
LOS	C	A	D	A	A
Approach Delay (s/veh)	16.7		45.2		9.4
Approach LOS	B		D		A

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay (s/veh): 35.2

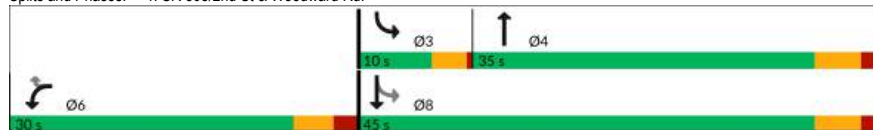
Intersection LOS: D

Intersection Capacity Utilization 48.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



B - 2035 AM Peak Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	WBL	WBR	NBT	NBR	SBL	SBT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↰		↰	↱
Traffic Volume (veh/h)	192	64	573	382	55	130
Future Volume (veh/h)	192	64	573	382	55	130
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	136	45	404	270	39	92
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	411	275	232	946
Arrive On Green	0.33	0.33	0.39	0.39	0.09	0.53
Sat Flow, veh/h	1711	1459	1045	698	1485	1796
Grp Volume(v), veh/h	136	45	0	674	39	92
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1744	1485	1796
Q Serve(g_s), s	4.4	1.6	0.0	28.7	1.0	1.9
Cycle Q Clear(g_c), s	4.4	1.6	0.0	28.7	1.0	1.9
Prop In Lane	1.00	1.00		0.40	1.00	
Lane Grp Cap(c), veh/h	559	477	0	686	232	946
V/C Ratio(X)	0.24	0.09	0.00	0.98	0.17	0.10
Avail Cap(c_a), veh/h	559	477	0	686	232	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	17.5	0.0	22.5	15.9	8.9
Incr Delay (d2), s/veh	1.0	0.4	0.0	30.4	1.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.6	0.0	15.8	0.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.5	17.9	0.0	52.9	17.5	9.1
LnGrp LOS	B	B		D	B	A
Approach Vol, veh/h	181		674			131
Approach Delay, s/veh	19.1		52.9			11.6
Approach LOS	B		D			B

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	10.0	35.0	30.0	45.0
Change Period (Y+Rc), s	3.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	6.5	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s	3.0	30.7	6.4	3.9
Green Ext Time (p_c), s	0.0	0.0	0.5	0.4

Intersection Summary

HCM 7th Control Delay, s/veh

41.2

HCM 7th LOS

D

B - 2035 AM Peak Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th TWSC
2: SR 303/2nd St & Driveway "B"/Hill St

11/23/2024

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	7	0	1	1	27	911	0	0	246	11
Future Vol, veh/h	4	0	7	0	1	1	27	911	0	0	246	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	100	0	100	100	100	100	100	2	100	0	6	100
Mvmt Flow	3	0	5	0	1	1	19	651	0	0	176	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	869	869	180	865	873	651	184	0	0	651	0	0
Stage 1	180	180	-	689	689	-	-	-	-	-	-	-
Stage 2	690	689	-	176	184	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.5	7.2	8.1	7.5	7.2	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4	4.2	4.4	4.9	4.2	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	188	292	663	189	204	333	968	-	-	945	-	-
Stage 1	639	755	-	311	326	-	-	-	-	-	-	-
Stage 2	311	449	-	643	596	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	181	283	663	182	197	333	968	-	-	945	-	-
Mov Cap-2 Maneuver	181	283	-	182	197	-	-	-	-	-	-	-
Stage 1	639	755	-	301	316	-	-	-	-	-	-	-
Stage 2	300	435	-	638	596	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v15.94		19.61	0.25	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	52	-	-	337 248	945	-	-
HCM Lane V/C Ratio	0.02	-	-	0.023 0.006	-	-	-
HCM Control Delay (s/veh)	8.8	0	-	15.9 19.6	0	-	-
HCM Lane LOS	A	A	-	C C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1 0	0	-	-

Timings

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	←	→	↙	↘	←	→	↙	↘	←	→	↙	↘
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	
Lane Configurations	↙	↘	↘	↙	↘	↘	↙	↘	↙	↘	↘	
Traffic Volume (vph)	444	1584	283	44	757	81	244	140	66	85	143	
Future Volume (vph)	444	1584	283	44	757	81	244	140	66	85	143	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	
Protected Phases	7	4		3	8		5	2	1	6		
Permitted Phases	4		4	8		8	2		6		6	
Detector Phase	7	4	4	3	8	8	5	2	1	6	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0	
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1	
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0	
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%	
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None	
Act Effct Green (s)	57.9	49.7	49.7	31.7	24.5	24.5	34.8	24.4	23.6	15.9	15.9	
Actuated g/C Ratio	0.54	0.47	0.47	0.30	0.23	0.23	0.33	0.23	0.22	0.15	0.15	
v/c Ratio	0.68	0.81	0.29	0.21	0.78	0.17	0.49	0.42	0.19	0.26	0.32	
Control Delay (s/veh)	24.6	30.4	8.6	18.4	46.3	2.9	33.1	39.3	29.2	45.5	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	
Total Delay (s/veh)	24.6	30.4	8.6	18.4	46.3	2.9	33.1	39.3	29.2	45.5	5.2	
LOS	C	C	A	B	D	A	C	D	C	D	A	
Approach Delay (s/veh)		26.6			40.9			35.9		22.3		
Approach LOS		C			D			D		C		

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 106.4

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 30.5

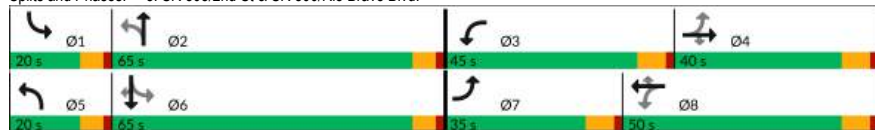
Intersection LOS: C

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

B - 2035 AM Peak Build
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HCM 7th Signalized Intersection Summary

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	←	→	↙	↘	←	→	↙	↘	←	→	↙	↘
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↘	↘	↙	↘	↘	↙	↘	↙	↘	↘	
Traffic Volume (veh/h)	444	1584	283	44	757	81	244	140	61	66	85	143
Future Volume (veh/h)	444	1584	283	44	757	81	244	140	61	66	85	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	370	1320	236	37	631	68	203	117	51	55	71	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	451	1309	579	163	874	356	462	269	117	338	309	
Arrive On Green	0.17	0.37	0.37	0.05	0.25	0.25	0.11	0.23	0.23	0.06	0.17	0.00
Sat Flow, veh/h	1795	3526	1560	1739	3526	1434	1767	1196	521	1654	1826	1585
Grp Volume(v), veh/h	370	1320	236	37	631	68	203	0	168	55	71	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1560	1739	1763	1434	1767	0	1717	1654	1826	1585
Q Serve(g_s), s	12.9	32.9	9.9	1.4	14.5	3.3	8.1	0.0	7.4	2.4	3.0	0.0
Cycle Q Clear(g_c), s	12.9	32.9	9.9	1.4	14.5	3.3	8.1	0.0	7.4	2.4	3.0	0.0
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.30	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	451	1309	579	163	874	356	462	0	387	338	309	
V/C Ratio(X)	0.82	1.01	0.41	0.23	0.72	0.19	0.44	0.00	0.43	0.16	0.23	
Avail Cap(c_a), veh/h	710	1309	579	825	1707	694	537	0	1141	500	1213	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.0	27.9	20.6	25.2	30.5	26.3	25.1	0.0	29.5	27.4	31.8	0.0
Incr Delay (d2), s/veh	2.1	27.0	0.3	0.7	0.9	0.2	0.2	0.0	0.9	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	17.3	3.4	0.6	5.8	1.1	3.2	0.0	3.0	0.9	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	54.9	21.0	25.9	31.4	26.5	25.3	0.0	30.4	27.5	32.3	0.0
LnGrp LOS	C	F	C	C	C	C	C		C	C	C	
Approach Vol, veh/h		1926			736			371			126	
Approach Delay, s/veh		44.4			30.7			27.6			30.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	26.1	11.3	40.0	16.3	21.1	22.2	29.1
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.4	9.4	3.4	34.9	10.1	5.0	14.9	16.5
Green Ext Time (p_c), s	0.0	1.2	0.1	0.0	0.1	0.4	0.3	3.4

Intersection Summary

HCM 7th Control Delay, s/veh

38.7

HCM 7th LOS

D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

B - 2035 AM Peak Build
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HCM 7th TWSC
4: Driveway "A" & SR 303/2nd St

11/23/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	4	4	912	254	62
Future Vol, veh/h	22	4	4	912	254	62
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	100	100	100	4	7	100
Mvmt Flow	14	3	3	588	164	40

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	777	184	204	0	-	0
Stage 1	184	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	7.4	7.2	5.1	-	-	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	4.2	3.1	-	-	-
Pot Cap-1 Maneuver	256	659	949	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	255	659	949	-	-	-
Mov Cap-2 Maneuver	255	-	-	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	401	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v18.57		0.04	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	8	-	282	-	-
HCM Lane V/C Ratio	0.003	-	0.059	-	-
HCM Control Delay (s/veh)	8.8	0	18.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

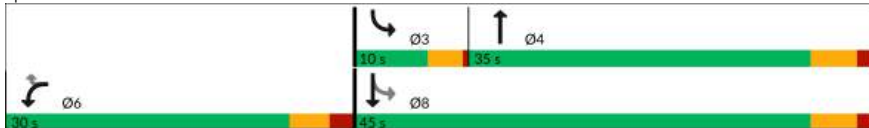
Timings

1: Woodward Rd. & SR 303/2nd St

11/23/2024

					
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	388	175	141	141	303
Future Volume (vph)	388	175	141	141	303
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	23.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	3.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	Max	Max
Act Effect Green (s)	24.5	24.5	29.5	41.5	39.5
Actuated g/C Ratio	0.33	0.33	0.39	0.55	0.53
v/c Ratio	0.50	0.23	0.24	0.18	0.23
Control Delay (s/veh)	24.1	5.1	11.2	9.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.1	5.1	11.2	9.0	10.4
LOS	C	A	B	A	B
Approach Delay (s/veh)	18.2		11.2		9.9
Approach LOS	B		B		A
Intersection Summary					
Cycle Length: 75					
Actuated Cycle Length: 75					
Natural Cycle: 70					
Control Type: Actuated-Uncoordinated					
Maximum v/c Ratio: 0.50					
Intersection Signal Delay (s/veh): 13.9			Intersection LOS: B		
Intersection Capacity Utilization 52.6%			ICU Level of Service A		
Analysis Period (min) 15					

Splits and Phases: 1: Woodward Rd. & SR 303/2nd St



C - 2035 PM Peak No Build
Horizon Year 2035

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HCM 7th Signalized Intersection Summary

1: Woodward Rd. & SR 303/2nd St

11/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	388	175	141	98	141	303
Future Volume (veh/h)	388	175	141	98	141	303
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	274	124	100	69	100	214
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	401	277	556	946
Arrive On Green	0.33	0.33	0.39	0.39	0.09	0.53
Sat Flow, veh/h	1711	1459	1020	704	1485	1796
Grp Volume(v), veh/h	274	124	0	169	100	214
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1724	1485	1796
Q Serve(g_s), s	9.6	4.7	0.0	4.9	2.7	4.8
Cycle Q Clear(g_c), s	9.6	4.7	0.0	4.9	2.7	4.8
Prop In Lane	1.00	1.00		0.41	1.00	
Lane Grp Cap(c), veh/h	559	477	0	678	556	946
V/C Ratio(X)	0.49	0.26	0.00	0.25	0.18	0.23
Avail Cap(c_a), veh/h	559	477	0	678	556	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	18.6	0.0	15.3	10.1	9.5
Incr Delay (d2), s/veh	3.1	1.3	0.0	0.9	0.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	1.7	0.0	1.9	0.9	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.3	19.9	0.0	16.2	10.9	10.1
LnGrp LOS	C	B		B	B	B
Approach Vol, veh/h	398		169			314
Approach Delay, s/veh	22.2		16.2			10.3
Approach LOS	C		B			B
Timer - Assigned Phs						
Phs Duration (G+Y+Rc), s			3	4	6	8
Change Period (Y+Rc), s			10.0	35.0	30.0	45.0
Max Green Setting (Gmax), s			3.5	5.5	5.5	5.5
Max Q Clear Time (g_c+I1), s			6.5	29.5	24.5	39.5
Green Ext Time (p_c), s			4.7	6.9	11.6	6.8
			0.0	0.5	1.1	0.7
Intersection Summary						
HCM 7th Control Delay, s/veh			16.8			
HCM 7th LOS			B			

C - 2035 PM Peak No Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th TWSC
2: SR 303/2nd St. & Hill St.

11/23/2024

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	247	4	0	725
Future Vol, veh/h	0	4	247	4	0	725
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	6	0	2	100	100	0
Mvmt Flow	0	3	159	3	0	468

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	628	161	0
Stage 1	161	-	-
Stage 2	468	-	-
Critical Hdwy	6.46	6.2	-
Critical Hdwy Stg 1	5.46	-	-
Critical Hdwy Stg 2	5.46	-	-
Follow-up Hdwy	3.554	3.3	-
Pot Cap-1 Maneuver	440	890	-
Stage 1	859	-	-
Stage 2	622	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	440	890	-
Mov Cap-2 Maneuver	440	-	-
Stage 1	859	-	-
Stage 2	622	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.06	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	989
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s/veh)	-	-	9.1	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Timings

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↰	↱	↱
Traffic Volume (vph)	122	883	235	30	2019	30	196	48	57	113	379
Future Volume (vph)	122	883	235	30	2019	30	196	48	57	113	379
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	55.4	50.1	50.1	50.0	42.9	42.9	32.5	22.6	22.5	15.2	15.2
Actuated g/C Ratio	0.53	0.48	0.48	0.48	0.41	0.41	0.31	0.22	0.21	0.15	0.15
v/c Ratio	0.49	0.44	0.24	0.07	1.17	0.04	0.43	0.24	0.17	0.36	0.63
Control Delay (s/veh)	22.7	20.7	4.8	11.9	115.3	0.1	30.9	23.3	27.6	45.6	11.1
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 (s/veh)	22.7	20.7	4.8	11.9	115.3	0.1	30.9	23.3	27.6	45.6	11.1
LOS	C	C	A	B	F	A	C	C	C	D	B
Approach Delay (s/veh)		17.9			112.2			28.2		19.9	
Approach LOS		B			F			C		B	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 104.8

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay (s/veh): 65.9

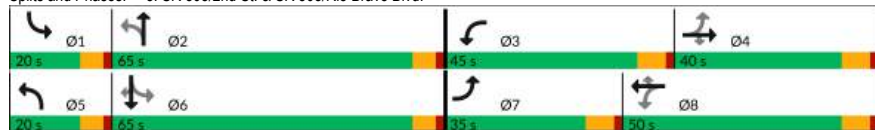
Intersection LOS: E

Intersection Capacity Utilization 88.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

C - 2035 PM Peak No Build
Horizon Year 2035Synchro 12 Report
2035.syn

HCM 7th Signalized Intersection Summary

3: SR 303/2nd St. & SR 505/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	122	883	235	30	2019	30	196	48	61	57	113	379
Future Volume (veh/h)	122	883	235	30	2019	30	196	48	61	57	113	379
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00			1.00	1.00	0.98	1.00			1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	102	736	196	25	1682	25	163	40	51	48	94	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	189	1613	712	317	1505	599	374	140	178	333	272	
Arrive On Green	0.07	0.46	0.46	0.03	0.43	0.43	0.10	0.19	0.19	0.05	0.15	0.00
Sat Flow, veh/h	1795	3526	1557	1739	3526	1403	1767	722	920	1654	1826	1585
Grp Volume(v), veh/h	102	736	196	25	1682	25	163	0	91	48	94	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1557	1739	1763	1403	1767	0	1642	1654	1826	1585
Q Serve(g_s), s	3.1	14.4	7.9	0.8	42.9	1.0	7.7	0.0	4.8	2.4	4.6	0.0
Cycle Q Clear(g_c), s	3.1	14.4	7.9	0.8	42.9	1.0	7.7	0.0	4.8	2.4	4.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	189	1613	712	317	1505	599	374	0	318	333	272	
V/C Ratio(X)	0.54	0.46	0.28	0.08	1.12	0.04	0.44	0.00	0.29	0.14	0.35	
Avail Cap(c_a), veh/h	570	1613	712	911	1505	599	449	0	962	477	1070	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	18.7	16.9	15.4	28.8	16.8	31.4	0.0	34.6	33.1	38.4	0.0
Incr Delay (d2), s/veh	0.9	0.2	0.2	0.1	62.6	0.0	0.3	0.0	0.6	0.1	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.4	2.6	0.3	29.4	0.3	3.2	0.0	1.9	0.9	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	18.9	17.1	15.5	91.5	16.8	31.7	0.0	35.2	33.2	39.3	0.0
LnGrp LOS	C	B	B	B	F	B	C		D	C	D	
Approach Vol, veh/h		1034			1732			254			142	
Approach Delay, s/veh		19.0			89.3			32.9			37.2	
Approach LOS		B			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	25.6	10.6	53.1	15.7	21.1	13.7	50.0
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.4	6.8	2.8	16.4	9.7	6.6	5.1	44.9
Green Ext Time (p_c), s	0.0	0.6	0.0	4.0	0.1	0.6	0.1	0.0

Intersection Summary

HCM 7th Control Delay, s/veh

59.4

HCM 7th LOS

E

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

C - 2035 PM Peak No Build
Horizon Year 2035Synchro 12 Report
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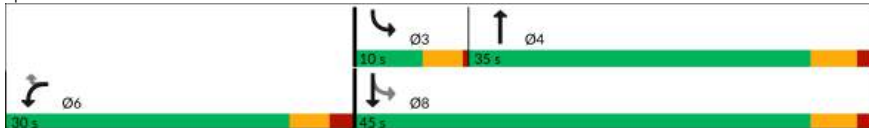
Timings

1: SR 303/2nd St & Woodward Rd.

11/23/2024

	←	↖	↑	↗	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↖	↗	↑	↖	↗
Traffic Volume (vph)	422	175	148	141	306
Future Volume (vph)	422	175	148	141	306
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	6		4	3	8
Permitted Phases	6	6		8	
Detector Phase	6	6	4	3	8
Switch Phase					
Minimum Initial (s)	8.0	8.0	12.0	3.0	12.0
Minimum Split (s)	27.5	27.5	32.5	9.5	17.5
Total Split (s)	30.0	30.0	35.0	10.0	45.0
Total Split (%)	40.0%	40.0%	46.7%	13.3%	60.0%
Yellow Time (s)	3.5	3.5	4.0	3.5	4.0
All-Red Time (s)	2.0	2.0	1.5	0.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	Max	Max	Max	None	Max
Act Effct Green (s)	24.5	24.5	31.5	41.0	39.5
Actuated g/C Ratio	0.33	0.33	0.42	0.55	0.53
v/c Ratio	0.54	0.23	0.30	0.20	0.23
Control Delay (s/veh)	25.1	5.1	10.3	9.4	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.1	5.1	10.3	9.4	10.4
LOS	C	A	B	A	B
Approach Delay (s/veh)	19.2		10.3		10.1
Approach LOS	B		B		B
Intersection Summary					
Cycle Length: 75					
Actuated Cycle Length: 75					
Natural Cycle: 70					
Control Type: Semi Act-Uncoord					
Maximum v/c Ratio: 0.54					
Intersection Signal Delay (s/veh): 14.1					
Intersection LOS: B					
Intersection Capacity Utilization 53.7%					
ICU Level of Service A					
Analysis Period (min) 15					

Splits and Phases: 1: SR 303/2nd St & Woodward Rd.



D - 2035 PM Peak Build
Horizon Year 2035

Synchro 12 Report
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HCM 7th Signalized Intersection Summary

1: SR 303/2nd St & Woodward Rd.

11/23/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	422	175	148	171	141	306
Future Volume (veh/h)	422	175	148	171	141	306
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1796	1722	1870	1841	1559	1796
Adj Flow Rate, veh/h	298	124	104	121	100	216
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	7	12	2	4	23	7
Cap, veh/h	559	477	325	378	494	946
Arrive On Green	0.33	0.33	0.42	0.42	0.06	0.53
Sat Flow, veh/h	1711	1459	778	905	1485	1796
Grp Volume(v), veh/h	298	124	0	225	100	216
Grp Sat Flow(s),veh/h/ln	1711	1459	0	1682	1485	1796
Q Serve(g_s), s	10.7	4.7	0.0	6.7	2.7	4.9
Cycle Q Clear(g_c), s	10.7	4.7	0.0	6.7	2.7	4.9
Prop In Lane	1.00	1.00		0.54	1.00	
Lane Grp Cap(c), veh/h	559	477	0	703	494	946
V/C Ratio(X)	0.53	0.26	0.00	0.32	0.20	0.23
Avail Cap(c_a), veh/h	559	477	0	703	531	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	18.6	0.0	14.7	10.6	9.6
Incr Delay (d2), s/veh	3.6	1.3	0.0	1.2	0.2	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.7	0.0	2.5	0.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.2	19.9	0.0	15.9	10.8	10.1
LnGrp LOS	C	B		B	B	B
Approach Vol, veh/h	422		225			316
Approach Delay, s/veh	22.9		15.9			10.3
Approach LOS	C		B			B
Timer - Assigned Phs			3	4	6	8
Phs Duration (G+Y+Rc), s			8.1	36.9	30.0	45.0
Change Period (Y+Rc), s			4.0	5.5	5.5	5.5
Max Green Setting (Gmax), s			6.0	29.5	24.5	39.5
Max Q Clear Time (g_c+I1), s			4.7	8.7	12.7	6.9
Green Ext Time (p_c), s			0.0	1.1	1.1	1.1
Intersection Summary						
HCM 7th Control Delay, s/veh			17.1			
HCM 7th LOS			B			

D - 2035 PM Peak Build
Horizon Year 2035

Synchro 12 Report
2035.syn

HCM 7th TWSC
2: SR 303/2nd St & Driveway "B"/Hill St

11/23/2024

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	13	1	22	0	0	4	14	249	4	1	735	6
Future Vol, veh/h	13	1	22	0	0	4	14	249	4	1	735	6
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	100	0	100	100	100	100	100	2	100	0	6	100
Mvmt Flow	9	1	16	0	0	3	10	178	3	1	525	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	726	729	527	726	730	179	529	0	0	181	0	0
Stage 1	529	529	-	199	199	-	-	-	-	-	-	-
Stage 2	198	201	-	527	531	-	-	-	-	-	-	-
Critical Hdwy	8.1	6.5	7.2	8.1	7.5	7.2	5.1	-	-	4.1	-	-
Critical Hdwy Stg 1	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.1	5.5	-	7.1	6.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.4	4	4.2	4.4	4.9	4.2	3.1	-	-	2.2	-	-
Pot Cap-1 Maneuver	241	352	400	241	253	664	683	-	-	1407	-	-
Stage 1	392	531	-	622	585	-	-	-	-	-	-	-
Stage 2	623	739	-	393	396	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	236	346	400	227	249	664	683	-	-	1407	-	-
Mov Cap-2 Maneuver	236	346	-	227	249	-	-	-	-	-	-	-
Stage 1	391	530	-	612	576	-	-	-	-	-	-	-
Stage 2	611	727	-	376	395	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	17.3		10.45		0.54		0.01	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	94	-	-	318	664	2	-
HCM Lane V/C Ratio	0.015	-	-	0.081	0.004	0.001	-
HCM Control Delay (s/veh)	10.3	0	-	17.3	10.4	7.6	0
HCM Lane LOS	B	A	-	C	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-

Timings

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↩	↩↩	↩	↩	↩↩	↩	↩	↩	↩	↩	↩
Traffic Volume (vph)	133	883	235	30	2019	32	196	51	60	119	403
Future Volume (vph)	133	883	235	30	2019	32	196	51	60	119	403
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		6	
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	10.0	10.0	7.0	10.0	10.0	7.0	15.0	7.0	15.0	15.0
Minimum Split (s)	14.1	46.1	46.1	14.1	17.1	17.1	13.1	29.1	13.1	21.1	21.1
Total Split (s)	35.0	40.0	40.0	45.0	50.0	50.0	20.0	65.0	20.0	65.0	65.0
Total Split (%)	20.6%	23.5%	23.5%	26.5%	29.4%	29.4%	11.8%	38.2%	11.8%	38.2%	38.2%
Yellow Time (s)	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)	7.1	7.1	7.1	7.1	7.1	7.1	6.1	6.1	6.1	6.1	6.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	Min	None	None	None
Act Effct Green (s)	56.1	50.4	50.4	50.0	42.9	42.9	32.6	22.7	22.7	15.3	15.3
Actuated g/C Ratio	0.53	0.48	0.48	0.47	0.41	0.41	0.31	0.22	0.22	0.15	0.15
v/c Ratio	0.52	0.44	0.24	0.07	1.18	0.04	0.43	0.25	0.17	0.38	0.65
Control Delay (s/veh)	24.5	20.7	4.8	12.0	117.9	0.1	31.1	24.9	27.8	46.3	11.2
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 (s/veh)	24.5	20.7	4.8	12.0	117.9	0.1	31.1	24.9	27.8	46.3	11.2
LOS	C	C	A	B	F	A	C	C	C	D	B
Approach Delay (s/veh)		18.1			114.6			28.8		20.1	
Approach LOS		B			F			C		C	

Intersection Summary

Cycle Length: 170

Actuated Cycle Length: 105.3

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay (s/veh): 66.7

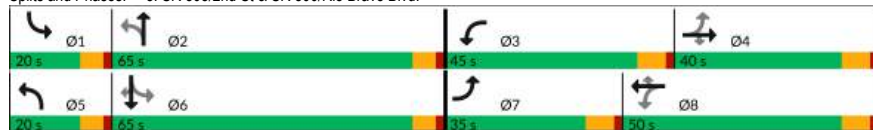
Intersection LOS: E

Intersection Capacity Utilization 89.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

D - 2035 PM Peak Build
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HCM 7th Signalized Intersection Summary

3: SR 303/2nd St & SR 500/Rio Bravo Blvd.

11/23/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩↩	↩	↩	↩↩	↩	↩	↩	↩	↩	↩	↩
Traffic Volume (veh/h)	133	883	235	30	2019	32	196	51	61	60	119	403
Future Volume (veh/h)	133	883	235	30	2019	32	196	51	61	60	119	403
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00			1.00	1.00	0.98	1.00			1.00	1.00	1.00
Parking Bus, Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1856	1841	1826	1856	1693	1856	1811	1826	1737	1826	1870
Adj Flow Rate, veh/h	111	736	196	25	1682	27	163	42	51	50	99	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	3	4	5	3	14	3	6	5	11	5	2
Cap, veh/h	191	1614	713	317	1503	598	370	143	174	332	272	
Arrive On Green	0.07	0.46	0.46	0.03	0.43	0.43	0.10	0.19	0.19	0.05	0.15	0.00
Sat Flow, veh/h	1795	3526	1557	1739	3526	1403	1767	743	902	1654	1826	1585
Grp Volume(v), veh/h	111	736	196	25	1682	27	163	0	93	50	99	0
Grp Sat Flow(s),veh/h/ln	1795	1763	1557	1739	1763	1403	1767	0	1645	1654	1826	1585
Q Serve(g_s), s	3.4	14.4	7.9	0.8	42.9	1.1	7.7	0.0	4.9	2.5	4.9	0.0
Cycle Q Clear(g_c), s	3.4	14.4	7.9	0.8	42.9	1.1	7.7	0.0	4.9	2.5	4.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	191	1614	713	317	1503	598	370	0	317	332	272	
V/C Ratio(X)	0.58	0.46	0.28	0.08	1.12	0.05	0.44	0.00	0.29	0.15	0.36	
Avail Cap(c_a), veh/h	569	1614	713	911	1503	598	444	0	963	474	1069	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.9	18.7	16.9	15.5	28.9	16.9	31.5	0.0	34.8	33.1	38.5	0.0
Incr Delay (d2), s/veh	1.0	0.1	0.2	0.1	63.2	0.0	0.3	0.0	0.6	0.1	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.4	2.6	0.3	29.5	0.3	3.2	0.0	1.9	1.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	18.8	17.1	15.6	92.0	16.9	31.8	0.0	35.4	33.2	39.5	0.0
LnGrp LOS	C	B	B	B	F	B	C		D	C	D	
Approach Vol, veh/h		1043			1734			256			149	
Approach Delay, s/veh		19.1			89.8			33.1			37.4	
Approach LOS		B			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	25.5	10.6	53.2	15.8	21.1	13.8	50.0
Change Period (Y+Rc), s	6.1	6.1	7.1	7.1	6.1	6.1	7.1	7.1
Max Green Setting (Gmax), s	13.9	58.9	37.9	32.9	13.9	58.9	27.9	42.9
Max Q Clear Time (g_c+I1), s	4.5	6.9	2.8	16.4	9.7	6.9	5.4	44.9
Green Ext Time (p_c), s	0.0	0.6	0.0	4.0	0.1	0.6	0.1	0.0

Intersection Summary

HCM 7th Control Delay, s/veh

59.6

HCM 7th LOS

E

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

D - 2035 PM Peak Build
Horizon Year 2035Synchro 12 Report
2035.syn

HCM 7th TWSC
4: Driveway "A" & SR 303/2nd St

11/23/2024

Intersection

Int Delay, s/veh 1.3

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations 

Traffic Vol, veh/h 67 11 2 260 731 31

Future Vol, veh/h 67 11 2 260 731 31

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 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 93 93 93 93 93 93

Heavy Vehicles, % 100 100 100 4 7 100

Mvmt Flow 43 7 1 168 472 20

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 652 482 492 0 - 0

Stage 1 482 - - - - -

Stage 2 170 - - - - -

Critical Hdwy 7.4 7.2 5.1 - - -

Critical Hdwy Stg 1 6.4 - - - - -

Critical Hdwy Stg 2 6.4 - - - - -

Follow-up Hdwy 4.4 4.2 3.1 - - -

Pot Cap-1 Maneuver 311 428 710 - - -

Stage 1 460 - - - - -

Stage 2 670 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 310 428 710 - - -

Mov Cap-2 Maneuver 310 - - - - -

Stage 1 459 - - - - -

Stage 2 670 - - - - -

Approach EB NB SB

HCM Control Delay, s/v18.21 0.08 0

HCM LOS C

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 14 - 323 - -

HCM Lane V/C Ratio 0.002 - 0.156 - -

HCM Control Delay (s/veh) 10.1 0 18.2 - -

HCM Lane LOS B A C - -

HCM 95th %tile Q(veh) 0 - 0.5 - -