Appendix C

Endeavour Spirited Living
Traffic Impact Study

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Prepared for submittal to:

City of Tucson, AZ

Pima County

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2934 W. Salvia Drive
Tucson, AZ 85745

December 17, 2020
Updated June 4, 2021
Updated November 16, 2021
Updated June 6, 2022

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Project No. 2020.03

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1. Introduction and Summary of Key Findings

Project Overview

This report analyzes traffic impacts from a proposed 34-acre project located west of Craycroft and south of River Road (the "Project"). Parcel A is 20 acres of the Project to be developed as an innovative, highly-amenitized active adult independent living community called Endeavor Spirited Living. The Project location is shown in Exhibit 1. Parcel A will include 177 residential units with innovative supporting services and amenities. The site plan for this main project is shown in Exhibit 2 and in the report appendix. Supporting services as shown on the site plan include food service options, recreation areas (indoor and outdoor), an administration area and staff areas. The proposed development is near the Pima County ("County") Rillito River Linear Park. Primary access to Parcel A is proposed from Craycroft Road and is shared with the County park access road and referred to herein as the "Main Access Road". An emergency-only secondary access is also discussed in this report.

Parcel B is located on the west side of Parcel A and proposes an additional seven (7) homes in a nine-lot single-family residential development. (There are currently 12 rental residences already located on the Parcel B.) Access to the lots will be via an existing north/south road along the eastern edge of Parcel B. This north/south road will intersect with River House Road which has an existing access to Camino Blanco to the north and ultimately River Road. There is an emergency-only access gate that separates Parcels A and B, so there will be no sharing of the roadways between the two projects.

A meeting was held with City of Tucson Department of Transportation and Mobility (COTDTM) staff in March 2020 to discuss Parcel A. The purpose of the meeting was to discuss potential improvements on the Main Access Road and at its intersection with Craycroft Road to enhance safe conditions within the Project study area. COTDTM staff requested that we explore a similar type of residential community to our project with comparable land uses and area context within the City of Tucson. Our research did not identify an existing senior living community that was comparable both in type and area; therefore "Congregate Care Facility" has been used for Parcel A in this analysis.

Purpose of Report

This analysis addresses impacts from the Project on the surrounding roadways and intersections. The Project area is within the County's jurisdiction, but the Main Access Road for Parcel A is within the City of Tucson ("City").

The report has thus been prepared in accordance with the requirements within both the *Transportation Access Management Guidelines for the City of Tucson* for a Category I traffic impact analysis (TIA) and Pima County's *Subdivision and Development Street Standards*. The level of TIA under both jurisdictions' requirements is done for a single-phase development with fewer than 500 peak hour trips. The study analyzes the impacts in the opening year, 2023 and the study area includes the site access driveways and all adjacent signalized and/or major unsignalized street intersections. The roadways and intersections analyzed in this report include the following:

Roadways
Craycroft Road
River Road

Intersections
Craycroft Road/River Road (signalized)
Craycroft Road/Gregory School (signalized)
River Road/Camino Blanco (unsignalized)
Craycroft Road/Main Access Road (unsignalized)

The purpose of this report, in addition to analyzing the study area roadway system and the impacts of the Project, is to make careful recommendations for traffic and roadway improvements. Because the Project will serve an elderly population, the recommendations in this report are provided to optimize the safety and ease of access for the Parcel A residents and staff and the Parcel B residents as well as for those drivers that currently use the Main Access Road and Camino Blanco.

Exhibit 1 Project Location

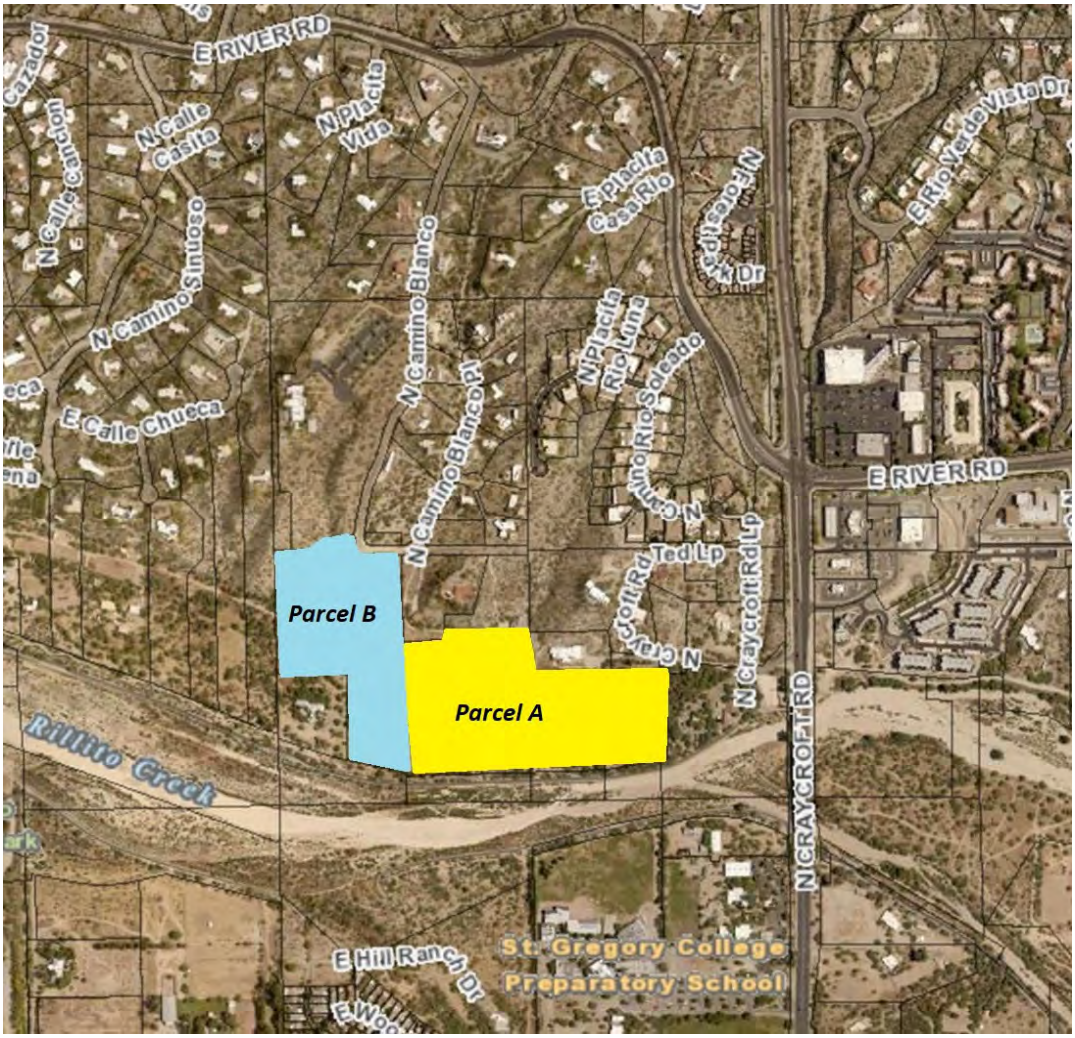


Exhibit 2 Conceptual Site Plan – Parcels A & B

Methodology

This analysis uses recorded weekday AM and PM peak hour volumes from 2018 and 2020. We have applied a 2% growth factor to estimate year 2022[1] and 2023 conditions. We analyzed both "no Project" and "with Project" scenarios. For the "no Project" scenarios, we increased the recorded traffic volumes by 2% per year and analyzed conditions for the year 2023.

In order to estimate the trips for Parcel A, we reviewed the land use types in the ITE Trip Generation Manual to determine the closest land use to this project. The description of the land use "Congregate Care Facility" (ITE Land Use Code 253) was determined by the Project team to be the best representation of the type of facility this Project will be. For Parcel B, we applied the trip rates for the land use "Single Family Detached Housing" (ITE Land Use Code 210). The average trip generation rates for the daily, AM peak hour and PM peak hour time frames were applied to estimate the Project site trips. Based on comments from Pima County DOT, we have also provided the estimated site trips based

[1] The preparation of this project began in 2020 and existing older traffic volumes were "normalized" to estimate 2020 traffic volumes. Because of the impact on traffic volumes and patterns because of the COVID-19 pandemic, we believe that traffic volumes did not increase in the project area between 2020 and 2021. Therefore the 2% increase per year to estimate the original 2020 volumes assumes that the 2021 volumes would be the same as the 2020 volumes. The original buildout year was 2022, but has been updated to 2023, and the estimated 2022 volumes have been applied to the new buildout 2023 volumes for the same reason. To be clear, the 2023 volumes were estimated by applying a 2% rate per year for two years from the 2021 volumes.

on the trip rates for the AM and PM Peak Generator time periods and updated the trip generation estimates to reflect changes in the trip generation rates in the recently updated 11th Edition of the Institute of Transportation Engineers' *Trip Generation Manual.*

The estimated site trips from the Project were then added to future background volumes to provide an estimate of total traffic for the buildout year. To be conservative, we applied the site trips associated with the AM and PM Peak Generator times during the AM and PM peak hours. We then analyzed the study area intersections using the Synchro software program to determine what impacts the Project would have and to recommend mitigation to bring the intersections to acceptable levels of service. The analyses were conducted for the Project year, with and without site trips, to clearly demonstrate the impacts from the Project.

Summary of Key Findings

- The proposed Parcel A project will generate about 391 trips during the average weekday, with about 14 during the morning commuter peak hour and 32 during the afternoon/evening commuter peak hour[2]. During the times when Parcel A will generate the highest morning and afternoon/evening hourly trips, the project will generate about 34 AM trips and 41 PM trips.
- The proposed Parcel B project will generate about 66 new trips during the average weekday, with about 5 during the morning peak hour and 7 during the afternoon/evening peak hour.

- Current conditions:
    - The intersection of River/Craycroft currently operates at LOS E or F during the morning and afternoon peak hours.
    - The eastbound left turn movement at the Main Access Road intersection on Craycroft Road operates at LOS F during the morning peak hours and delays will increase without and with the Project through 2023. Delays are common for driveways or minor streets that enter major streets during peak commute hours.
    - The intersection of Gregory School/Craycroft currently operates at LOS C during the peak hours and will continue to operate at LOS C through 2023 with the Project.
    - The northbound left turn movement at the River Road/Camino Blanco intersection operates at LOS E during the morning peak hour and will continue to operate at LOS E/F through 2023.
    - The Main Access Road on Craycroft Road exists and meets City of Tucson standards for driveway spacing and corner clearance.
- Adding the Project site trips to the future years' background traffic volumes will increase delays even more at the intersections, although the proportional increases are minor.

Parcel A recommended mitigation:

- Specific Project related intersection mitigation recommendations includes:
    - Re-striping the two-way left turn lane on the northbound Craycroft Road approach to the Craycroft Road/Main Access Road intersection to delineate a 150-foot left turn lane.

[2] Commuter peak hours are typically the highest volume one hour period in the 7-9 AM morning time frame and the highest volume one hour period in the 4-6 PM time frame.

  - Provide a warranted southbound right turn lane on Craycroft Road for turns into the Main Access Road. This improvement should only be considered if the sight distance for drivers entering Craycroft Road from the Main Access Road is not reduced to an unacceptable distance because of the improvement.
  - Reconstructing the Main Access Road to accommodate the lane configuration near Craycroft as shown in the site plan. Outbound traffic is restricted to right-out turning movements.
  - Providing stop control inside the reconstructed Main Access Road at the internal intersecting roads between the Rillito River Park trail head and the new Project/residences to the north.

- Drivers turning left out of the Main Access Road today experience delays representative of LOS E or LOS F conditions. Elderly (or any) drivers wishing to head north of Craycroft Road from the Main Access Road would likely opt to turn right from the Main Access Road onto Craycroft and seek a downstream opportunity to turn around and head north. It is recommended that outbound movements be restricted to right turns out only to eliminate the potential for eastbound to northbound left turn crashes. The following improvement at the downstream intersection of Craycroft Road/Gregory School is recommended.
- To assist exiting drivers from the Main Access Road onto Craycroft Road, a new raised median and delineated U-turn lane is recommended at the Craycroft Road/Gregory School access for the north leg of the intersection. The purpose of this is to provide a southbound U-turn lane at the intersection for use by drivers whose destinations are north of the Project access driveway and who would be restricted to the recommended right-out only movement at the Main Access Road intersection with Craycroft Road. The north leg of the Craycroft Road/Gregory School intersection would be reconstructed and restriped to provide a 150-foot left turn lane with a raised median separating northbound and southbound traffic. If this recommendation is approved, a left turn phase warrant analysis should be conducted for the southbound left turn lane.

Parcel B recommended mitigation:

- Parcel B trips will be only via Camino Blanco to River Road. Access from Parcel A to Camino Blanco will be only for emergencies through a gated access on the west side of the project. No additional mitigation is recommended on River House Road, Camino Blanco or River Road.

2. Proposed Development

Site Location

The Project is located near the southwest corner of the intersection of Craycroft Road and River Road in Pima County. It is in an area surrounded by commercial, institutional, and single-family residential uses.

Proposed Development and Access

Parcel A of the Project includes 177 senior living residential units sited on about 20 acres of a 28-acre site. Parcel B includes 9 single family residential lots with 7 new homes proposed. The site plan is shown in Exhibit 2.

The following describes important features of the Parcel A Project:

- Parcel A will be age-restricted to 55 years and older. However, the targeted demographic is over 70 years old.
- Parcel A will support an independent living lifestyle for the targeted demographic of active adult seniors in a small neighborhood setting.
- Parcel A differs from other senior residential developments in several ways. One difference is that it will not be a licensed continuing care or assisted living community and will not provide "on-property" health care or medical treatment to its residents. Rather it will emphasize the proactive health and wellness of its residents.
- Parcel A will include innovative amenities on-site including a central gathering space featuring dining options (formal dining, sports bar dining, coffee bar) with staff providing full dining service as well as take out services for residents and their guests. The on-site dining amenities generally differ from traditional senior living or assisted living developments that contract out the dining services.
- Parcel A will have three to four activity specialists (therapists and exercise trainers) as regular staff instead of contracting with outside providers.
- Staffing shifts will be "flexed" to be outside of peak commute hours.

There is one access location shown on the plan, on Craycroft Road, via an existing access (the "Main Access Road") to a County park and residential lots. A secondary emergency-only gated access via a new connection from the Project to River Road via Camino Blanco is discussed in this report.

The existing Main Access Road for Parcel A is stop-sign controlled at its intersection with Craycroft Road and has one entering lane and one exiting lane. It is just north of a bridge over the Rillito River. The Main Access Road is narrow and provides current access to the Pima County park driveway and trailhead and a few residential lots. The Main Access Road would need to be widened to provide two-way paved access to Parcel A. This will require the removal of existing vegetation along the existing road. Separate left and right turn lanes should be provided on the Main Access Road to minimize delays for drivers entering Craycroft Road. Stop sign control should be provided on the intersecting roadways that provide access to the residential lots to the north and the Pima County park driveway and trailhead.

Trips to and from Parcel B will be via the existing River House Road to Camino Blanco. Secondary emergency-only access for Parcel A will be provided at a gated access to the Parcel B north/south roadway. Further discussions with the jurisdictions will determine the level of improvements, if any, need to be made to this access.

Development Phasing and Timing

For the purposes of this study, both parcels are expected to open in 2023.

Study Area

The study area includes all major roadways, and major intersections in the vicinity of the Project. This includes Craycroft Road and the existing intersections of Craycroft Road/River Road, Craycroft/Gregory School Road, Craycroft/Main Access Road and River Road/Camino Blanco.

Area of Significant Traffic Impact

Significant impact from this Project will be on all roadways and intersections in the vicinity of the Project.

Influence Area

Parcel A will draw staff and visitors from the general Tucson area and possibly beyond. It will be a specific destination for employees served by this land use. Parcel B will serve residents living on Parcel B.

Site Accessibility

Parcel A will be served by Craycroft Road. Parcel B will be accessed to the north from River House Road to Camino Blanco and ultimately to River Road. On the City of Tucson Major Streets and Routes Map, Craycroft Road is classified as an arterial street between Golf Links Road to north of Fort Lowell Road where it changes classification to a Scenic Arterial Street. Craycroft Road is a four-lane roadway in the vicinity of the Project with a two-way left turn lane. The area is easily accessible via Tucson's and Pima County's arterial and collector roadway system.

River Road is classified as a Low Volume Arterial on Pima County's Major Streets Plan and a Scenic Major Route on Pima County's Scenic Routes Plan. It is a two-lane roadway that is also easily accessible via Tucson's and Pima County's arterial and collector roadway system.

Camino Blanco is a paved two-lane local roadway maintained by Pima County.

Future Roadway Improvements

There are no funded roadway improvement Projects near the Project currently.

3. Analysis of Existing Conditions

Physical Characteristics

This section provides a description of the roadways that provide access to the Project. Exhibit 3 provides a physical inventory of the study area roadways and Exhibit 4 contains ground photographs showing the roadways as they exist today.

Existing Roads Adjacent to the Project

Craycroft Road is a north/south arterial road with a five-lane cross-section near the Project. There are two travel lanes in each direction with a two-way left turn lane. There is a bike lane on each side of the roadway. Curbs and sidewalk and walls exist along both sides of the road. The posted speed limit is 45 mph north of Gregory School Road and 40 mph south of Gregory School Road.

River Road is an east/west arterial road approximately 870 feet north of the Project access on Craycroft Road. It is a two-lane roadway with a posted speed limit of 35 mph. There are sidewalks, curb and gutter and bike lanes on the south side of the road near Craycroft Road.

Main Access Road is a private road providing access to a trailhead of the Rillito River Park and to residential lots. The existing road is narrow and would need to be widened to a two-lane cross section.

Camino Blanco is a north/south local road providing access to residential and institutional uses south of River Road. It continues south for about ¾ mile to its intersection with the unpaved River House Road. There are no curbs, sidewalks, or bike routes.

Exhibit 3 Roadway Inventory

Roadway Segment	No. Lanes	Median	Bike Facility	Ped Facility	Speed Limit
Craycroft Road, North of River Road	4	Raised	Striped Lane	Sidewalks on both sides	45
Craycroft Road, South of River Road	4	TWLTL	Striped Lane	Sidewalks on both sides	45/40
River Road, East of Craycroft Road	2	TWLTL	Striped Lane	Sidewalk on the south side	35
River Road, West of Craycroft Road	2	TWLTL	Striped Lane	Sidewalk on south side	35
Main Access Road	Not defined, but narrow	No	No	No	N/A
Camino Blanco	2	No	No	No	25

Exhibit 4 Ground Photographs

Main Access Road – looking west

Looking east toward Craycroft Road

Exhibit 4 (cont.) Ground Photographs

Looking south on Craycroft Road at Main Access Road

Looking north on Craycroft Road from Main Access Road

Traffic Volumes and Level of Service

Level of service (LOS) is a qualitative description of how well a roadway operates under prevailing traffic conditions. A grading system of A through F, similar to academic grades, is utilized. LOS A is free-flowing traffic, whereas LOS F is forced flow and extreme congestion. Level of service D is the assumed performance standard in the Project area during the peak periods. Traffic volumes, roadway capacity and planning level LOS of the surrounding roadways are provided in Exhibit 5. Capacities are taken from the FDOT generalized LOS Tables[3]. Average daily volumes were recorded between 2018 and 2020[4] as shown in the table.

The table shows that most roadway segments are operating over the LOS D capacity of the segment. based on the FDOT LOS guidelines.

Exhibit 5 Current Segment Performance

Roadway Segment	Year	LOS D Capacity	Recorded ADT
Craycroft Road, North of River Road	2019	35,820	30,151
Craycroft Road, North of Project Driveway	2020	35,820	37,603
Craycroft Road, South of Project Driveway	2020	35,820	37,545
River Road, East of Craycroft Road	2019	13,320	16,017
River Road, West of Craycroft Road	2019	13,320	13,920
Camino Blanco, South of River Road	2018	n/a	220 (estimated)

Existing Intersections

The existing Project area signalized intersections at Craycroft Road/River Road and Craycroft Road/Gregory School Road experience heavy commuter traffic during the morning and afternoon peak hours.

River Road/Craycroft Road has dual left turn lanes on the westbound approach and one exclusive left turn lane on the other approaches. Each approach has an exclusive right turn lane. Each approach has a protected leading left turn phase.

[3] Florida Department of Transportation *Level of Service Tables,2012*

[4] The last traffic volumes were collected in February 2020, before COVID-19 shut down schools and impacted travel, therefore these traffic volumes are considered "typical".

Craycroft Road/Gregory School is a three-leg intersection. The Gregory School approach has a one exclusive left turn lane and an exclusive right turn lane. There is a leading left turn phase on the northbound approach.

The Craycroft/Main Access Road is a three-leg intersection and is stop-sign controlled on the minor approach.

River Road/Camino Blanco is a three-leg intersection and is stop-sign controlled on the minor (Camino Blanco) approach.

Intersection Performance

The most recently recorded intersection peak hour volumes used in this analysis are provided in the Appendix of this report. These volumes were collected in 2018 or 2020 and were provided by the Pima Association of Governments Transportation Data Management System webpage (Craycroft Road/Gregory School, data collected in 2018), or were collected by Field Data Services of Arizona (River Road/Craycroft Road and Craycroft Road/Project Access, data collected for both in 2020 and River Road/Camino Blanco, data collected in 2018). To estimate 2020 volumes for the 2018 volumes, an annual growth rate of 2%/year was applied to the recorded volumes. Because of COVID, we have applied the 2020 volumes as being more typical than volumes in 2022. These volumes are shown in Exhibit 6.

We analyzed the intersections using the software program Synchro 10. This program provides delay and level of service based on the Highway Capacity Manual methodology for intersections. As shown in Exhibit 7, the operational analysis of the intersections indicates that the signalized intersection of River Road/Craycroft Road currently has movements that operate at LOS E or F during the peak hours. The signalized intersection of Craycroft Road/Gregory School operates at LOS D or better during the peak hours. At the Craycroft Road/Main Access Road intersection, the eastbound approach to Craycroft experiences LOS E during the AM peak hour. The northbound left turn lane movement at the River Road/Camino Blanco intersection operates at LOS E during the AM peak hour.

Exhibit 6 Current Peak Hour Volumes

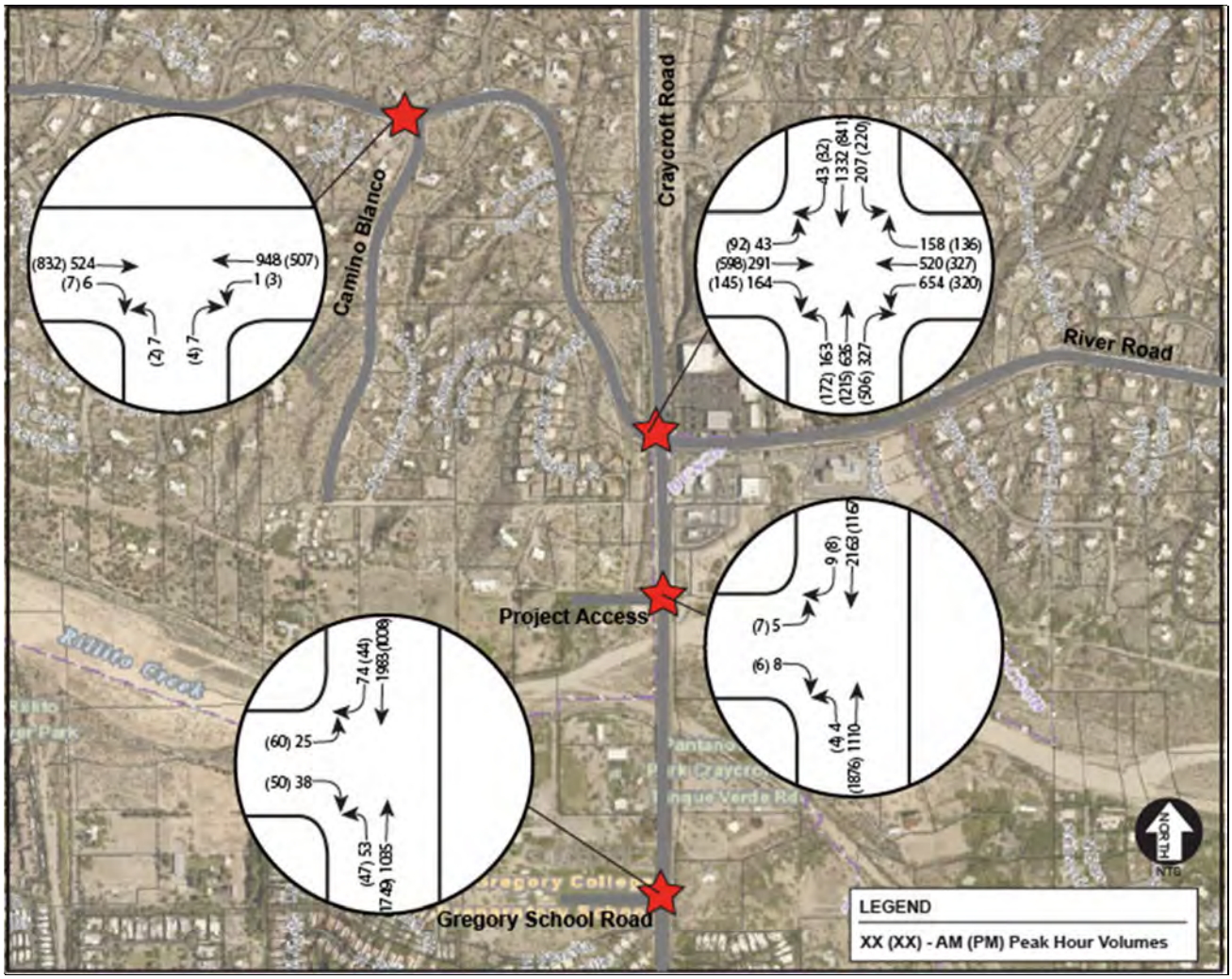


Exhibit 7 Current Intersections Performance

River/Craycroft

	Existing (2020)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	38.4	D	32.4	C
Through	43.8	D	48.2	D
Right	55.6	E	33.1	C
Approach	*47.2*	*D*	*43.8*	*D*
Westbound				
Left	50.9	D	51.8	D
Through	40.4	D	39.1	D
Right	37.9	D	40.4	D
Approach	*45.3*	*D*	*44.5*	*D*
Northbound				
Left	86.5	F	35.6	D
Through	38.8	D	100.8	F
Right	18.9	B	29.1	C
Approach	*39.9*	*D*	*75.7*	*E*
Southbound				
Left	46	D	83.2	F
Through	162.9	F	51.3	D
Right	22.4	C	22.9	C
Approach	*143.8*	*F*	*56.8*	*E*
Intersection	***81.5***	***F***	***60.2***	***E***

Craycroft/Gregory School

	Existing (2020)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	41.7	D	21.6	C
Right	48.1	D	21.6	C
Approach	*45.6*	*D*	*21.6*	*C*
Northbound				
Left	19.6	B	10.6	B
Through	2.2	A	20.9	C
Approach	*3*	*A*	*20.7*	*C*
Southbound				
Through	15.5	B	18.7	B
Right	15.9	B	18.5	B
Approach	*15.7*	*B*	*18.6*	*B*
Intersection	***12.2***	***B***	***20.0***	***C***

Craycroft/Project Driveway

	Existing (2020)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	125.7	F	33.8	D
Right	30.1	D	13.5	B
Northbound				
Left	26	D	11.4	B

River Road/Camino Blanco

	Existing (2020)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Westbound				
Left	8.6	A	9.9	A
Northbound				
Left	37.7	E	32.3	D
Right	12.1	B	16.4	C

Traffic Safety

Vehicle crash data at the nearest intersection, River Road/Craycroft Road, and the roadway segments on River Road and Craycroft Road in the vicinity of the Project were provided by the Arizona Department of Transportation for the period of January 1, 2016, thru December 31, 2018. Exhibits 8a and 8b summarize the number of crashes by crash type, injury severity and crash rate. There were no intersection crashes recorded during this period for the intersections of Craycroft Road/Main Access Road or Craycroft Road/Gregory School.

The summary shows that the most common crash types at River/Craycroft were Rear End (9), Left Turn (10) crashes. The three-year crash rate was near 0.50 crashes per million entering vehicles (MEV) with no fatal crashes during the three-year period.

On the roadway segments, most of the non-intersection related crashes were single vehicle (5) and sideswipes (6). There were an equal number of crashes (6) on the River Road segment east of Craycroft Road as on the Craycroft Road segment south of River Road during the three-year period. There were ten property damage only crashes and seven crashes with injury. The segment with the highest crash rate (0.68 crashes per million vehicle miles) was the River Road segment east of Craycroft Road.

Exhibit 8a Crash Rates: Intersection Related

River/Craycroft

Crash Type	2016	2017	2018	Total	%
Single Vehicle (1)		1		1	4%
Angle (2)	1	1		2	7%
Left Turn (3)	1	4	5	10	37%
Rear End (4)	1	4	4	9	33%
Head On (5)		1		1	4%
Side Swipe (6 7)	1	2		3	11%
Other		1		1	4%
Total	4	14	9	27	
Crash Rate (per MVE)	0.22	0.79	0.50	0.50	

Severity				Total	%
Bodily Injury	3	3	4	10	37%
Property Damage	1	11	5	17	63%

Note: MVE = Million Vehicles Entering the intersection

Entering Vols
River/Craycroft **48,846 Based on PAG Data**

Source of crash data: ADOT; Source of volumes: PAG.

Exhibit 8b Crash Rates: Non-Intersection Related

	2016		2017		2018			3 Year Total			
Crash Type	**Craycroft Road, South of River**	**River Road, West of Craycroft**	**Craycroft Road, South of River**	**River Road, West of Craycroft**	**Craycroft Road, South of River**	**River Road, East of Craycroft**	**River Road, West of Craycroft**	**Craycroft Road, South of River**	**River Road, East of Craycroft**	**River Road, West of Craycroft**	**%**
Single Vehicle	2		1	1		1		3	**1**	**1**	**29%**
Rear End	1			1	1	1		2	**1**	**1**	**24%**
Sideswipe	1			1		3	1	1	**3**	**2**	**35%**
Other		1						0	**0**	**1**	**6%**
Angle						1		0	**1**	**0**	**6%**
Total	**4**	**1**	**1**	**3**	**1**	**6**	**1**	**6**	**6**	**5**	
Crash Rate (per MVM)	**0.58**	**0.34**	**0.34**	**1.03**	**0.15**	**2.05**	**0.39**	**0.29**	**0.68**	**0.66**	

Severity											**%**
Fatal	0	0	0	0	0	0	0	0	**0**	**0**	**0%**
Bodily Injury	2	1	1		0	2	1	3	**2**	**2**	**41%**
Property Damage	2	0		3	1	4		3	**4**	**3**	**59%**
Total	4	1	1	3	1	6	1	6	6	5	

Note: MVM = Million Vehicle-Miles

Volumes		
Craycroft, South of River	**37,603**	**Based on PAG Data**
River, West of Craycroft	**13,920**	
River, East of Craycroft	**16,017**	

Source of Crash Data: ADOT; Source of Volumes: PAG.

4. Projected Traffic

Site Traffic Forecasting

The future traffic from Parcel A is estimated using the trip rates contained in the Institute of Traffic Engineers' *Trip Generation, 11th Edition* for land use category 253– Congregate Care Facility and is based on the number of planned residential units (177) of the proposed Project. The project team reviewed the descriptions of residential land use types in the ITE Trip Generation Manual to determine the closest land use to this project. The description of the land use "Congregate Care Facility" was determined by the Project team to be the best representation of the type of facility this Project will be. Pima County staff also approved the use of this land use for the purpose of this analysis early in the development of this project. The average trip generation rates for the daily, commuter AM peak hour and commuter PM peak hour time frames for this land use were applied to estimate the Project site trips. Based on comments from Pima County DOT, we have also provided the estimated site trips based on the trip rates for the AM and PM Peak Generator time periods.

The future traffic from Parcel B is estimated using the trip rates for land use category 210– Single-Family Detached Housing and is based on the number of new dwelling units (7) of the proposed Parcel B area.

Trip generation is the mathematical product of land use intensity (building square footage, number of units, etc.) and the trip generation rate. The result is the total number of one-way trips expected to be generated by the Project. These trips represent the number of vehicles estimated to enter and leave the Project. All the estimates are based on average trip rates per residential unit.

Trip Generation

Exhibits 9a and 9b provide the ITE trip rates and resulting trip generation for the proposed uses during the average weekday. These volumes represent the total number of vehicle trips generated by the Project parcels at the driveways.

Exhibit 9a Trip Generation – Parcel A

				Trip Generation Rates					
				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Congregate Care Facility	Units	177	253	0.08		0.18		2.21	
				58%	42%	49%	51%	50%	50%

				Trip Generation					
				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Congregate Care Facility	1000 SF	177	253	14		32		391	
				8	6	16	16	196	196

Note: AM, PM Rates based on Peak Hour of Adjacent Street Traffic (7-9 AM; 4-6 PM)

				Trip Generation Rates					
				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Congregate Care Facility	Units	177	253	0.19		0.23		2.21	
				56%	44%	54%	46%	50%	50%

				Trip Generation					
				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Congregate Care Facility	1000 SF	177	253	34		41		391	
				19	15	22	19	196	196

Note: AM, PM Rates based on Peak Hour of Generator

Exhibit 9b Trip Generation – Parcel B

				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Single Family Detached Unit	Units	7	210	0.7		0.94		9.43	
				26%	74%	63%	37%	50%	50%

				Trip Generation					
				Weekday AM		Weekday PM		Avg Weekday	
Land Use	Unit	No. Units	ITE Categ.	In	Out	In	Out	In	Out
Single Family Detached Unit	1000 SF	7	210	5		7		66	
				1	4	4	2	33	33

Note: AM, PM Rates based on Peak Hour of Adjacent Street Traffic (7-9 AM; 4-6 PM)

Trip Deductions

No pass-by trip reductions were applied to this land use category. Pass-by trip reductions are typically applied to shopping centers, restaurants, and convenience stores.

Trip Distribution

Trips generated for both Project parcels have been distributed to the surrounding roadway network and the Project driveways. Parcel B traffic will be completely distributed to River Road via Camino Blanco, and Parcel A traffic will be completely distributed via the Craycroft access. The percentage site distribution for each scenario is shown in Exhibit 10.

Site Traffic Assignment

Using the distribution of total trips shown in Exhibit 10, the site trips are assigned to the roadways and the intersections and driveway. The resulting peak hour assignment at buildout of the Project are illustrated in Exhibit 11.

Exhibit 10 Site Traffic Distribution

Note: Distribution shown for Parcel A Trips. Distribution of Parcel B Trips will be 100% via Camino Blanco and distributed equally to the east and west on River Road.

Non-Site Traffic Forecasting

The background traffic for 2023 was grown by 2%/year from the existing recorded volumes. The intersection volumes at the study area intersections are shown in Exhibit 12.

Total Traffic

New site trips were added to the "no Project" volumes. The resulting peak hour total traffic for 2023 are shown in Exhibits 13. These peak hour volumes were used to analyze future intersection operations. The analysis is provided in the next section.

Exhibit 11 Site Traffic Assignment

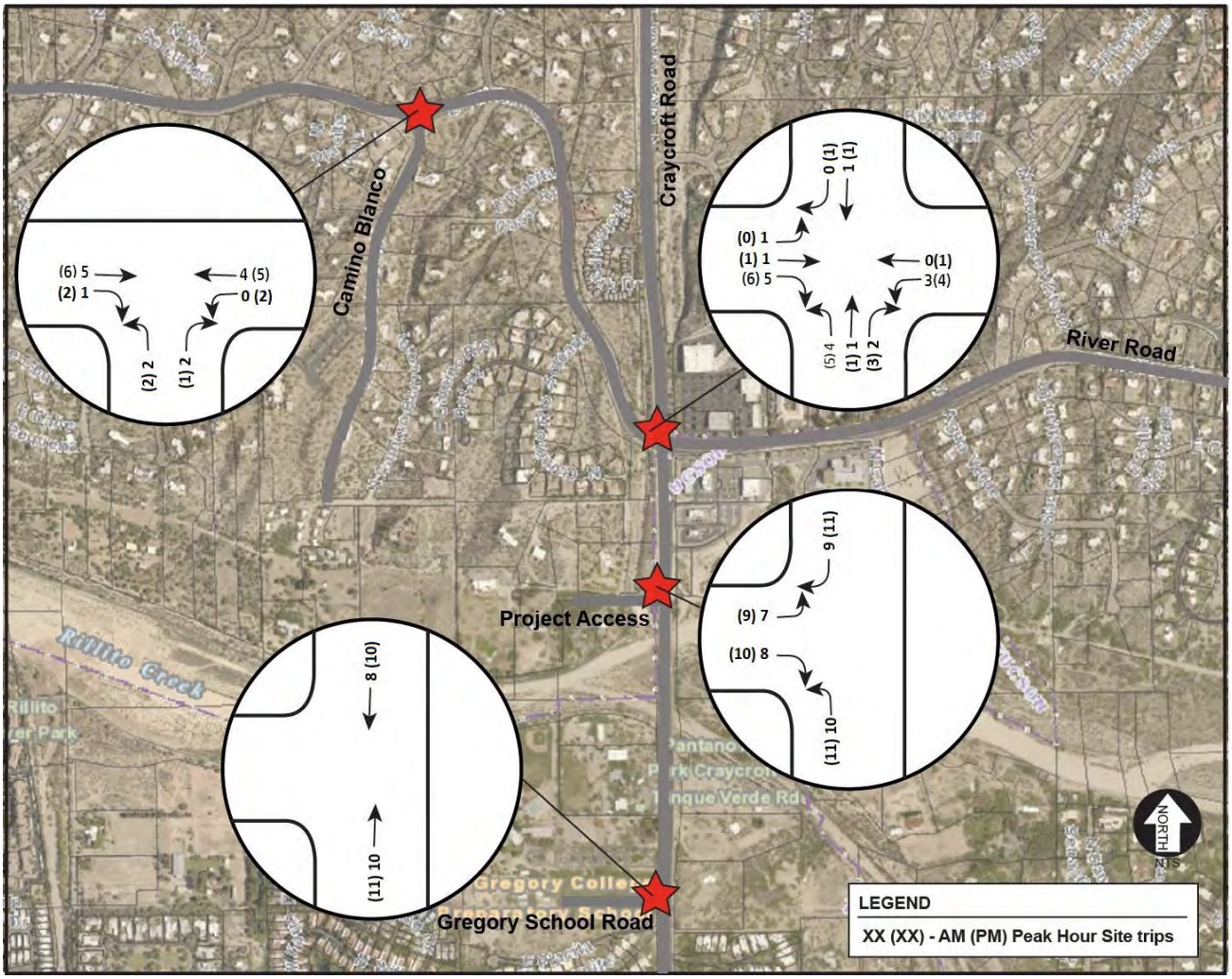


Exhibit 12 No Project Traffic Volumes - 2023

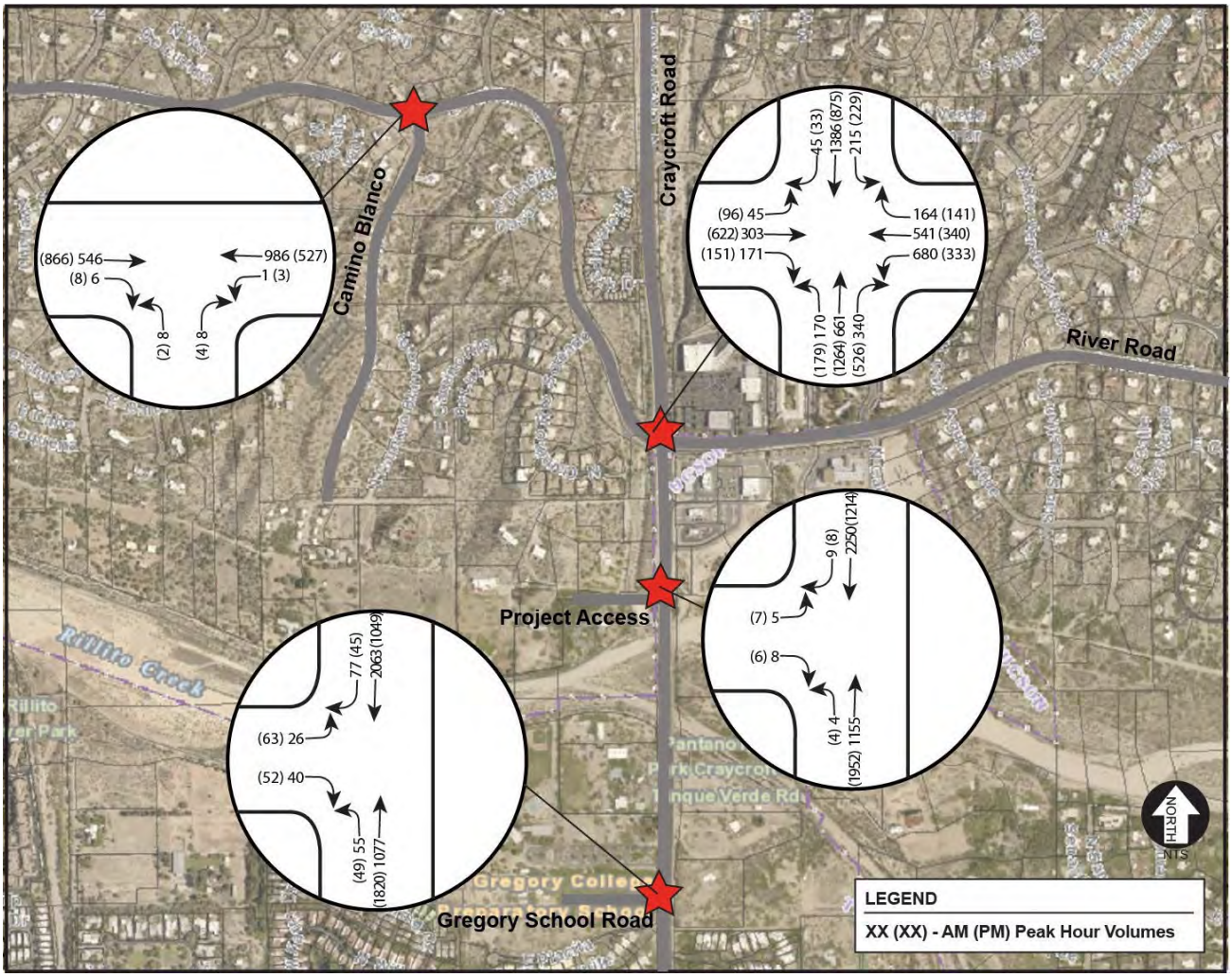
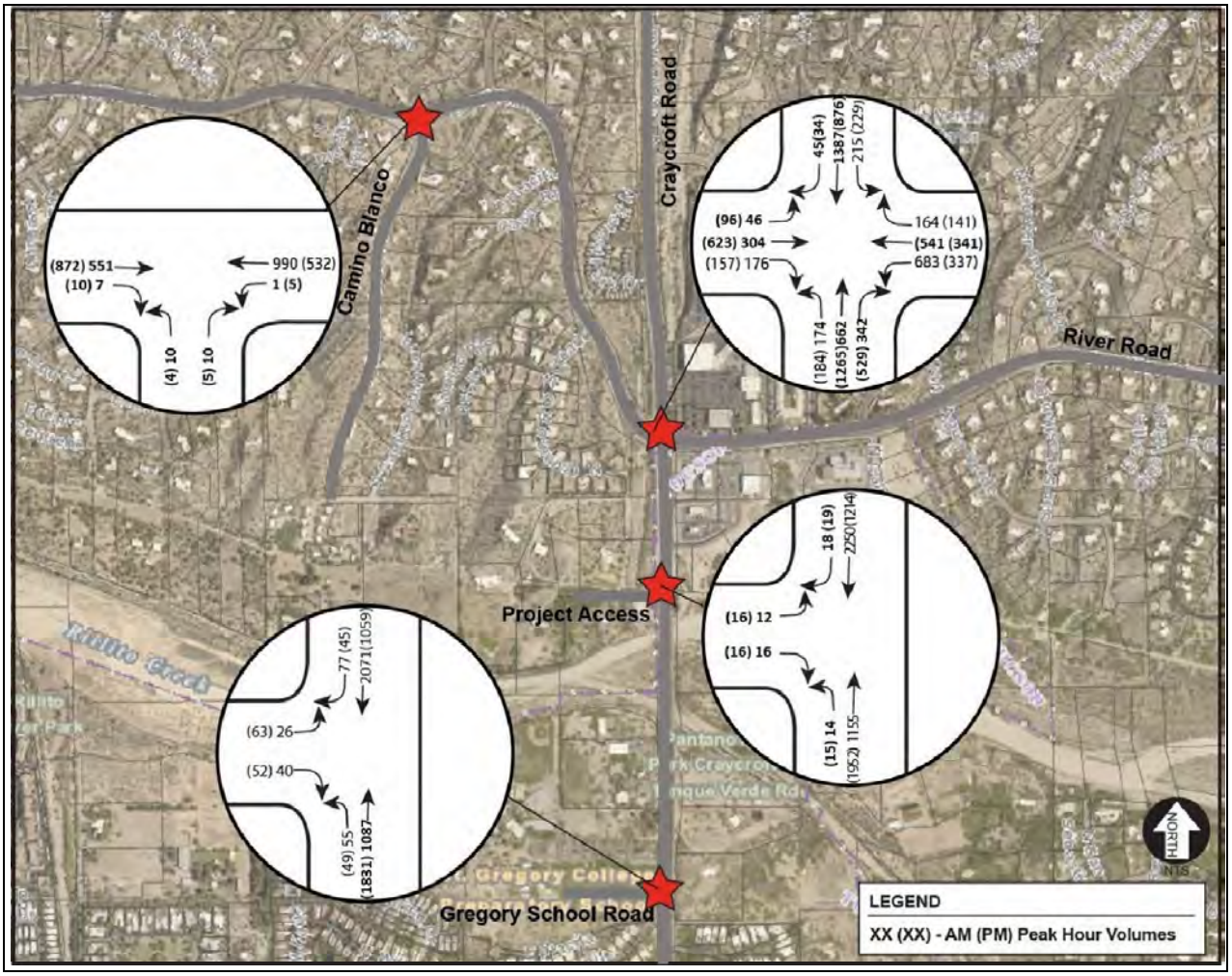


Exhibit 13 With Project Traffic Volumes - 2023



5. Traffic and Circulation Analysis

Roadway Performance

New daily site trips were added to the 2023 background volumes to analyze roadway directional performance with the additional trips. The analysis summarized in Exhibit 14 shows that both segments of River Road, and Craycroft Road south of River Road will continue to operate over their LOS D capacities even without the Project through 2023. Craycroft Road will operate below its LOS D daily capacity with the Project.

Exhibit 14 Roadway Volumes (2023)

Roadway Segment	Year	LOS D Capacity	Recorded ADT	2023 No Project ADT	Site Trips	2023 With Project	2023 No Project Over/Under LOS D Capacity	2023 With Project Over/Under LOS D Capacity
Craycroft Road, North of River Road	2019	35,820	30,151	32,636	56	32,692	Under	Under
Craycroft Road, North of Project Driveway	2020	35,820	37,603	39,905	196	40,100	Over	Over
Craycroft Road, South of Project Driveway	2020	35,820	37,545	39,843	196	40,039	Over	Over
River Road, East of Craycroft Road	2019	13,320	16,017	17,337	75	17,412	Over	Over
River Road, West of Craycroft Road	2019	13,320	13,920	15,067	131	15,198	Over	Over

Intersection Performance

The study area intersections were analyzed under "without Project" and "with Project" conditions for the year 2023. The am and pm peak hour analyses results are provided in Exhibits 15 and 16 for the off-site intersections.

2023 No Project

The following intersections and movements will operate at LOS E or F under the 2023 No Project Conditions:

<u>River Road/Craycroft Road</u>

- Eastbound Right, LOS E, AM
- Westbound Left LOS E, PM
- Northbound Left, LOS F, AM
- Northbound Through and Approach, LOS F, PM
- Southbound Through and Approach, LOS F, AM
- Southbound Left and Through, LOS F, PM
- Southbound Approach, LOS E, PM
- Intersection, LOS F, AM
- Intersection, LOS E, PM

Craycroft/Main Access Road

- Eastbound Left, LOS F, AM
- Eastbound Left, LOS E, PM

River Road/Camino Blanco

- Northbound Left, LOS E, AM

2023 With Project

The following intersections and movements will operate at LOS E or F under the 2023 With Project Conditions

River Road/Craycroft Road

- Eastbound Right, LOS E, AM
- Westbound Left LOS E, PM
- Northbound Left, LOS F, AM
- Northbound Through and Approach, LOS F, PM
- Southbound Through and Approach, LOS F, AM
- Southbound Left and Through, LOS F, PM
- Southbound Approach, LOS E, PM
- Intersection, LOS F, AM
- Intersection, LOS E, PM

Craycroft/Main Access Road

- Eastbound Left, LOS F, AM
- Eastbound Left, LOS E, PM

River Road/Camino Blanco

- Northbound Left, LOS E, AM and PM

River Road/Gregory School will continue to operate at LOS D or better with the Project during the peak hours.

For Parcel A, with only access to Craycroft Road, the eastbound left on the Main Access Road will experience longer delays during both peak hours than under the no Project condition. For Parcel B, with only access to River Road, the northbound approach on Camino Blanco at its intersection with River Road will experience longer delays during both peak hours than under the no Project condition, but the relative impact would not be significant.

Exhibit 15 2023 Intersection Performance – No Project

River/Craycroft

	No Project (2022)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	38.8	D	32.7	C
Through	44.5	D	51.3	D
Right	58	E	33.2	C
Approach	*48.4*	*D*	*46.1*	*D*
Westbound				
Left	53.2	D	55.7	E
Through	40.6	D	39.2	D
Right	37.9	D	40.4	D
Approach	*46.5*	*D*	*46.1*	*D*
Northbound				
Left	101.9	F	36.7	D
Through	41	D	121.9	F
Right	19.4	B	31.4	C
Approach	*43.6*	*D*	*90*	*F*
Southbound				
Left	49.4	D	96	F
Through	194.3	F	61.3	F
Right	23.1	C	23.1	C
Approach	*170.7*	*F*	*67.2*	*E*
Intersection	***93.1***	***F***	***69.4***	***E***

Craycroft/Gregory School

	No Project (2022)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	46.6	D	21.8	C
Right	53.6	D	21.7	C
Approach	*50.9*	*D*	*21.8*	*C*
Northbound				
Left	24.3	C	11.1	B
Through	2.2	A	26.1	C
Approach	*3.3*	*A*	*25.8*	*C*
Southbound				
Through	16.3	B	19.5	B
Right	16.9	B	19.4	B
Approach	*16.6*	*B*	*19.5*	*B*
Intersection	***13.1***	***B***	***23.4***	***C***

Craycroft/Project Driveway

	No Project (2022)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	148.8	F	35.7	E
Right	32.3	D	13.8	B
Northbound				
Left	28.1	D	11.7	B

River Road/Camino Blanco

	No Project (2022)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Westbound				
Left	8.7	A	10.1	B
Northbound				
Left	41.4	E	34.8	D
Right	12.4	B	17.0	C

Exhibit 16 2023 Intersection Performance – With Project

River/Craycroft

	With Project (2023)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	38.7	D	32.7	C
Through	44.4	D	51.5	D
Right	59.4	E	33.6	C
Approach	*48.9*	*D*	*46.2*	*D*
Westbound				
Left	53.9	D	57.4	E
Through	40.8	D	39.1	D
Right	38.1	D	40.3	D
Approach	*46.9*	*D*	*46.9*	*D*
Northbound				
Left	109.9	F	37.2	D
Through	41.5	D	122.3	F
Right	19.6	B	31.7	C
Approach	*45.2*	*D*	*90.1*	*F*
Southbound				
Left	50	D	96	F
Through	197.8	F	61.6	F
Right	23.3	C	23.1	C
Approach	*173.7*	*F*	*67.3*	*E*
Intersection	***94.6***	***F***	***69.6***	***E***

Craycroft/Gregory School

	With Project (2023)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	46.6	D	21.8	C
Right	53.6	D	21.7	C
Approach	*50.9*	*D*	*21.8*	*C*
Northbound				
Left	24.7	C	11.2	B
Through	2.2	A	27.2	C
Approach	*3.3*	*A*	*26.8*	*C*
Southbound				
Through	16.6	B	19.7	B
Right	17.2	B	19.6	B
Approach	*16.9*	*B*	*19.7*	*B*
Intersection	***13.2***	***B***	***24.1***	***C***

Craycroft/Project Driveway

	With Project (2023)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Eastbound				
Left	320.4	F	43.7	E
Right	27.5	E	14.3	B
Northbound				
Left	30.8	D	11.9	B

River Road/Camino Blanco

	With Project (2023)			
	AM		PM	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Westbound				
Left	8.7	A	10.2	B
Northbound				
Left	42.6	E	36.6	E
Right	12.4	B	17.2	C

Queue and Storage Lengths

Projected maximum (95th percentile) queue lengths for the year 2023 are provided in in Exhibit 17 for the Craycroft/Project Access intersection.

These lengths are calculated by the Synchro program used for the intersection capacity analysis. The results indicate that the projected 95th percentile queue lengths will be shorter than the minimum storage lengths required for warranted turn lanes. Left turns are made on northbound Craycroft from the existing two-way left turn lane. It is recommended that Craycroft Road be restriped on the approach to the Craycroft Road/Main Access Road intersection access to delineate a 150-foot northbound left turn lane.

Exhibit 17 Queue and Storage Lengths – 2023 With Project

Craycroft/Main Access Road 2023 With Project

	Existing Storage (ft)	95th Percentile Queue (ft)	
		AM Peak Hour	PM Peak Hour
Eastbound			
Left	N/A	78	23
Right	N/A	23	5
Northbound			
Left	N/A	15	3

COT Minimum Storage Length = 110' for all roads with speed limit of 40 MPH or lower and 150' for roads with speed limits over 40 MPH

Potential Mitigation

The primary access to Parcel A will be from Craycroft Road. The Main Access Road must be improved to provide two-way traffic. Because access to the park and to residential uses to the north intersect the Main Access Road, it is recommended that these roads be stop-sign controlled at their intersections with the Main Access Road. The Main Access Road should be constructed to accommodate emergency vehicles.

At the intersection of Craycroft Road/Main Access Road, there will be delays for drivers entering Craycroft Road during the peak hours, and possibly at other hours. To reduce delays, the entrance should be reconstructed at the Craycroft Road/Main Access Road intersection with a restriction of right-out only for motor vehicle traffic. Outbound drivers wishing to head north on Craycroft Road but restricted to right-out only would be served by a new U-turn lane downstream at the Craycroft/Gregory School intersection.

The northbound Craycroft approach to the Craycroft Road/Main Access Road intersection should be also restriped to provide a 150-foot left turn lane, with pavement markings designed to City of Tucson standards.

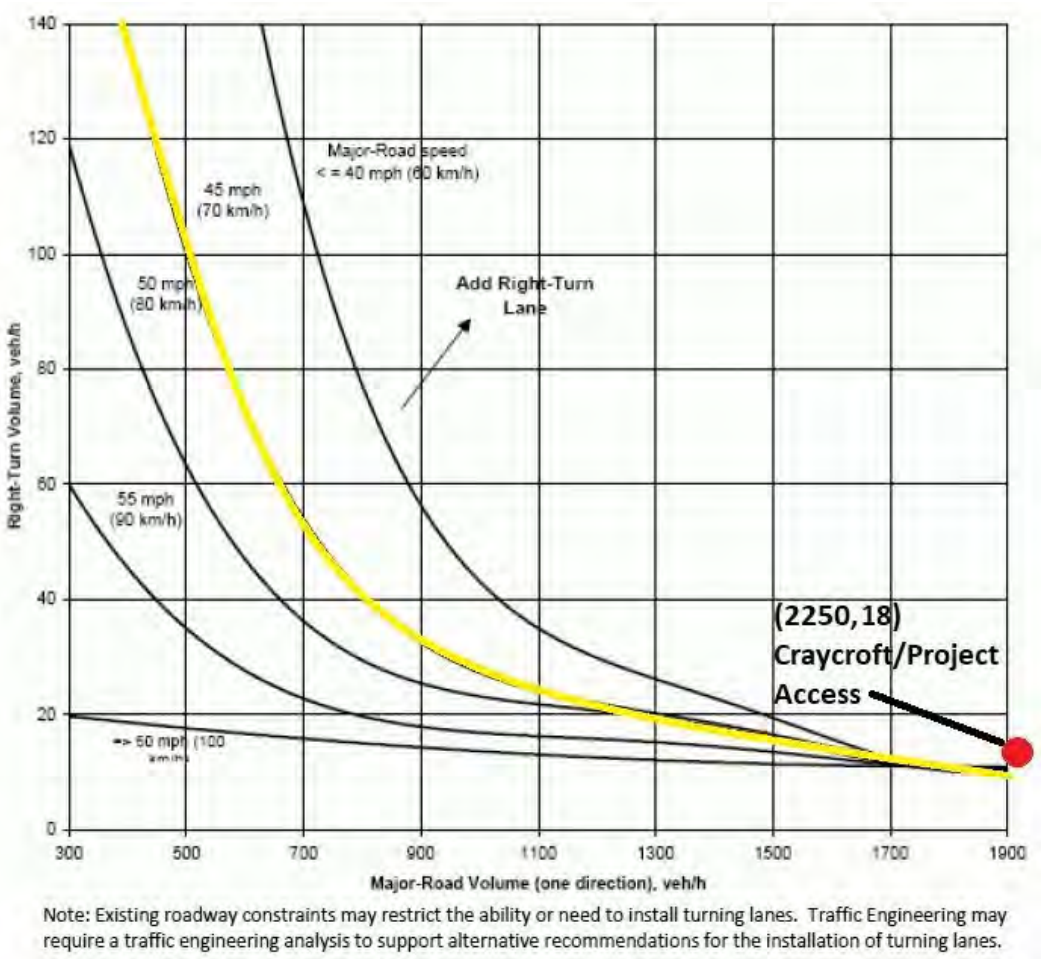
Turn Lane Requirements

Turn lane warrants are contained in both the *Transportation Access Management Guidelines for the City of Tucson*[5] and the *Pima County Subdivision and Development Street Standards*. The graph indicating the warrant thresholds based on volume and speed limit for four-lane roadways is provided in Exhibit 18.

Under the 2023 with Project scenario a southbound right turn lane is warranted at the Craycroft/Main Access Road intersection. Based on the queuing analysis there will be a need for less than 150 feet of storage, the City of Tucson's minimum turn lane length for roads with a 45-mph speed limit. The provision of this turn lane should consider whether sight distance would be reduced for drivers turning out of the Main Access Road with the construction of this turn lane.

The northbound Craycroft approach to the Craycroft Road/Main Access Road intersection should be restriped to delineate a left turn lane. The left turn lane should be striped for 150 feet of storage and be designed to City of Tucson pavement marking standards.

Exhibit 18 Right Turn Lane Warrant Criteria (4-lane Roadways)



Note: Existing roadway constraints may restrict the ability or need to install turning lanes. Traffic Engineering may require a traffic engineering analysis to support alternative recommendations for the installation of turning lanes.

Note: Highest SB Right Peak Hour Volume at Craycroft/Project Access (AM Peak Hour, 2023 With Project)

[5] *Transportation Access Management Guidelines for the City of Tucson, Arizona*, page 26.

Traffic Control Needs

The existing and future existing traffic at the Main Access Road on Craycroft Road face long delays representing LOS E or F conditions during commute hours. Drivers exiting the site wishing to go northbound on Craycroft Road must wait to turn left until there are gaps in traffic on a road that will carry close to 40,000 vehicles per day by the year 2023. This may be more difficult for the older drivers who may want to patronize businesses north of the Project site.

In order to facilitate left turns out at this location, the following options have been considered:

1. Signalization – Providing a signal at this location would need to be based on the results of a traffic signal warrant analysis, as well as a consideration of the spacing of other signalized intersections on Craycroft Road. The Manual of Uniform Traffic Control Devices provides guidelines and standards for signal warrant studies. Signals are typically warranted based on existing or projected hourly volume and volume thresholds. The traffic volumes coming out of the Project site on the Main Access Road would not meet any of the MUTCD signal warrant thresholds for a signal at this location. Other warrants (pedestrian, crash history) would also not be met.

   The closest signalized intersections are at Craycroft/River and at Craycroft/Gregory School. The Craycroft/River intersection is approximately 970 feet north of the Project access and the Craycroft/Gregory School intersection is about 1,850 feet south of the Project access on Craycroft. The City of Tucson requires ½ mile spacing between signals on City arterials and collectors. The City does allow for non-standard spacing of signalized intersections, but one of the criteria is that the volume-based warrants be 1.5 times the standard thresholds. The projected volumes from the Main Access Road would not meet this criterion to allow for a signal at this location.

2. The City allows for the consideration of a Florida-T intersection where typical signalized intersection spacing cannot be met. We considered this for the Craycroft/Main Access Road intersection. However, the location of an existing full-access driveway on the east side of Craycroft Road about 230 feet north of the Main Access Road would create a conflict as outbound left turning vehicles at this east driveway may collide with the outbound northbound vehicles that may occupy the same space on Craycroft Road because of the close spacing of the two driveways.

With a no-left-turn restriction, drivers who turn right and then return to the north would need to have a convenient and safe downstream U-turn opportunity. At other similar locations, drivers have opportunities to turn right out of similar access locations with downstream U-turn locations nearby but there are no nearby downstream U-turn locations south on Craycroft Road.

On Craycroft Road, the closest U-turn lane would be at the Craycroft Road/Grant Road intersection, almost one and one-half miles south of the Main Access Road. There are other side streets that are available for drivers to turn into, and then return to the north, but these maneuvers are not recommended due to the number of conflicting movements required.

In order to provide this opportunity, a raised median can be constructed on the north leg of the Craycroft Road/Gregory School to better separate southbound to northbound U-turn movements from northbound through traffic at this signalized intersection. A concept of this is shown in Exhibit 19.

Signal operation may need to be updated to accommodate the new U-turn movement at the intersection. It would also require the restriping of the southbound lanes to delineate the U-turn lane.

All traffic control devices, including signs and markings, should be installed in accordance with the MUTCD.

Exhibit 19 Left Turn/Raised Median Concept at Craycroft/Gregory School

Pedestrian, Bicycle, and Transit Considerations

Sidewalks and bike lanes will remain along the Parcel A Project frontage on Craycroft Road. Access to the County linear park will be provided for residents and staff from the site. There are no plans to add transit routes on Craycroft Road at this location.

Speed Considerations

Speeding is not known to be problematic in the Project vicinity.

Sight Distances

Sight visibility triangles will be included in the Project development plan, as required by the City of Tucson's development code.

Other

Access from River Road via Camino Blanco

Parcel B project access will only be to the north via River House Road and Camino Blanco toward River Road. This route would also be a secondary access for Parcel A in the event of a blockage on the Main Access Road. There would be a gated fence disallowing regular access from Parcel A.

Access Requirements in the Pima County Subdivision and Development Street Standards

The *Pima County Subdivision and Development Street Standards* includes requirements for the number of access locations dependent on number of units. For this project, three access points are required and two are provided. Pima County allows for Modifications of Standards when strict compliance with the Standards may be infeasible. Pima County staff is aware of the topographic and ownership constraints that will not permit a third access point. As such, Pima County staff acknowledges that a Modification of Standards will be requested at the time of Development Package.

6. Conclusions and Recommendations

- The proposed Parcel A project will generate about 391 trips during the average weekday, with about 14 during the morning commuter peak hour and 32 during the afternoon/evening commuter peak hour[6]. During the times when Parcel A will generate the highest morning and afternoon/evening hourly trips, the project will generate about 34 AM trips and 41 PM trips.
- The proposed Parcel B project will generate about 66 new trips during the average weekday, with about 5 during the morning peak hour and 7 during the afternoon/evening peak hour.

- Current conditions:
    - The intersection of River/Craycroft currently operates at LOS E or F during the morning and afternoon peak hours.
    - The eastbound left turn movement at the Main Access Road intersection on Craycroft Road operates at LOS F during the morning peak hours and delays will increase without and with the Project through 2023. Delays are common for driveways or minor streets that enter major streets during peak commute hours.
    - The intersection of Gregory School/Craycroft currently operates at LOS C during the peak hours and will continue to operate at LOS C through 2023 with the Project.
    - The northbound left turn movement at the River Road/Camino Blanco intersection operates at LOS E during the morning peak hour and will continue to operate at LOS E/F through 2023.
    - The Main Access Road on Craycroft Road exists and meets City of Tucson standards for driveway spacing and corner clearance.
- Adding the Project site trips to the future years' background traffic volumes will increase delays even more at the intersections, although the proportional increases are minor.

Parcel A recommended mitigation:

- Specific Project related intersection mitigation recommendations includes:
    - Re-striping the two-way left turn lane on the northbound Craycroft Road approach to the Craycroft Road/Main Access Road intersection to delineate a 150-foot left turn lane.
    - Provide a warranted southbound right turn lane on Craycroft Road for turns into the Main Access Road. This improvement should only be considered if the sight distance for drivers entering Craycroft Road from the Main Access Road is not reduced to an unacceptable distance because of the improvement.
    - Reconstructing the Main Access Road to accommodate the lane configuration near Craycroft as shown in the site plan. Outbound traffic is restricted to right-out turning movements.
    - Providing stop control inside the reconstructed Main Access Road at the internal intersecting roads between the Rillito River Park trail head and the new Project/residences to the north.

[6] Commuter peak hours are typically the highest volume one hour period in the 7-9 AM morning time frame and the highest volume one hour period in the 4-6 PM time frame.

- Drivers turning left out of the Main Access Road today experience delays representative of LOS E or LOS F conditions. Elderly (or any) drivers wishing to head north of Craycroft Road from the Main Access Road would likely opt to turn right from the Main Access Road onto Craycroft and seek a downstream opportunity to turn around and head north. It is recommended that outbound movements be restricted to right turns out only to eliminate the potential for eastbound to northbound left turn crashes. The following improvement at the downstream intersection of Craycroft Road/Gregory School is recommended.
- To assist exiting drivers from the Main Access Road onto Craycroft Road, a new raised median delineated U-turn lane is recommended at the Craycroft Road/Gregory School access for the north leg of the intersection. The purpose of this is to provide a southbound U-turn lane at the intersection for use by drivers whose destinations are north of the Project access driveway and who would be restricted to the recommended right-out only movement at the Main Access Road intersection with Craycroft Road. The north leg of the Craycroft Road/Gregory School intersection would be reconstructed and restriped to provide a 150-foot left turn lane with a raised median separating northbound and southbound traffic. If this recommendation is approved, a left turn phase warrant analysis should be conducted for the southbound left turn lane.

Parcel B recommended mitigation:

- Parcel B trips will be only via Camino Blanco to River Road. Access from Parcel A to Camino Blanco will be only for emergencies through a gated access on the west side of the project. No additional mitigation is recommended on River House Road, Camino Blanco or River Road.

APPENDIX

- Site Plan
- Traffic Data
- Synchro Analysis

CONCEPT PLAN - PARCEL A & B

NOT TO SCALE

ENDEAVOUR Spirited Living | CATALINA FOOTHILLS

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Craycroft Rd.	DATE:	02/25/20	LOCATION:	Tucson
E-W STREET:	River Rd.	DAY:	TUESDAY	PROJECT#	20-1100-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	2	2	1	1	2	1	2	2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	41	169	87	58	303	6	8	54	28	166	128	41	1089
7:15 AM	43	166	85	54	328	9	11	80	41	196	133	54	1200
7:30 AM	43	145	86	50	412	13	10	88	45	141	131	30	1194
7:45 AM	36	155	69	45	289	15	14	69	50	151	128	33	1054
8:00 AM	66	98	66	40	288	14	12	76	54	154	124	29	1021
8:15 AM	60	99	60	44	255	10	8	74	52	161	111	42	976
8:30 AM	65	122	65	43	243	11	5	58	43	166	119	41	981
8:45 AM	58	103	58	41	239	8	9	65	45	122	112	54	914
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	412	1057	576	375	2357	86	77	564	358	1257	986	324	8429
Approach %	20.15	51.69	28.17	13.31	83.64	3.05	7.71	56.46	35.84	48.97	38.41	12.62	
App/Depart	2045	/	1458	2818	/	3972	999	/	1515	2567	/	1484	

AM Peak Hr Begins at: 700 AM

PEAK													
Volumes	163	635	327	207	1332	43	43	291	164	654	520	158	4537
Approach %	14.49	56.44	29.07	13.08	84.20	2.72	8.63	58.43	32.93	49.10	39.04	11.86	
2023 NP	170	661	340	215	1386	45	45	303	171	680	541	164	
Site Trips	4	1	2		1	0	1	1	5	3	0		
2023 WP	174	662	342	215	1387	45	46	304	176	683	541	164	
PEAK HR. FACTOR:		0.947			0.833			0.871			0.869		0.945

CONTROL:	Signal
COMMENT 1:	
GPS:	32.273464, -110.875095

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup

N-S STREET:	Craycroft Rd. 0	DATE:	02/25/20	LOCATION:	Tucson
E-W STREET:	River Rd.	DAY:	TUESDAY	PROJECT#	20-1100-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	2	2	1	1	2	1	2	2	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	43	299	128	56	255	4	18	142	28	80	85	43	1181
4:15 PM	44	296	122	52	196	7	22	141	41	69	88	41	1119
4:30 PM	40	298	131	58	199	10	20	154	43	86	80	24	1143
4:45 PM	45	322	125	54	191	11	32	161	33	85	74	28	1161
5:00 PM	50	325	124	50	214	7	25	166	30	45	76	24	1136
5:15 PM	54	274	141	45	198	5	24	169	32	41	69	20	1072
5:30 PM	41	269	143	43	185	8	21	131	28	50	66	22	1007
5:45 PM	42	246	130	41	147	5	19	122	24	55	60	19	910
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	359	2329	1044	399	1585	57	181	1186	259	511	598	221	8729
Approach %	9.62	62.41	27.97	19.55	77.66	2.79	11.13	72.94	15.93	38.42	44.96	16.62	
App/Depart	3732	/	2731	2041	/	2355	1626	/	2629	1330	/	1014	

PM Peak Hr Begins at: 400 PM

PEAK													
Volumes	172	1215	506	220	841	32	92	598	145	320	327	136	4604
Approach %	9.09	64.18	26.73	20.13	76.94	2.93	11.02	71.62	17.37	40.87	41.76	17.37	
2023 NP	179	1264	526	229	875	33	96	622	151	333	340	141	
Site Trips	5	1	3		1	1	0	1	6	4	1		
2023 WP	184	1265	529	229	876	34	96	623	157	337	341	141	
PEAK HR. FACTOR:		0.962			0.867			0.924			0.941		0.975

CONTROL:	Signal
COMMENT 1:	0
GPS:	32.273464, -110.875095

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Craycroft Rd.	DATE:	02/25/20	LOCATION:	Tucson
E-W STREET:	Project Access	DAY:	TUESDAY	PROJECT#	20-1100-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	304	0	0	483	3	2	0	1	0	0	0	795
7:15 AM	0	300	0	0	581	1	0	0	1	0	0	0	883
7:30 AM	0	262	0	0	623	4	2	0	0	0	0	0	891
7:45 AM	2	244	0	0	476	1	1	0	6	0	0	0	730
8:00 AM	1	216	0	0	479	2	1	0	2	0	0	0	701
8:15 AM	4	223	0	0	469	0	0	0	2	0	0	0	698
8:30 AM	2	278	0	0	430	6	4	0	3	0	0	0	723
8:45 AM	2	211	0	0	410	4	1	0	2	0	0	0	630
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	13	2038	0	0	3951	21	11	0	17	0	0	0	6051
Approach %	0.63	99.37	0.00	0.00	99.47	0.53	39.29	0.00	60.71	####	####	####	
App/Depart	2051	/	2049	3972	/	3968	28	/	0	0	/	34	

AM Peak Hr Begins at: 700 AM

PEAK													
Volumes	4	1110	0	0	2163	9	5	0	8	0	0	0	3299
2023 NP	4	1155	0	0	2250	9	5	0	8				
Site Trips	10					9	7		8				
2023 WP	14	1155	0	0	2250	18	12	0	16				
Approach %	0.36	99.64	0.00	0.00	99.59	0.41	38.46	0.00	61.54	####	####	####	
PEAK HR. FACTOR:		0.910			0.866			0.464			0.000		0.926

CONTROL: 1-Way Stop (EB)
COMMENT 1:
GPS: 32.270825, -110.875100

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Craycroft Rd.	DATE:	02/25/20	LOCATION:	Tucson
	0				
E-W STREET:	Project Access	DAY:	TUESDAY	PROJECT#	20-1100-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	0	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	4	445	0	0	334	2	2	0	4	0	0	0	791
4:15 PM	0	444	0	0	286	1	1	0	0	0	0	0	732
4:30 PM	0	452	0	0	291	3	1	0	1	0	0	0	748
4:45 PM	3	472	0	0	303	3	2	0	2	0	0	0	785
5:00 PM	1	508	0	0	287	1	3	0	3	0	0	0	803
5:15 PM	0	452	0	0	268	0	1	0	3	0	0	0	724
5:30 PM	2	444	0	0	250	1	0	0	2	0	0	0	699
5:45 PM	3	392	0	0	236	0	1	0	2	0	0	0	634
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	13	3609	0	0	2255	11	11	0	17	0	0	0	5916
Approach %	0.36	99.64	0.00	0.00	99.51	0.49	39.29	0.00	60.71	####	####	####	
App/Depart	3622	/	3620	2266	/	2272	28	/	0	0	/	24	

PM Peak Hr Begins at: 415 PM

PEAK													
Volumes	4	1876	0	0	1167	8	7	0	6	0	0	0	3068
2023 NP	4	1952	0	0	1214	8	7	0	6				
Site Trips	11					11	9		10				
2023 WP	15	1952	0	0	1214	19	16	0	16				
Approach %	0.21	99.79	0.00	0.00	99.32	0.68	53.85	0.00	46.15	####	####	####	

PEAK HR. FACTOR:	0.923	0.960	0.542	0.000	0.955

CONTROL: 1-Way Stop (EB)
COMMENT 1: 0
GPS: 32.270825, -110.875100

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Camino Blanco	DATE:	08/30/18	LOCATION:	Tucson
E-W STREET:	East River Rd.	DAY:	THURSDAY	PROJECT#	18-1387-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	0	0	0	0	0	0	102	3	0	202	0	308
7:15 AM	0	0	3	0	0	0	0	115	0	0	243	0	361
7:30 AM	1	0	2	0	0	0	0	139	1	0	210	0	353
7:45 AM	3	0	1	0	0	0	0	120	1	1	233	0	359
8:00 AM	3	0	1	0	0	0	0	130	4	0	225	0	363
8:15 AM	3	0	4	0	0	0	0	142	1	0	170	0	320
8:30 AM	0	0	6	0	0	0	0	97	2	1	172	0	278
8:45 AM	3	0	1	0	0	0	0	105	1	0	128	0	238
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	14	0	18	0	0	0	0	950	13	2	1583	0	2580
Approach %	43.75	0.00	56.25	####	####	####	0.00	98.65	1.35	0.13	99.87	0.00	
App/Depart	32	/	0	0	/	15	963	/	968	1585	/	1597	

AM Peak Hr Begins at: 715 AM

PEAK													
Volumes	7	0	7	0	0	0	0	504	6	1	911	0	1436
Approach %	50.00	0.00	50.00	####	####	####	0.00	98.82	1.18	0.11	99.89	0.00	
2020 Existing	7	0	7	0	0	0	0	524	6	1	948	0	
2023 NP	8	0	8	0	0	0	0	546	6	1	986	0	
Site Trips	2.00		2.00					5.00	1.00	0.00	4.00		
2023 WP	10	0	10	0	0	0	0	551	7	1	990	0	
PEAK HR. FACTOR:		0.875			0.000			0.911			0.938		0.989

CONTROL: 1-Way Stop (NB)
COMMENT 1:
GPS: 32.279366, -110.880450

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET:	Camino Blanco 0	DATE:	08/30/18	LOCATION:	Tucson
E-W STREET:	East River Rd.	DAY:	THURSDAY	PROJECT#	18-1387-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	0	2	0	0	0	0	195	2	0	113	0	313
4:15 PM	0	0	0	0	0	0	0	187	2	0	101	0	290
4:30 PM	0	0	0	0	0	0	0	153	2	3	90	0	248
4:45 PM	0	0	1	0	0	0	0	176	3	0	133	0	313
5:00 PM	0	0	3	0	0	0	0	223	1	1	126	0	354
5:15 PM	1	0	0	0	0	0	0	193	2	2	110	0	308
5:30 PM	1	0	0	0	0	0	0	208	1	0	118	0	328
5:45 PM	2	0	2	0	0	0	0	146	3	5	90	0	248
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	5	0	8	0	0	0	0	1481	16	11	881	0	2402
Approach %	38.46	0.00	61.54	####	####	####	0.00	98.93	1.07	1.23	98.77	0.00	
App/Depart	13	/	0	0	/	27	1497	/	1489	892	/	886	

PM Peak Hr Begins at: 445 PM

PEAK													
Volumes	2	0	4	0	0	0	0	800	7	3	487	0	1303
Approach %	33.33	0.00	66.67	####	####	####	0.00	99.13	0.87	0.61	99.39	0.00	
2020 Existing	2	0	4	0	0	0	0	832	7	3	507	0	
2023 NP	2	0	4	0	0	0	0	866	8	3	527	0	
Site Trips	2.00		1.00					6.00	2.00	2.00	5.00		
2023 WP	4	0	5	0	0	0	0	872	10	5	532	0	

CONTROL: 1-Way Stop (NB)
COMMENT 1: 0
GPS: 32.279366, -110.880450

Project: Craycroft/St Gregorys

Date: Thursday, September 27, 2018

Count period: 0:15

Count Starts at

	7:00 AM	NB Craycroft				SB Craycroft				EB St Gregorys				WB River				TOTALS					END	
	END Time	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	NB	SB	EB	WB	Total	END Time	
	7:15 AM	0	4	238	0	0	0	348	8	0	5	0	2	0	0	0	0	242	356	7	0	605	7:15 AM	
	7:30 AM	0	20	291	0	0	0	508	15	0	2	0	5	0	0	0	0	311	523	7	0	841	7:30 AM	
	7:45 AM	0	7	235	0	0	0	523	16	0	8	0	12	0	0	0	0	242	539	20	0	801	7:45 AM	
	8:00 AM	0	12	236	0	0	0	452	20	0	4	0	12	0	0	0	0	248	472	16	0	736	8:00 AM	
	8:15 AM	0	12	233	0	0	0	423	20	0	10	0	8	0	0	0	0	245	443	18	0	706	8:15 AM	
	8:30 AM	0	13	227	0	0	0	405	31	0	15	0	12	0	0	0	0	240	436	27	0	703	8:30 AM	
	8:45 AM	0	35	188	0	0	0	332	61	0	30	0	28	0	0	0	0	223	393	58	0	674	8:45 AM	
	9:00 AM	0	6	183	0	0	0	355	18	0	15	0	19	0	0	0	0	189	373	34	0	596	9:00 AM	
7:00 AM	8:00 AM	0	43	1000	0	0	0	1831	59	0	19	0	31	0	0	0	0	1043	1890	50	0	2983	7:00 AM	8:00 AM
7:15 AM	8:15 AM	0	51	995	0	0	0	1906	71	0	24	0	37	0	0	0	0	1046	1977	61	0	3084	7:15 AM	8:15 AM
7:30 AM	8:30 AM	0	44	931	0	0	0	1803	87	0	37	0	44	0	0	0	0	975	1890	81	0	2946	7:30 AM	8:30 AM
7:45 AM	8:45 AM	0	72	884	0	0	0	1612	132	0	59	0	60	0	0	0	0	956	1744	119	0	2819	7:45 AM	8:45 AM
8:00 AM	9:00 AM	0	66	831	0	0	0	1515	130	0	70	0	67	0	0	0	0	897	1645	137	0	2679	8:00 AM	9:00 AM
7:00 AM	9:00 AM	0	109	1831	0	0	0	3346	189	0	89	0	98	0	0	0	0	1940	3535	187	0	5662	7:00 AM	9:00 AM
																		PHF	0.84	0.92	0.76			
2020 Existing		0	53	1035	0	0	0	1983	74	0	25	0	38	0	0	0	0							
2023 NP		0	55	1077	0	0	0	2063	77	0	26	0	40	0	0	0	0							
Site Trips				10				8																
2023 WP		0	55	1087	0	0	0	2071	77	0	26	0	40	0	0	0	0							

Count Starts at

	4:00 PM	NB Craycroft				SB Craycroft				EB St Gregorys				WB River				TOTALS					END	
	END Time	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	U-Turn	Left Turn	THRU	Right Turn	NB	SB	EB	WB	Total	END Time	
	4:15 PM	0	18	352	0	0	0	253	10	0	10	0	2	0	0	0	0	370	263	12	0	645	4:15 PM	
	4:30 PM	0	13	386	0	0	0	244	23	0	12	0	3	0	0	0	0	399	267	15	0	681	4:30 PM	
	4:45 PM	0	14	380	0	0	0	220	18	0	13	0	7	0	0	0	0	394	238	20	0	652	4:45 PM	
	5:00 PM	0	13	427	0	0	0	235	9	0	14	0	5	0	0	0	0	440	244	19	0	703	5:00 PM	
	5:15 PM	0	7	402	0	0	0	249	10	0	12	0	13	0	0	0	0	409	259	25	0	693	5:15 PM	
	5:30 PM	0	17	448	0	0	0	239	15	0	19	0	19	0	0	0	0	465	254	38	0	757	5:30 PM	
	5:45 PM	0	8	404	0	0	0	246	8	0	13	0	11	0	0	0	0	412	254	24	0	690	5:45 PM	
	6:00 PM	0	3	333	0	0	0	171	9	0	7	0	8	0	0	0	0	336	180	15	0	531	6:00 PM	
4:00 PM	5:00 PM	0	58	1545	0	0	0	952	60	0	49	0	17	0	0	0	0	1603	1012	66	0	2681	4:00 PM	5:00 PM
4:15 PM	5:15 PM	0	47	1595	0	0	0	948	60	0	51	0	28	0	0	0	0	1642	1008	79	0	2729	4:15 PM	5:15 PM
4:30 PM	5:30 PM	0	51	1657	0	0	0	943	52	0	58	0	44	0	0	0	0	1708	995	102	0	2805	4:30 PM	5:30 PM
4:45 PM	5:45 PM	0	45	1681	0	0	0	969	42	0	58	0	48	0	0	0	0	1726	1011	106	0	2843	4:45 PM	5:45 PM
5:00 PM	6:00 PM	0	35	1587	0	0	0	905	42	0	51	0	51	0	0	0	0	1622	947	102	0	2671	5:00 PM	6:00 PM
4:00 PM	6:00 PM	0	93	3132	0	0	0	1857	102	0	100	0	68	0	0	0	0	3225	1959	168	0	5352	4:00 PM	6:00 PM
																		PHF	0.93	0.98	0.70			
2020 Existing		0	47	1749	0	0	0	1008	44	0	60	0	50	0	0	0	0							
2023 NP		0	49	1820	0	0	0	1049	45	0	63	0	52	0	0	0	0							
Site Trips				11				10																
2023 WP		0	49	1831	0	0	0	1059	45	0	63	0	52	0	0	0	0							

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, February 25, 2020 City: Tucson Project #: 20-1100-003

Location: Craycroft Rd. north of Project Access

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	19		11					12:00	303		275				
00:15	6		5					12:15	380		267				
00:30	8		9					12:30	242		285				
00:45	15	48	8	33			81	12:45	294	1219	246	1073			2292
01:00	14		5					13:00	302		266				
01:15	5		7					13:15	293		284				
01:30	6		5					13:30	277		277				
01:45	3	28	4	21			49	13:45	309	1181	258	1085			2266
02:00	6		6					14:00	311		249				
02:15	4		3					14:15	307		259				
02:30	8		4					14:30	359		287				
02:45	6	24	4	17			41	14:45	385	1362	337	1132			2494
03:00	4		6					15:00	406		320				
03:15	5		8					15:15	460		312				
03:30	12		12					15:30	498		291				
03:45	6	27	16	42			69	15:45	471	1835	308	1231			3066
04:00	8		14					16:00	447		336				
04:15	15		23					16:15	445		287				
04:30	21		23					16:30	453		294				
04:45	24	68	30	90			158	16:45	474	1819	306	1223			3042
05:00	27		51					17:00	511		288				
05:15	38		58					17:15	453		268				
05:30	48		98					17:30	444		251				
05:45	55	168	95	302			470	17:45	393	1801	236	1043			2844
06:00	75		132					18:00	358		207				
06:15	106		182					18:15	346		196				
06:30	126		295					18:30	368		166				
06:45	180	487	300	909			1396	18:45	364	1436	161	730			2166
07:00	306		487					19:00	331		154				
07:15	300		582					19:15	287		147				
07:30	264		627					19:30	245		141				
07:45	245	1115	477	2173			3288	19:45	205	1068	145	587			1655
08:00	217		481					20:00	197		152				
08:15	223		469					20:15	201		166				
08:30	282		436					20:30	162		161				
08:45	212	934	414	1800			2734	20:45	157	717	139	618			1335
09:00	212		338					21:00	143		133				
09:15	215		306					21:15	144		69				
09:30	210		332					21:30	137		80				
09:45	209	846	284	1260			2106	21:45	121	545	87	369			914
10:00	227		274					22:00	106		74				
10:15	238		283					22:15	88		76				
10:30	258		277					22:30	85		60				
10:45	249	972	167	1001			1973	22:45	87	366	65	275			641
11:00	232		276					23:00	68		54				
11:15	268		184					23:15	61		58				
11:30	274		292					23:30	66		52				
11:45	288	1062	236	988			2050	23:45	59	254	55	219			473
Total Vol.		5779		8636			**14415**			13603		9585			**23188**

GPS Coordinates: 32.271113, -110.875090

Daily Totals

NB	SB	EB	WB	**Combined**
19382	18221			**37603**

	AM			PM		
Split %	40.1%	59.9%	**38.3%**	58.7%	41.3%	**61.7%**
Peak Hour	11:30	07:00	**07:00**	16:30	14:45	**15:15**
Volume	1245	2173	**3288**	1891	1260	**3123**
P.H.F.	0.82	0.87	**0.92**	0.93	0.93	**0.99**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, February 25, 2020 City: Tucson Project #: 20-1100-004

Location: Craycroft Rd. south of Project Access

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	19		11					12:00	302		276				
00:15	7		5					12:15	376		265				
00:30	8		9					12:30	241		285				
00:45	15	49	8	33			82	12:45	293	1212	247	1073			2285
01:00	14		5					13:00	301		267				
01:15	5		7					13:15	292		284				
01:30	6		5					13:30	275		275				
01:45	3	28	4	21			49	13:45	308	1176	260	1086			2262
02:00	6		6					14:00	306		249				
02:15	4		3					14:15	308		258				
02:30	8		4					14:30	360		288				
02:45	6	24	4	17			41	14:45	384	1358	334	1129			2487
03:00	4		6					15:00	407		319				
03:15	5		8					15:15	457		312				
03:30	12		12					15:30	496		294				
03:45	6	27	16	42			69	15:45	468	1828	308	1233			3061
04:00	8		14					16:00	449		338				
04:15	15		23					16:15	444		286				
04:30	22		23					16:30	452		292				
04:45	25	70	30	90			160	16:45	475	1820	305	1221			3041
05:00	29		50					17:00	509		290				
05:15	39		56					17:15	452		271				
05:30	48		96					17:30	446		252				
05:45	54	170	94	296			466	17:45	395	1802	238	1051			2853
06:00	71		133					18:00	356		206				
06:15	103		182					18:15	345		198				
06:30	126		295					18:30	366		167				
06:45	179	479	299	909			1388	18:45	363	1430	165	736			2166
07:00	306		484					19:00	328		155				
07:15	301		582					19:15	285		150				
07:30	262		623					19:30	244		143				
07:45	247	1116	482	2171			3287	19:45	201	1058	150	598			1656
08:00	217		481					20:00	196		154				
08:15	228		471					20:15	199		167				
08:30	280		433					20:30	161		165				
08:45	213	938	412	1797			2735	20:45	154	710	140	626			1336
09:00	212		335					21:00	141		135				
09:15	214		305					21:15	143		72				
09:30	210		330					21:30	133		82				
09:45	206	842	283	1253			2095	21:45	120	537	88	377			914
10:00	224		267					22:00	104		74				
10:15	233		282					22:15	87		77				
10:30	255		274					22:30	85		62				
10:45	249	961	167	990			1951	22:45	86	362	66	279			641
11:00	235		277					23:00	66		58				
11:15	265		186					23:15	60		59				
11:30	270		287					23:30	65		54				
11:45	288	1058	236	986			2044	23:45	58	249	56	227			476
Total Vol.		5762		8605			**14367**			13542		9636			**23178**

GPS Coordinates: 32.270449, -110.875095

Daily Totals

NB	SB	EB	WB	Combined
19304	18241			**37545**

	AM			PM		
Split %	40.1%	59.9%	**38.3%**	58.4%	41.6%	**61.7%**
Peak Hour	11:30	07:00	**07:00**	16:30	14:45	**15:15**
Volume	1236	2171	**3287**	1888	1259	**3122**
P.H.F.	0.82	0.87	**0.93**	0.93	0.94	**0.99**

Prepared by: Field Data Services of Arizona/Veracity Traffic Group (520) 316-6745

Volumes for: Tuesday, February 25, 2020 City: Tucson Project #: 20-1100-005

Location: Project Access west of Craycroft Rd.

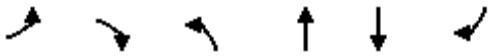
AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		0			12:00			5		3		
00:15			0		0			12:15			4		2		
00:30			0		1			12:30			4		3		
00:45			0	0	0	1	1	12:45			6	19	5	13	32
01:00			1		0			13:00			4		2		
01:15			0		0			13:15			2		1		
01:30			0		1			13:30			2		2		
01:45			0	1	2	3	4	13:45			5	13	2	7	20
02:00			0		1			14:00			6		1		
02:15			1		0			14:15			2		4		
02:30			0		0			14:30			3		3		
02:45			0	1	0	1	2	14:45			3	14	5	13	27
03:00			0		0			15:00			1		3		
03:15			0		0			15:15			5		2		
03:30			0		0			15:30			5		0		
03:45			0	0	0	0		15:45			5	16	2	7	23
04:00			0		0			16:00			6		6		
04:15			0		0			16:15			1		1		
04:30			0		1			16:30			2		3		
04:45			1	1	2	3	4	16:45			4	13	6	16	29
05:00			0		3			17:00			6		2		
05:15			0		3			17:15			4		0		
05:30			0		2			17:30			2		3		
05:45			2	2	2	10	12	17:45			3	15	3	8	23
06:00			7		2			18:00			6		5		
06:15			6		3			18:15			3		5		
06:30			1		1			18:30			3		3		
06:45			1	15	1	7	22	18:45			5	17	1	14	31
07:00			3		5			19:00			4		5		
07:15			1		1			19:15			5		1		
07:30			16		4			19:30			3		1		
07:45			7	27	3	13	40	19:45			9	21	3	10	31
08:00			3		3			20:00			3		3		
08:15			7		4			20:15			3		1		
08:30			7		8			20:30			5		1		
08:45			3	20	6	21	41	20:45			4	15	0	5	20
09:00			3		7			21:00			4		2		
09:15			4		4			21:15			4		0		
09:30			5		7			21:30			6		2		
09:45			5	17	4	22	39	21:45			2	16	2	6	22
10:00			3		7			22:00			2		1		
10:15			6		2			22:15			2		0		
10:30			5		5			22:30			2		1		
10:45			4	18	4	18	36	22:45			2	8	2	4	12
11:00			3		4			23:00			6		0		
11:15			7		2			23:15			2		2		
11:30			5		6			23:30			3		1		
11:45			2	17	2	14	31	23:45			2	13	2	5	18
Total Vol.				119		113	**232**					180		108	**288**

GPS Coordinates: 32.270730, -110.875540

Daily Totals

NB	SB	EB	WB	Combined
		299	221	**520**

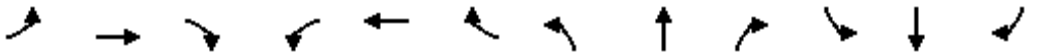
	AM			PM		
Split %	51.3%	48.7%	**44.6%**	62.5%	37.5%	**55.4%**
Peak Hour	07:30	08:15	**07:30**	15:15	16:00	**12:00**
Volume	33	25	**47**	21	16	**32**
P.H.F.	0.52	0.78	**0.59**	0.88	0.67	**0.73**



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	38	53	1035	1983	74
Future Volume (veh/h)	25	38	53	1035	1983	74
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	66	62	1203	2228	83
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	109	97	205	2969	2584	96
Arrive On Green	0.06	0.06	0.04	0.84	0.74	0.74
Sat Flow, veh/h	1781	1585	1781	3647	3588	129
Grp Volume(v), veh/h	43	66	62	1203	1126	1185
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1847
Q Serve(g_s), s	2.0	3.6	0.6	7.3	39.3	40.7
Cycle Q Clear(g_c), s	2.0	3.6	0.6	7.3	39.3	40.7
Prop In Lane	1.00	1.00	1.00			0.07
Lane Grp Cap(c), veh/h	109	97	205	2969	1314	1366
V/C Ratio(X)	0.39	0.68	0.30	0.41	0.86	0.87
Avail Cap(c_a), veh/h	370	329	234	2969	1314	1366
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	39.4	40.1	18.7	1.8	8.1	8.3
Incr Delay (d2), s/veh	2.3	8.0	0.8	0.4	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.3	1.0	1.2	13.3	14.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.7	48.1	19.6	2.2	15.5	15.9
LnGrp LOS	D	D	B	A	B	B
Approach Vol, veh/h	109			1265	2311	
Approach Delay, s/veh	45.6			3.0	15.7	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.4		9.9	8.4	69.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		72.9		18.1	5.3	63.1
Max Q Clear Time (g_c+I1), s		9.3		5.6	2.6	42.7
Green Ext Time (p_c), s		12.9		0.2	0.0	17.8

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	291	164	654	520	158	163	635	327	207	1332	43
Future Volume (veh/h)	43	291	164	654	520	158	163	635	327	207	1332	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	303	171	696	553	168	177	690	355	252	1624	52
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	479	214	774	730	326	194	963	785	350	1275	568
Arrive On Green	0.15	0.13	0.13	0.22	0.21	0.21	0.11	0.27	0.27	0.20	0.36	0.36
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	45	303	171	696	553	168	177	690	355	252	1624	52
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.3	8.4	10.9	20.3	15.2	9.8	10.2	18.2	0.0	13.7	37.2	2.3
Cycle Q Clear(g_c), s	2.3	8.4	10.9	20.3	15.2	9.8	10.2	18.2	0.0	13.7	37.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	479	214	774	730	326	194	963	785	350	1275	568
V/C Ratio(X)	0.16	0.63	0.80	0.90	0.76	0.52	0.91	0.72	0.45	0.72	1.27	0.09
Avail Cap(c_a), veh/h	273	617	275	850	1292	576	194	963	785	350	1275	568
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	42.4	43.5	39.1	38.8	36.6	45.7	34.2	17.0	39.0	33.3	22.1
Incr Delay (d2), s/veh	0.3	1.4	12.1	11.8	1.6	1.3	40.8	4.6	1.9	7.0	129.6	0.3
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	1.0	3.7	4.9	9.6	6.6	3.8	6.5	8.1	5.6	6.4	37.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	43.8	55.6	50.9	40.4	37.9	86.5	38.8	18.9	46.0	162.9	22.4
LnGrp LOS	D	D	E	D	D	D	F	D	B	D	F	C
Approach Vol, veh/h		519			1417			1222			1928	
Approach Delay, s/veh		47.2			45.3			39.9			143.8	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.9	32.6	27.7	18.5	15.8	41.7	20.4	25.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	20.4	28.1	25.5	18.0	11.3	37.2	5.8	37.7
Max Q Clear Time (g_c+I1), s	15.7	20.2	22.3	12.9	12.2	39.2	4.3	17.2
Green Ext Time (p_c), s	0.3	3.4	0.9	1.1	0.0	0.0	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	81.5
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	8	4	1110	2163	9
Future Vol, veh/h	5	8	4	1110	2163	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	46	46	91	91	87	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	17	4	1220	2486	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3122	1261	2522	0	-	0
Stage 1	2504	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 9	161	176	-	-	-
Stage 1	47	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 9	161	176	-	-	-
Mov Cap-2 Maneuver	40	-	-	-	-	-
Stage 1	46	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	66.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	176	-	40	161	-	-
HCM Lane V/C Ratio	0.025	-	0.272	0.108	-	-
HCM Control Delay (s)	26	-	125.7	30.1	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.9	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

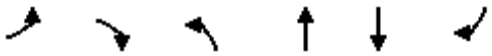
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	524	6	1	948	7	7
Future Vol, veh/h	524	6	1	948	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	94	94	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	576	7	1	1009	8	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	583	0	1591	580
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	1011	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	991	-	118	514
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	991	-	118	514
Mov Cap-2 Maneuver	-	-	-	-	118	-
Stage 1	-	-	-	-	560	-
Stage 2	-	-	-	-	352	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24.9
HCM LOS			C

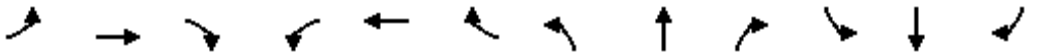
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	118	514	-	-	991	-
HCM Lane V/C Ratio	0.067	0.015	-	-	0.001	-
HCM Control Delay (s)	37.7	12.1	-	-	8.6	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	50	47	1749	1008	44
Future Volume (veh/h)	60	50	47	1749	1008	44
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	86	55	2034	1133	49
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	458	408	339	2183	1656	72
Arrive On Green	0.26	0.26	0.07	0.61	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3564	150
Grp Volume(v), veh/h	103	86	55	2034	580	602
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1843
Q Serve(g_s), s	3.2	3.0	0.9	36.1	17.7	17.8
Cycle Q Clear(g_c), s	3.2	3.0	0.9	36.1	17.7	17.8
Prop In Lane	1.00	1.00	1.00			0.08
Lane Grp Cap(c), veh/h	458	408	339	2183	848	880
V/C Ratio(X)	0.22	0.21	0.16	0.93	0.68	0.68
Avail Cap(c_a), veh/h	458	408	339	2183	848	880
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.5	20.4	9.6	12.2	14.2	14.2
Incr Delay (d2), s/veh	1.1	1.2	1.0	8.8	4.5	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.0	0.4	13.6	7.3	7.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.6	21.6	10.6	20.9	18.7	18.5
LnGrp LOS	C	C	B	C	B	B
Approach Vol, veh/h	189			2089	1182	
Approach Delay, s/veh	21.6			20.7	18.6	
Approach LOS	C			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.5		22.5	9.6	37.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		43.0		18.0	5.1	33.4
Max Q Clear Time (g_c+I1), s		38.1		5.2	2.9	19.8
Green Ext Time (p_c), s		4.4		0.4	0.0	6.7

Intersection Summary		
HCM 6th Ctrl Delay		20.0
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	598	145	320	327	136	172	1215	506	220	841	32
Future Volume (veh/h)	92	598	145	320	327	136	172	1215	506	220	841	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	623	151	340	348	145	187	1321	550	268	1026	39
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	700	312	410	483	215	328	1167	708	276	1063	474
Arrive On Green	0.18	0.20	0.20	0.12	0.14	0.14	0.18	0.33	0.33	0.16	0.30	0.30
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	96	623	151	340	348	145	187	1321	550	268	1026	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.2	15.3	7.6	8.6	8.4	7.8	8.6	29.4	15.7	13.4	25.5	1.6
Cycle Q Clear(g_c), s	4.2	15.3	7.6	8.6	8.4	7.8	8.6	29.4	15.7	13.4	25.5	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	700	312	410	483	215	328	1167	708	276	1063	474
V/C Ratio(X)	0.30	0.89	0.48	0.83	0.72	0.67	0.57	1.13	0.78	0.97	0.96	0.08
Avail Cap(c_a), veh/h	320	714	319	413	762	340	328	1167	708	276	1063	474
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	35.0	31.9	38.6	37.1	36.8	33.3	30.1	21.0	37.6	30.9	22.5
Incr Delay (d2), s/veh	0.5	13.2	1.2	13.2	2.0	3.6	2.3	70.7	8.2	45.6	20.3	0.3
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	1.8	7.7	2.9	4.3	3.7	3.2	3.7	22.9	5.9	9.0	13.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	48.2	33.1	51.8	39.1	40.4	35.6	100.8	29.1	83.2	51.3	22.9
LnGrp LOS	C	D	C	D	D	D	D	F	C	F	D	C
Approach Vol, veh/h		870			833			2058			1333	
Approach Delay, s/veh		43.8			44.5			75.7			56.8	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	33.9	15.1	22.1	21.0	31.3	20.6	16.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.9	29.4	10.7	18.0	16.5	26.8	9.5	19.2
Max Q Clear Time (g_c+I1), s	15.4	31.4	10.6	17.3	10.6	27.5	6.2	10.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.2	0.0	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	60.2
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	6	4	1876	1167	8
Future Vol, veh/h	7	6	4	1876	1167	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	92	92	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	4	2039	1216	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2248	612	1224	0	-	0
Stage 1	1220	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	35	436	565	-	-	-
Stage 1	242	-	-	-	-	-
Stage 2	306	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	35	436	565	-	-	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	240	-	-	-	-	-
Stage 2	306	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	565	-	138	436	-	-
HCM Lane V/C Ratio	0.008	-	0.094	0.025	-	-
HCM Control Delay (s)	11.4	-	33.8	13.5	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	832	7	3	507	2	4
Future Vol, veh/h	832	7	3	507	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	92	92	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	924	8	3	551	4	8

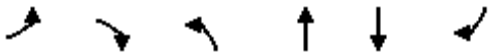
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	932	0	1485	928
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	557	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	734	-	137	325
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	574	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	734	-	136	325
Mov Cap-2 Maneuver	-	-	-	-	136	-
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	572	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	21.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	136	325	-	-	734	-
HCM Lane V/C Ratio	0.029	0.025	-	-	0.004	-
HCM Control Delay (s)	32.3	16.4	-	-	9.9	-
HCM Lane LOS	D	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
3: Craycroft Road & St Gregory School

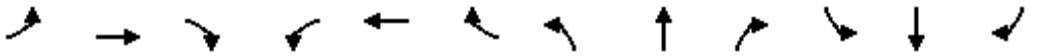
06/01/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	40	55	1077	2063	77
Future Volume (veh/h)	26	40	55	1077	2063	77
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	69	64	1252	2318	87
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	111	99	188	3006	2648	99
Arrive On Green	0.06	0.06	0.04	0.85	0.76	0.76
Sat Flow, veh/h	1781	1585	1781	3647	3587	130
Grp Volume(v), veh/h	45	69	64	1252	1172	1233
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1847
Q Serve(g_s), s	2.4	4.2	0.7	8.2	45.9	47.7
Cycle Q Clear(g_c), s	2.4	4.2	0.7	8.2	45.9	47.7
Prop In Lane	1.00	1.00	1.00			0.07
Lane Grp Cap(c), veh/h	111	99	188	3006	1347	1400
V/C Ratio(X)	0.41	0.70	0.34	0.42	0.87	0.88
Avail Cap(c_a), veh/h	329	293	209	3006	1347	1400
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	44.2	45.0	23.2	1.8	8.4	8.6
Incr Delay (d2), s/veh	2.4	8.6	1.1	0.4	7.9	8.3
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	0.2	1.2	1.5	15.7	17.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.6	53.6	24.3	2.2	16.3	16.9
LnGrp LOS	D	D	C	A	B	B
Approach Vol, veh/h	114			1316	2405	
Approach Delay, s/veh	50.9			3.3	16.6	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		87.4		10.6	8.6	78.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		82.9		18.1	5.3	73.1
Max Q Clear Time (g_c+I1), s		10.2		6.2	2.7	49.7
Green Ext Time (p_c), s		14.0		0.2	0.0	20.7

Intersection Summary		
HCM 6th Ctrl Delay	13.1	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	303	171	680	541	164	170	661	340	215	1386	45
Future Volume (veh/h)	45	303	171	680	541	164	170	661	340	215	1386	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	316	178	723	576	174	185	718	370	262	1690	55
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	491	219	793	753	336	191	950	787	346	1257	561
Arrive On Green	0.16	0.14	0.14	0.23	0.21	0.21	0.11	0.27	0.27	0.19	0.35	0.35
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	47	316	178	723	576	174	185	718	370	262	1690	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.4	8.8	11.5	21.4	16.0	10.2	10.9	19.5	0.0	14.6	37.2	2.4
Cycle Q Clear(g_c), s	2.4	8.8	11.5	21.4	16.0	10.2	10.9	19.5	0.0	14.6	37.2	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	491	219	793	753	336	191	950	787	346	1257	561
V/C Ratio(X)	0.17	0.64	0.81	0.91	0.76	0.52	0.97	0.76	0.47	0.76	1.34	0.10
Avail Cap(c_a), veh/h	277	608	271	838	1274	568	191	950	787	346	1257	561
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	42.9	44.0	39.5	39.0	36.7	46.7	35.4	17.4	40.0	34.0	22.7
Incr Delay (d2), s/veh	0.3	1.6	14.0	13.7	1.7	1.2	55.2	5.6	2.0	9.3	160.4	0.3
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	3.9	5.3	10.4	7.0	4.0	7.6	8.8	6.0	7.0	42.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	44.5	58.0	53.2	40.6	37.9	101.9	41.0	19.4	49.4	194.3	23.1
LnGrp LOS	D	D	E	D	D	D	F	D	B	D	F	C
Approach Vol, veh/h		541			1473			1273			2007	
Approach Delay, s/veh		48.4			46.5			43.6			170.7	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.9	32.6	28.6	19.0	15.8	41.7	20.9	26.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	20.4	28.1	25.5	18.0	11.3	37.2	5.8	37.7
Max Q Clear Time (g_c+I1), s	16.6	21.5	23.4	13.5	12.9	39.2	4.4	18.0
Green Ext Time (p_c), s	0.3	3.1	0.7	1.1	0.0	0.0	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	93.1
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	8	4	1155	2250	9
Future Vol, veh/h	5	8	4	1155	2250	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	46	46	91	91	87	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	17	4	1269	2586	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3247	1311	2622	0	-	0
Stage 1	2604	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 7	149	160	-	-	-
Stage 1	41	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 7	149	160	-	-	-
Mov Cap-2 Maneuver	35	-	-	-	-	-
Stage 1	40	-	-	-	-	-
Stage 2	485	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	77.1	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	160	-	35	149	-	-
HCM Lane V/C Ratio	0.027	-	0.311	0.117	-	-
HCM Control Delay (s)	28.1	-	148.8	32.3	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

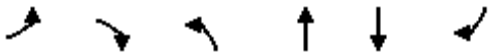
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	546	6	1	986	8	8
Future Vol, veh/h	546	6	1	986	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	94	94	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	600	7	1	1049	9	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	607	0	1655	604
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	1051	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	971	-	108	498
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	336	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	971	-	108	498
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	336	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	26.9
HCM LOS			D

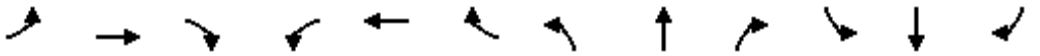
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	108	498	-	-	971	-
HCM Lane V/C Ratio	0.084	0.018	-	-	0.001	-
HCM Control Delay (s)	41.4	12.4	-	-	8.7	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	52	49	1820	1049	45
Future Volume (veh/h)	63	52	49	1820	1049	45
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	90	57	2116	1179	51
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	458	408	327	2183	1656	72
Arrive On Green	0.26	0.26	0.07	0.61	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3564	150
Grp Volume(v), veh/h	109	90	57	2116	603	627
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1843
Q Serve(g_s), s	3.4	3.1	1.0	39.7	18.8	18.8
Cycle Q Clear(g_c), s	3.4	3.1	1.0	39.7	18.8	18.8
Prop In Lane	1.00	1.00	1.00			0.08
Lane Grp Cap(c), veh/h	458	408	327	2183	848	880
V/C Ratio(X)	0.24	0.22	0.17	0.97	0.71	0.71
Avail Cap(c_a), veh/h	458	408	327	2183	848	880
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.6	20.5	10.0	12.9	14.5	14.5
Incr Delay (d2), s/veh	1.2	1.2	1.2	13.3	5.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.2	0.4	16.1	7.8	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.8	21.7	11.1	26.1	19.5	19.4
LnGrp LOS	C	C	B	C	B	B
Approach Vol, veh/h	199			2173	1230	
Approach Delay, s/veh	21.8			25.8	19.5	
Approach LOS	C			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.5		22.5	9.6	37.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		43.0		18.0	5.1	33.4
Max Q Clear Time (g_c+I1), s		41.7		5.4	3.0	20.8
Green Ext Time (p_c), s		1.2		0.4	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	622	151	333	340	141	179	1264	526	229	875	33
Future Volume (veh/h)	96	622	151	333	340	141	179	1264	526	229	875	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	648	157	354	362	150	195	1374	572	279	1067	40
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	711	317	411	496	221	327	1161	706	275	1058	472
Arrive On Green	0.18	0.20	0.20	0.12	0.14	0.14	0.18	0.33	0.33	0.15	0.30	0.30
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	100	648	157	354	362	150	195	1374	572	279	1067	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.4	16.1	7.9	9.1	8.8	8.1	9.0	29.4	17.5	13.9	26.8	1.6
Cycle Q Clear(g_c), s	4.4	16.1	7.9	9.1	8.8	8.1	9.0	29.4	17.5	13.9	26.8	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	711	317	411	496	221	327	1161	706	275	1058	472
V/C Ratio(X)	0.31	0.91	0.50	0.86	0.73	0.68	0.60	1.18	0.81	1.01	1.01	0.08
Avail Cap(c_a), veh/h	319	711	317	411	758	338	327	1161	706	275	1058	472
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	35.2	32.0	38.9	37.1	36.8	33.7	30.3	21.6	38.0	31.6	22.8
Incr Delay (d2), s/veh	0.6	16.1	1.2	16.8	2.1	3.6	3.0	91.6	9.7	57.9	29.7	0.4
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	1.9	8.3	3.0	4.7	3.9	3.3	4.0	26.2	6.8	10.1	14.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	51.3	33.2	55.7	39.2	40.4	36.7	121.9	31.4	96.0	61.3	23.1
LnGrp LOS	C	D	C	E	D	D	D	F	C	F	F	C
Approach Vol, veh/h		905			866			2141			1386	
Approach Delay, s/veh		46.1			46.1			90.0			67.2	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	33.9	15.2	22.5	21.0	31.3	20.6	17.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.9	29.4	10.7	18.0	16.5	26.8	9.5	19.2
Max Q Clear Time (g_c+I1), s	15.9	31.4	11.1	18.1	11.0	28.8	6.4	10.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	0.0	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	69.4
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	6	4	1952	1214	8
Future Vol, veh/h	7	6	4	1952	1214	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	92	92	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	4	2122	1265	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2338	637	1273	0	-	0
Stage 1	1269	-	-	-	-	-
Stage 2	1069	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	31	420	541	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	291	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	31	420	541	-	-	-
Mov Cap-2 Maneuver	130	-	-	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	291	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	541	-	130	420	-	-
HCM Lane V/C Ratio	0.008	-	0.1	0.026	-	-
HCM Control Delay (s)	11.7	-	35.7	13.8	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	866	8	3	527	2	4
Future Vol, veh/h	866	8	3	527	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	92	92	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	962	9	3	573	4	8

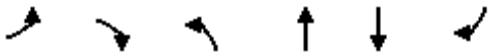
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	971	0	1546	967
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	710	-	126	308
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	560	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	710	-	125	308
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	558	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	22.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	125	308	-	-	710	-
HCM Lane V/C Ratio	0.032	0.026	-	-	0.005	-
HCM Control Delay (s)	34.8	17	-	-	10.1	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
3: Craycroft Road & St Gregory School

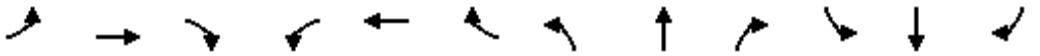
05/31/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	40	55	1087	2071	77
Future Volume (veh/h)	26	40	55	1087	2071	77
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	69	64	1264	2327	87
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	111	99	186	3006	2648	98
Arrive On Green	0.06	0.06	0.04	0.85	0.76	0.76
Sat Flow, veh/h	1781	1585	1781	3647	3588	130
Grp Volume(v), veh/h	45	69	64	1264	1176	1238
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1847
Q Serve(g_s), s	2.4	4.2	0.7	8.3	46.5	48.2
Cycle Q Clear(g_c), s	2.4	4.2	0.7	8.3	46.5	48.2
Prop In Lane	1.00	1.00	1.00			0.07
Lane Grp Cap(c), veh/h	111	99	186	3006	1347	1400
V/C Ratio(X)	0.41	0.70	0.34	0.42	0.87	0.88
Avail Cap(c_a), veh/h	329	293	208	3006	1347	1400
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	44.2	45.0	23.6	1.8	8.5	8.7
Incr Delay (d2), s/veh	2.4	8.6	1.1	0.4	8.1	8.5
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	0.2	1.2	1.5	16.0	17.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.6	53.6	24.7	2.2	16.6	17.2
LnGrp LOS	D	D	C	A	B	B
Approach Vol, veh/h	114			1328	2414	
Approach Delay, s/veh	50.9			3.3	16.9	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		87.4		10.6	8.6	78.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		82.9		18.1	5.3	73.1
Max Q Clear Time (g_c+I1), s		10.3		6.2	2.7	50.2
Green Ext Time (p_c), s		14.2		0.2	0.0	20.3

Intersection Summary		
HCM 6th Ctrl Delay	13.2	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	304	176	683	541	164	174	662	342	215	1387	45
Future Volume (veh/h)	46	304	176	683	541	164	174	662	342	215	1387	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	317	183	727	576	174	189	720	372	262	1691	55
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	500	223	794	752	336	191	945	786	344	1251	558
Arrive On Green	0.16	0.14	0.14	0.23	0.21	0.21	0.11	0.27	0.27	0.19	0.35	0.35
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	48	317	183	727	576	174	189	720	372	262	1691	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.5	8.9	11.9	21.7	16.1	10.3	11.2	19.7	0.0	14.7	37.2	2.5
Cycle Q Clear(g_c), s	2.5	8.9	11.9	21.7	16.1	10.3	11.2	19.7	0.0	14.7	37.2	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	500	223	794	752	336	191	945	786	344	1251	558
V/C Ratio(X)	0.17	0.63	0.82	0.92	0.77	0.52	0.99	0.76	0.47	0.76	1.35	0.10
Avail Cap(c_a), veh/h	283	605	270	834	1268	566	191	945	786	344	1251	558
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	42.8	44.1	39.7	39.2	36.9	47.1	35.7	17.5	40.3	34.2	23.0
Incr Delay (d2), s/veh	0.3	1.6	15.3	14.2	1.7	1.2	62.8	5.8	2.0	9.6	163.5	0.4
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	4.0	5.5	10.5	7.1	4.0	8.1	8.9	6.1	7.1	43.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	44.4	59.4	53.9	40.8	38.1	109.9	41.5	19.6	50.0	197.8	23.3
LnGrp LOS	D	D	E	D	D	D	F	D	B	D	F	C
Approach Vol, veh/h		548			1477			1281			2008	
Approach Delay, s/veh		48.9			46.9			45.2			173.7	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.9	32.6	28.8	19.4	15.8	41.7	21.3	26.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	20.4	28.1	25.5	18.0	11.3	37.2	5.8	37.7
Max Q Clear Time (g_c+I1), s	16.7	21.7	23.7	13.9	13.2	39.2	4.5	18.1
Green Ext Time (p_c), s	0.3	3.1	0.6	1.0	0.0	0.0	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	94.6
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	16	14	1155	2250	18
Future Vol, veh/h	13	16	14	1155	2250	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	46	46	91	91	87	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	35	15	1269	2586	72

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3287	1329	2658	0	-	0
Stage 1	2622	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 7	145	155	-	-	-
Stage 1	40	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 6	145	155	-	-	-
Mov Cap-2 Maneuver	31	-	-	-	-	-
Stage 1	36	-	-	-	-	-
Stage 2	473	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	164.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	155	-	31	145	-	-
HCM Lane V/C Ratio	0.099	-	0.912	0.24	-	-
HCM Control Delay (s)	30.8	-	$ 320.4	37.5	-	-
HCM Lane LOS	D	-	F	E	-	-
HCM 95th %tile Q(veh)	0.3	-	3.1	0.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	551	7	1	990	10	10
Future Vol, veh/h	551	7	1	990	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	94	94	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	605	8	1	1053	11	11

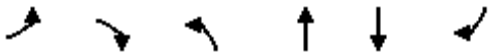
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	613	0	1664	609
Stage 1	-	-	-	-	609	-
Stage 2	-	-	-	-	1055	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	966	-	107	495
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	335	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	966	-	107	495
Mov Cap-2 Maneuver	-	-	-	-	107	-
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	335	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	27.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	107	495	-	-	966	-
HCM Lane V/C Ratio	0.106	0.023	-	-	0.001	-
HCM Control Delay (s)	42.6	12.4	-	-	8.7	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
3: Craycroft Road & St Gregory School

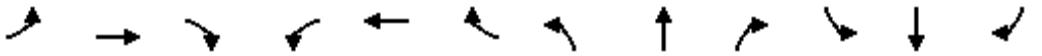
05/31/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	52	49	1831	1059	45
Future Volume (veh/h)	63	52	49	1831	1059	45
Initial Q (Qb), veh	0	0	0	0	0	0
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	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	90	57	2129	1190	51
Peak Hour Factor	0.58	0.58	0.86	0.86	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	458	408	324	2183	1657	71
Arrive On Green	0.26	0.26	0.07	0.61	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3565	149
Grp Volume(v), veh/h	109	90	57	2129	609	632
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1844
Q Serve(g_s), s	3.4	3.1	1.0	40.3	19.1	19.1
Cycle Q Clear(g_c), s	3.4	3.1	1.0	40.3	19.1	19.1
Prop In Lane	1.00	1.00	1.00			0.08
Lane Grp Cap(c), veh/h	458	408	324	2183	848	880
V/C Ratio(X)	0.24	0.22	0.18	0.98	0.72	0.72
Avail Cap(c_a), veh/h	458	408	324	2183	848	880
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	20.6	20.5	10.1	13.0	14.6	14.6
Incr Delay (d2), s/veh	1.2	1.2	1.2	14.3	5.2	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.2	0.4	16.6	8.0	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.8	21.7	11.2	27.2	19.7	19.6
LnGrp LOS	C	C	B	C	B	B
Approach Vol, veh/h	199			2186	1241	
Approach Delay, s/veh	21.8			26.8	19.7	
Approach LOS	C			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.5		22.5	9.6	37.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		43.0		18.0	5.1	33.4
Max Q Clear Time (g_c+I1), s		42.3		5.4	3.0	21.1
Green Ext Time (p_c), s		0.6		0.4	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	623	157	337	341	141	184	1265	529	229	876	34
Future Volume (veh/h)	96	623	157	337	341	141	184	1265	529	229	876	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	649	164	359	363	150	200	1375	575	279	1068	41
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	711	317	411	497	222	327	1161	706	275	1058	472
Arrive On Green	0.18	0.20	0.20	0.12	0.14	0.14	0.18	0.33	0.33	0.15	0.30	0.30
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	100	649	164	359	363	150	200	1375	575	279	1068	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.4	16.1	8.3	9.2	8.8	8.1	9.3	29.4	17.7	13.9	26.8	1.7
Cycle Q Clear(g_c), s	4.4	16.1	8.3	9.2	8.8	8.1	9.3	29.4	17.7	13.9	26.8	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	711	317	411	497	222	327	1161	706	275	1058	472
V/C Ratio(X)	0.31	0.91	0.52	0.87	0.73	0.68	0.61	1.18	0.81	1.01	1.01	0.09
Avail Cap(c_a), veh/h	319	711	317	411	758	338	327	1161	706	275	1058	472
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	35.2	32.1	39.0	37.1	36.8	33.8	30.3	21.7	38.0	31.6	22.8
Incr Delay (d2), s/veh	0.6	16.2	1.5	18.4	2.1	3.6	3.4	92.0	10.0	57.9	30.0	0.4
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	1.9	8.3	3.2	4.8	3.9	3.3	4.1	26.2	6.9	10.1	14.9	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	51.5	33.6	57.4	39.1	40.3	37.2	122.3	31.7	96.0	61.6	23.1
LnGrp LOS	C	D	C	E	D	D	D	F	C	F	F	C
Approach Vol, veh/h		913			872			2150			1388	
Approach Delay, s/veh		46.2			46.9			90.1			67.3	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	33.9	15.2	22.5	21.0	31.3	20.6	17.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.9	29.4	10.7	18.0	16.5	26.8	9.5	19.2
Max Q Clear Time (g_c+I1), s	15.9	31.4	11.2	18.1	11.3	28.8	6.4	10.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	0.0	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	69.6
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	16	15	1952	1214	19
Future Vol, veh/h	16	16	15	1952	1214	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	54	54	92	92	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	30	16	2122	1265	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2368	643	1285	0	-	0
Stage 1	1275	-	-	-	-	-
Stage 2	1093	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 29	416	536	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 28	416	536	-	-	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	219	-	-	-	-	-
Stage 2	283	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	536	-	122	416	-	-
HCM Lane V/C Ratio	0.03	-	0.243	0.071	-	-
HCM Control Delay (s)	11.9	-	43.7	14.3	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.9	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	872	10	5	532	4	5
Future Vol, veh/h	872	10	5	532	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	50	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	92	92	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	969	11	5	578	8	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	980	0	1563	975
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	588	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	704	-	123	305
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	555	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	704	-	122	305
Mov Cap-2 Maneuver	-	-	-	-	122	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	555	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	25.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	122	305	-	-	704	-
HCM Lane V/C Ratio	0.066	0.033	-	-	0.008	-
HCM Control Delay (s)	36.6	17.2	-	-	10.2	-
HCM Lane LOS	E	C	-	-	B	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-