Exhibit 5

Preliminary Sewer Report

For:

Wingfield Commons
Sparks, Nevada

Prepared for:

Foothills at Wingfield, LLC

Prepared by:

SHAW ENGINEERING

20 Vine Street
Reno, NV 89503

March 6, 2018

3-6-18

1.0 Introduction

The purpose of this preliminary report is to address the sanitary sewerage impacts that may result from the proposed Wingfield Commons development, in accordance with the City of Sparks development standards and sound engineering practices. This report will quantify the estimated sanitary sewer flows to be generated by the proposed project and will analyze the impacts of this development on the existing downstream facilities. Potential mitigation measures will also be discussed. It is anticipated that a more in-depth sewer report will be provided during the Tentative Map phase of the project.

2.0 Location and Background

The proposed development is located approximately eight miles north of Interstate 80 off of Vista Boulevard, within Section Eighteen (18), Township Twenty (20) North, Range Twenty-One (21) East, Mount Diablo Meridian, City of Sparks, County of Washoe, State of Nevada. The site is southeast of the existing Wingfield Springs Planned Development, south of the existing Foothills Planned Development, and directly east of Golden Eagle Regional Park. The property consists of three parcels identified by the Washoe County Assessor's Office as APN 084-550-02, 084-550-07 and 084-550-08.

The site is located in a broad, relatively flat valley east of Spanish Springs Valley, surrounded by the Pah Rah Range to the east, Spanish Springs Canyon to the south and Canoe Hill to the west. Surface drainage through the site is generally south-to-north, with an eventual connection to the main drainage channel that flows in a southerly direction through Spanish Springs Valley to the Truckee River via the North Truckee Drain along Sparks Boulevard.

The subject property is generally vacant with an unoccupied single-family residence and several outbuildings. The area to the west is developed as Golden Eagle Regional Park (GERP), opened in 2008. The area to the south, east and north is currently undeveloped BLM land. The site also abuts four smaller parcels that are outside of the city's incorporated limits.

The previous 2009 draft planned-development handbook, consisted of a mixed-use project containing residential, commercial and open space components, with an estimated peak sewer flow of approximately 563,000 gallons per day.

3.0 Project Description and Assumptions

The currently-proposed Wingfield Commons development will consist of up to 500 single-family dwelling units. Utilizing an average daily dry weather wastewater flow (ADWF) of 210 gallons per day per dwelling unit, the estimated daily flow for the project is 105,000 gallons per day. This is consistent with the November 2016 Sewer Model Update Report, prepared by Atkins. It is anticipated that the project will be phased over several years, with approximately 100 single-family homes built per phase.

4.0 Existing Sanitary Sewer Infrastructure

The subject property is not currently connected to the city sewer system. The nearest potential connection point is located approximately 1,800 feet northwest of the site, adjacent to the City of Sparks maintenance facility for GERP. This location currently contains a small lift station that conveys sewer flows from GERP via a force main to a gravity manhole located on the nearby fire station property. The gravity trunk main then flows generally in a northwesterly direction through several residential streets and cross-country easements to Cinnamon Drive, then west to Wingfield Springs Road, then southwest through the Wingfield Springs development to the existing 30-inch interceptor in Vista Boulevard, and eventually to the Truckee Meadows Water Reclamation Facility (TMWRF).

Based on information provided in a preliminary sewer capacity analysis prepared by Atkins on January 12, 2018, there are portions of the existing trunk sewer main that currently do not meet the city's "d/D" dry-weather flow (DWF) capacity criteria. These d/D criteria violations exist without the additional flows that would be generated by the proposed Wingfield Commons project. To address these violations, the November 2016 Sewer Model Update Report, prepared by Atkins proposed Capital Improvement Projects (CIP) #12 and #14 to upsize two existing segments of gravity sewer mains along Cinnamon Drive and Wingfield Springs Road. (Refer to the January 12, 2018 Atkins Report in Appendix A for maps and diagrams of the offsite trunk sewer main).

5.0 Proposed Sanitary Sewer Infrastructure

The proposed project will consist of a network of 8-inch gravity sewer mains located within the various proposed streets to collect flows from the individual dwelling units. The sewer mains shall be designed to provide a minimum velocity of 2 feet per second flowing half full. Sewer manholes will be provided at junctions and angle points, with spacings of no more than 400 feet for maintenance access. Because of an elevation conflict with the existing trapezoidal drainage channel located west of the site, a gravity connection cannot be provided to the nearest existing sewer manhole located on the fire station property. Therefore, it is anticipated that the existing lift station located east of the city maintenance building will need to be rebuilt, with a deeper wet well to allow a gravity connection from the proposed Wingfield Commons development. This scenario is preferred over having two separate lift stations.

Additionally, based on the January 12, 2018 Atkins Report, there is an existing section of cross-county 8-inch sewer main located southwest of Centaurus Drive that will require upsizing under full buildout conditions of the proposed Wingfield Commons development.

It is anticipated that a more in-depth analysis, based actual sewer flows will be required to establish a timeframe for the required off-site improvements, based on the number of lots constructed during each proposed phase of the project. Foothills at Wingfield, LLC will work with the city through the Tentative Map process to ensure all required offsite sewer improvements are properly planned and conditioned.

6.0 Conclusions

Full buildout of the proposed Wingfield Commons development will require certain off-site improvements to existing sewer infrastructure, including completion of CIP #12 and #14, upgrade of the existing lift station located adjacent to the city maintenance building, and upsizing of a section of 8-inch cross-county gravity sewer main located near Centaurus Drive.

The proposed improvements noted above will ensure there is adequate capacity within the city's sewer network to serve full buildout of the proposed development. The final implementation schedule of all offsite sewer system improvements will be coordinated with the City through the Tentative Map process.

Enclosures

Exhibit A – Wingfield Commons Preliminary Land Plan
Appendix A – January 12, 2018 Atkins Report prepared for the City of Sparks

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SCALE (FEET)

PRELIMINARY LAND PLAN

WINGFIELD COMMONS
SPARKS, NEVADA
MARCH 2018

EXHIBIT "A"

APPENDIX A

Memo

ATKINS

To:	Andy Hummel, P.E., City of Sparks
From:	Brian Janes, P.E., Atkins
Date:	January 12, 2018
Subject:	Golden Eagle Development-Capacity Analysis City of Sparks Sewer Model Update

Per the request of the City, Atkins performed a preliminary capacity analysis of the existing sanitary sewer system downstream of the proposed Golden Eagle Development (herein referred to as the "Project"). The purpose of this analysis was to determine the potential impacts to the existing sanitary sewer system resulting from the planned single family housing development proposed at the 59.92 acre parcel (APN: 084-550-02) located east along the Golden Eagle Trail (see attached **Figure 1**). This Project was originally planned to have 330 Single Family Residential dwelling units but per the latest information from the City of Sparks, the Project will now comprise of 500 dwelling units. The Project flows in the *2016 Sewer Model Update Technical Report* entered the hydraulic model at manhole SSN004820 at the intersection of the Spanish Springs Trail and Wingfield Comm Trail. However, as part of this study an 8 inch sewer line from SSN035828 (near Vista Blvd) to SSN004820 was modeled, and now the Project flow from this parcel enters the hydraulic model at SSN035828. This memorandum summarizes the preliminary findings from the analysis of the 8 inch sewer line and the additional number of dwelling units associated with the Project.

Wastewater Flows and Hydraulic Model

In modeling the wastewater generated from the proposed development, Atkins used the average daily dry weather wastewater flow (ADWF) unit generation rates recommended in **Table 3-7** of the *2016 Sewer Model Update Technical Report*. **Table 1** below summarizes the estimated wastewater flows generated from the new development.

Table 1 Wastewater Generation Model Loading

Proposed Development Land Use [1]	Recommended Unit Wastewater Generation Rate [2]	Average Daily Flow (gpd)
Single Family Residential (500 DU)	210 gpd/DU	105,000
	Total ADWF =	105,000

Notes:
[1] Total number of dwelling units (500) provided by City of Sparks in December 2017, is more than the units assumed (330) for this parcel at the time of developing buildout land use model for the *2016 Sewer Model Update Technical Report*
[2] Recommended unit wastewater generation rates referenced from the *2016 Sewer Model Update Technical Report*
• ADWF = average daily dry weather flow

These wastewater flows were loaded into the current version of a City of Sparks InfoSWMM hydraulic model (originally completed by Atkins, November 3, 2016 as part of the *2016 Sewer Model Update Technical Report*). The following models scenarios were simulated to determine the impact of the project: (1) existing condition dry weather flow (DWF) and wet weather flow (WWF) models (including the proposed Project anticipated flows) and (2) buildout condition dry and wet weather flow models (including the proposed Project anticipated flows).

Based on calibrated diurnal patterns for typical single family residential developments, the estimated peak dry weather flow (PDWF) from this development is approximately 0.143 MGD. Additionally, based on calibrated wet weather flow parameters determined in the *2016 Sewer Model Update Technical Report*, the estimated peak wet weather flow (PWWF) for this development is approximately 0.189 MGD.

Existing Condition Model Results

Figure 2 compares the d/D modeling results for the sewer system between the existing condition scenario and the existing condition plus the proposed development scenario to determine the potential downstream capacity impacts from the development. The existing condition plus the proposed development scenario includes the

estimated ADWF of 0.105 MGD from the proposed Project in the model simulation. The criteria used to evaluate the sewer system are listed in **Table 4-6** of the *2016 Sewer Model Update Technical Report.*

In the existing condition (without project), there is a d/D violation occurring at SSL015161, and immediately downstream of this conduit, the d/D values are close to 0.5, from Centaurus Dr to Cinnamon Dr. To address these violations, the 2016 Report proposed CIP 12 in Section 5.3.1 of the *2016 Sewer Model Update Technical Report.* The existing condition CIP consists of upsizing the sewer from Centaurus Dr to Cinnamon Dr (SSL015161 to SSL002982) from 10 inch and 12 inch to 15 inches.

As shown in **Figure 2**, the sewer flows from the proposed development results in minor d/D DWF criteria violations at multiple conduits from SSL015161 to SSL002987 (d/D = 0.52 to 0.64) along the Centaurus Dr to Cinnamon Dr sewer. These violations also include a violation (d/D = 0.64) at the end of the newly modeled 8 inch sewer line at SSL015546. In the existing condition model (without project), this line has a d/D of 0.5 which is at the criteria limit.

Buildout Condition Model Results

Figure 3 compares the d/D modeling results for the sewer system between the original buildout condition scenario developed in the 2016 Report and the buildout condition with the proposed development scenario to determine the potential future downstream capacity impacts from the 170 dwelling units proposed with the development.

The original buildout scenario in 2016 had assumed a total of 330 dwelling units for the Project which generated an ADWF value of 0.0693 MGD. However, per the latest City of Sparks information, the development will have 500 dwelling units and generates higher wastewater flows as compared to the original buildout condition, with an ADWF value of 0.105 MGD (ADWF increase of 0.0357 MGD).

In the original buildout condition, there are d/D DWF criteria violations occurring at multiple conduits from Centaurus Dr to Cinnamon Dr, from SSL001561 and SSL005781, caused by the proposed developments of Wingfield Springs and The Foothills at Wingfield springs, where the Project is located. To address these violations, the 2016 Report proposed buildout condition CIP 14 in Section 5.3.2 of the *2016 Sewer Model Update Technical Report*. The CIP consists of upsizing the Wingfield Springs Rd sewer (SSL002986 to SSL005755) from a 15 inch size to a 18 inch size pipe. Implementation of CIP 12 and 14 eliminate d/D violations downstream of the newly modeled 8 inch sewer line.

The 8 inch sewer line modeled as part of this study indicates there will be d/D violations towards its junction with Centaurus Dr sewer at SSL015546 and SSL002985. Implementing both CIPs (CIP 12 and CIP 14) reduces the d/D violations to 0.53 at SSL015546 and 0.51 at SSL002985 but does not eliminate the violations. If an additional improvements are constructed to increase these 3 pipe segments to 10 inches, the d/D violations are reduced to less than 0.42.

Conclusions

The updated higher number of dwelling units results in higher sewage generation from the Project, when compared with the original buildout condition. The higher flows result in d/D DWF criteria violations in the Centaurus Dr to Cinnamon Dr sewer line in the existing condition. There is also a violation in the 8 inch sewer line that has been modelled at its junction with the Centaurus sewer. CIP 12 was proposed in Section 5.3.1 of the *2016 Sewer Model Update Technical Report* and addresses the d/D violations in the Centaurus Dr sewer.

In the buildout condition in the 2016 Sewer Model Update, the Golden Eagle development combined with the other Wingfield Springs developments in the vicinity, and the consequent wastewater flows and d/D DWF criteria violations, triggered the formulation of CIP 14. The latest City information for the higher dwelling units on the Project parcels increases the generation of wastewater flows, and results in marginally higher d/D criteria violations , when compared with original buildout condition. Applying CIP 12 and CIP 14 addresses the d/D violations occurring in the Centaurus Dr to Wingfield Springs sewer, however does not address criteria violations in the newly modeled 8 inch sewer line.

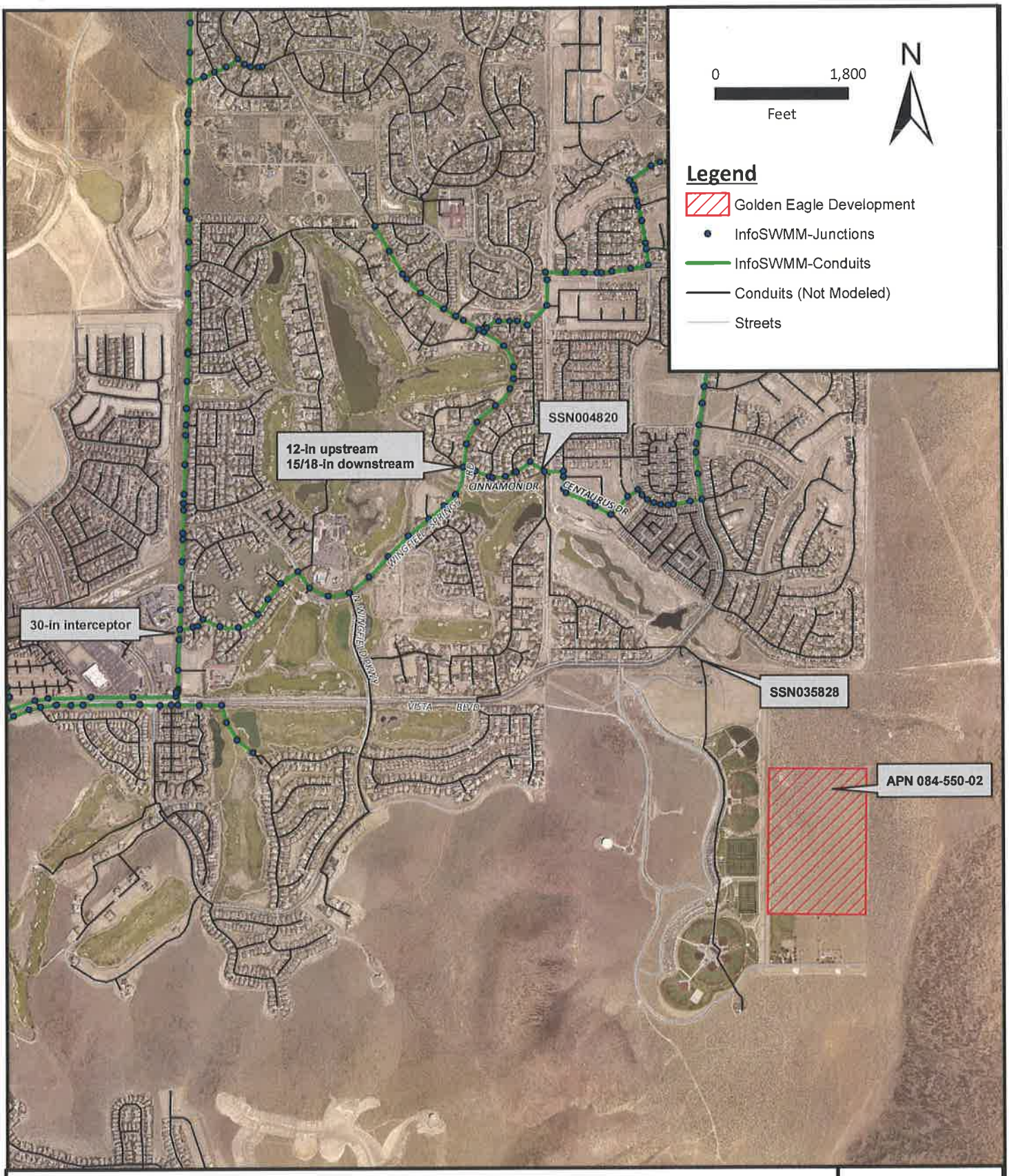
The 8 inch sewer line from SSN035828 to SSN004820 has marginal d/D violations even after implementing CIP 12 and CIP 14 near its junction with the Centaurus Dr sewer. Two pipes on this line, SSL015546 and SSL002985 have d/D values of 0.53 and 0.51 respectively. Increasing the pipe size from SSL002985 to

SSL015546 from 8 inches to 10 inches (total length 615 ft) removes these violations. However, these 8 inch sewer violations can be approached in different ways.

- Since, the criteria violations in the 8 inch sewer line are marginal, and are localized, with no further violations to the system downstream after the implementation of CIP 12 and CIP 14, the City may want to confirm model criteria violations with actual performance data prior to deciding whether to upsize the 8 inch sewer line.
- Upgrade the 8 inch sewer from SSL002985 to SSL015546 to 10 inches. This completely removes the d/D violations in this line

The existing system does not have adequate capacity to convey the project flows and meet criteria without implementation of CIPs. In the buildout condition without CIPs, the criteria violations increase. Implementing planned CIPs 12 and 14 appear to adequately address sewer lines modeled with the master plan however minor criteria violations remain in the newly modeled 8 inch sewer line to the project. Increasing three sections of the 8 inch sewer line to 10 inches is expected to adequately address these violations in both the existing condition and buildout condition.

APPENDIX A



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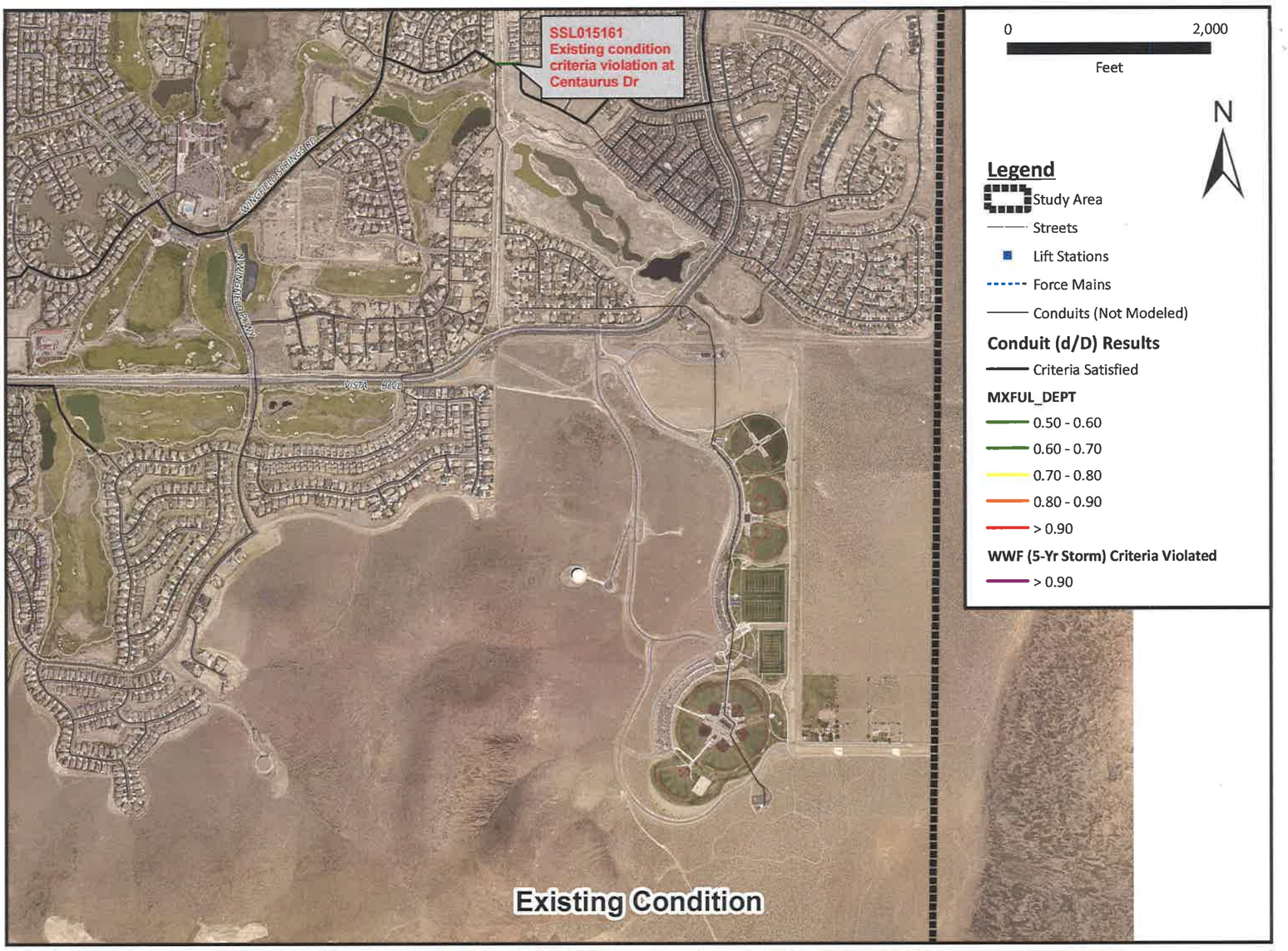
City of Sparks

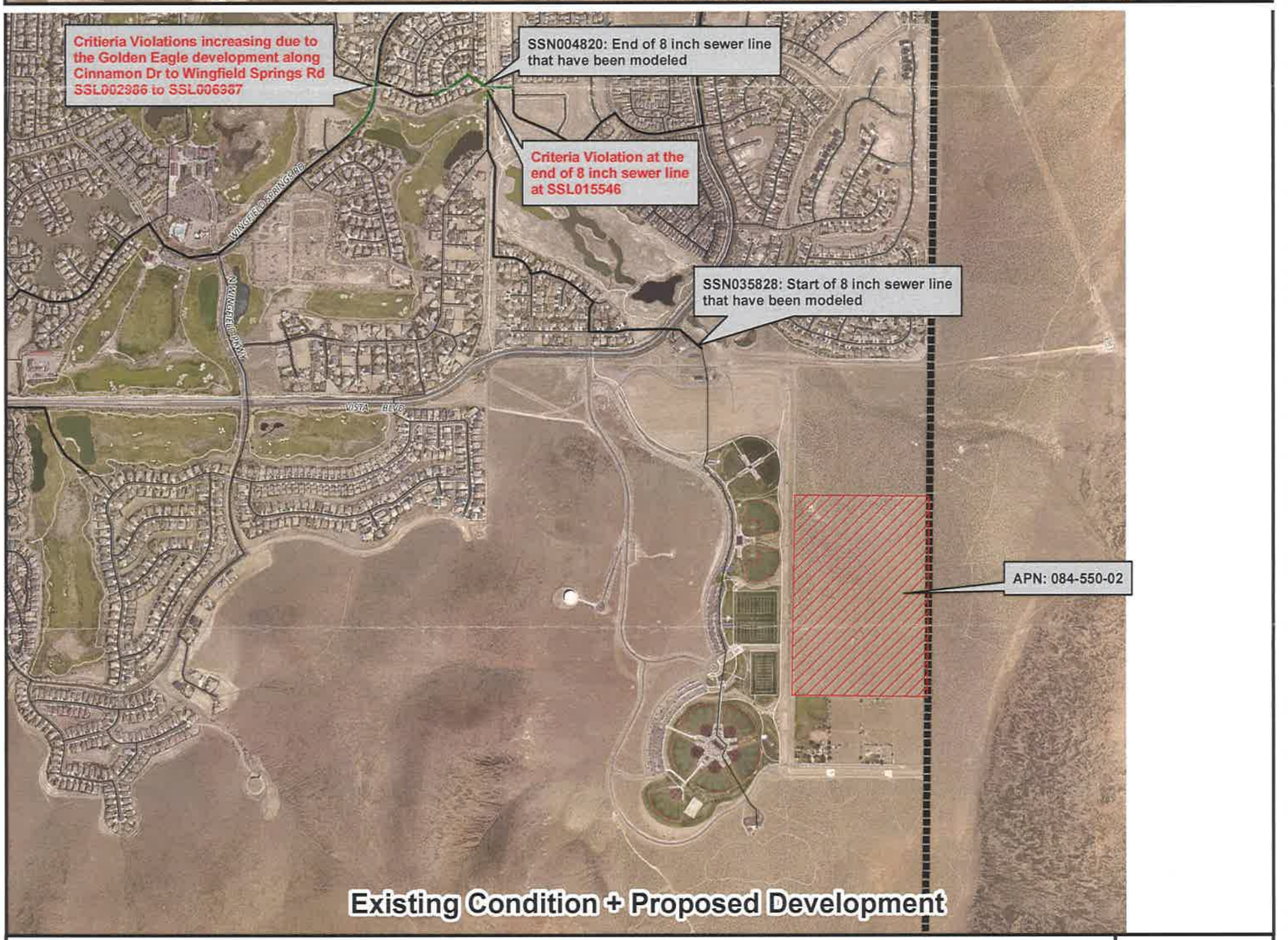
Sewer Model Update

Golden Eagle Development - Vicinity Map

Figure 1

APPENDIX A





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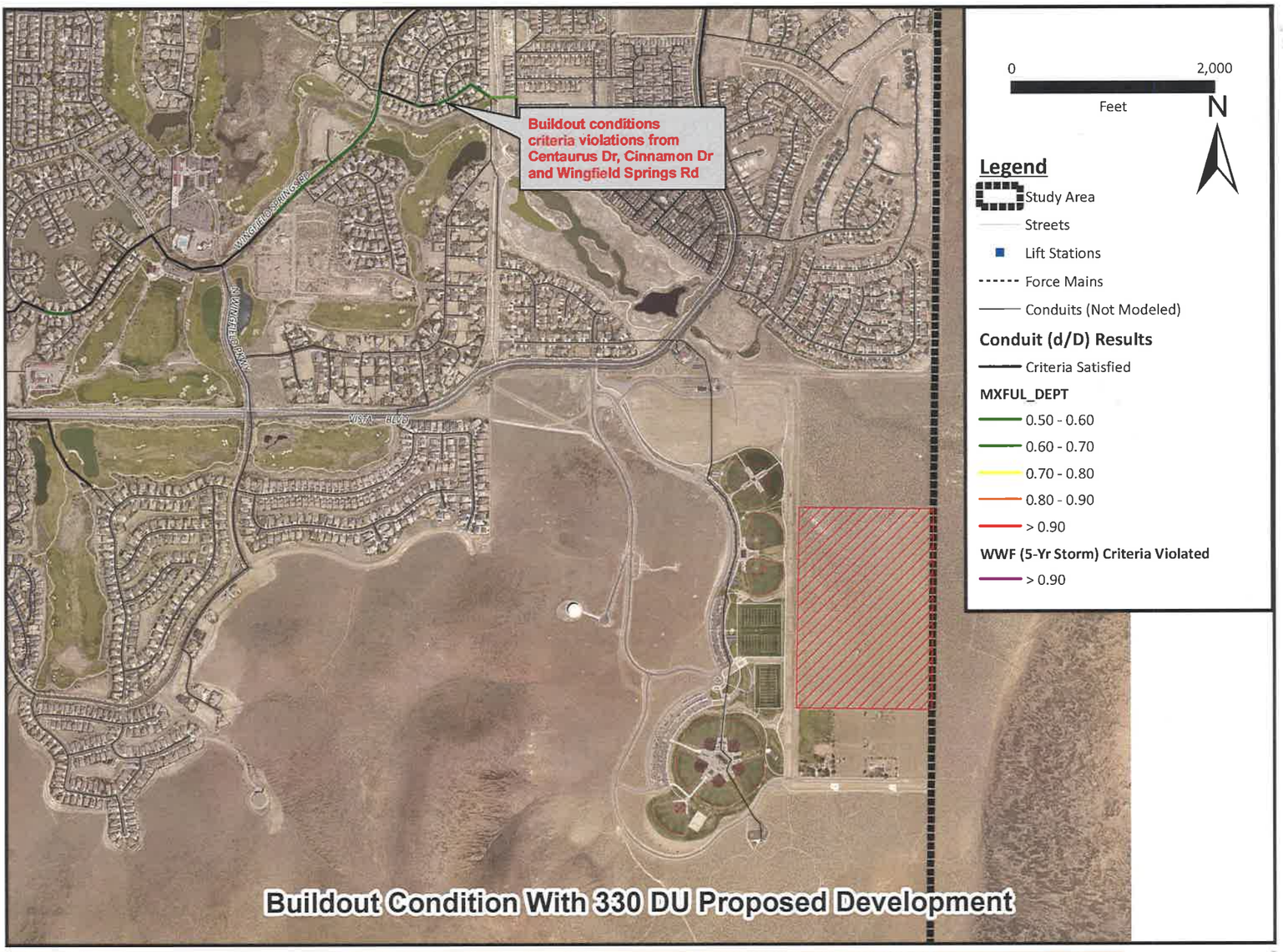
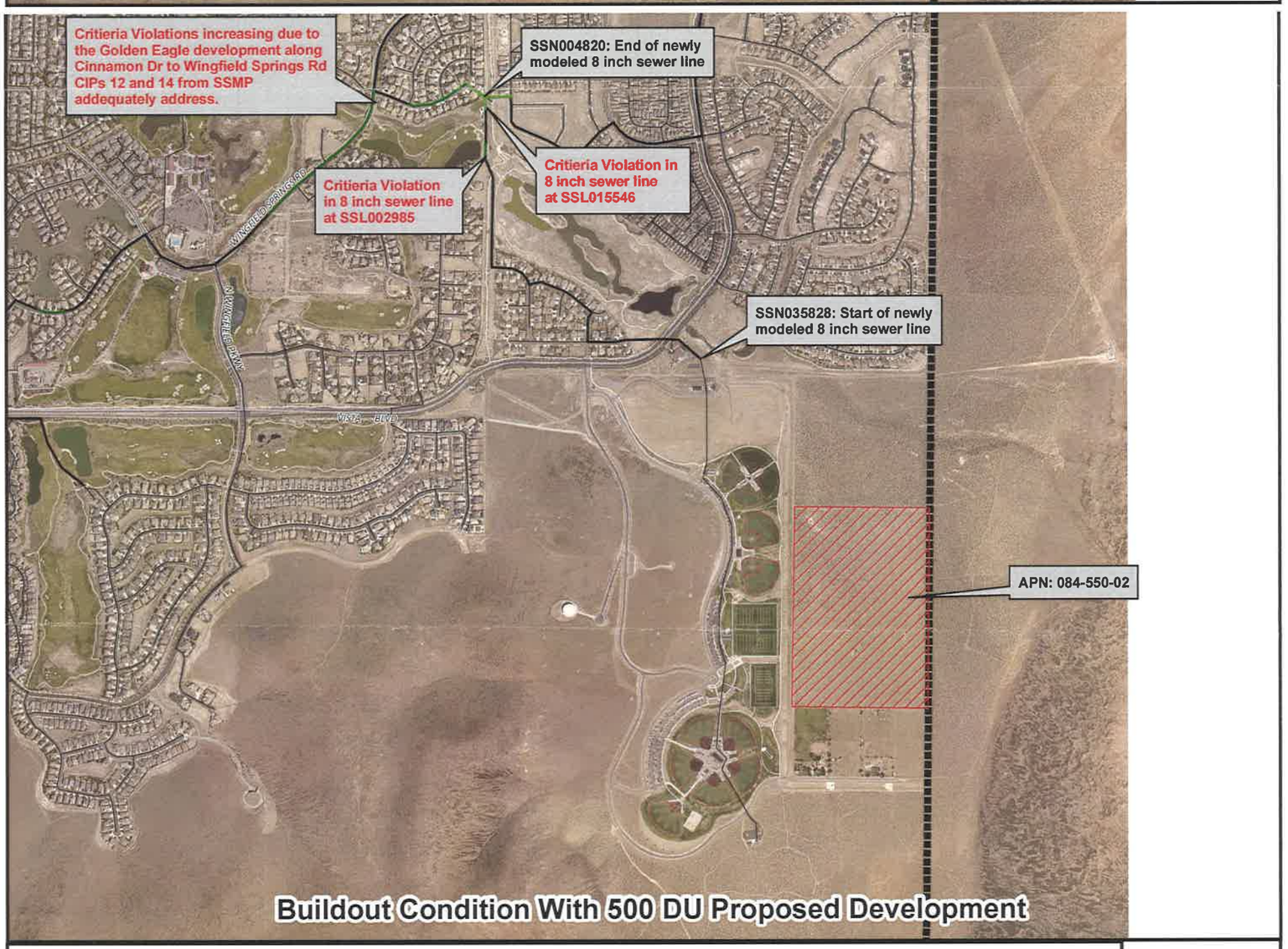
City of Sparks

Sewer Model Update

Existing Condition Comparison - Golden Eagle Development

Figure 2





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City of Sparks

Sewer Model Update

Buildout Condition Comparison - Golden Eagle Development

Figure 3

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WINGFIELD COMMONS

TRAFFIC STUDY

JULY 2018

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WINGFIELD COMMONS
TRAFFIC STUDY

EXECUTIVE SUMMARY

The proposed Wingfield Commons development is located in the City of Sparks, Nevada. The project site is located directly east of the Golden Eagle Regional Park (GERP) generally south of Vista Boulevard and east of Homerun Drive. The project site is currently undeveloped land except for a few dwelling units that will be removed. The purpose of this study is to address the project's impact upon the adjacent street network. The Vista Boulevard/Homerun Drive/Scorpius Drive, Homerun Drive/Touchdown Drive, and Touchdown Drive/Project Access intersections have been identified for weekday and Saturday AM and PM peak hour capacity analysis for the existing (without GERP event), existing (with GERP event), existing plus project (without GERP event), existing plus project (with GERP event), 2040 base (with GERP event), and 2040 base plus project (with GERP event) scenarios.

The proposed Wingfield Commons development will consist of the construction of 450 single family dwelling units. Project access will be provided from a new proposed access roadway intersecting Touchdown Drive. Wingfield Commons is anticipated to generate 4,248 average daily trips, 333 AM peak hour trips, and 446 PM peak hour trips on a typical weekday and 4,293 average daily trips, 170 AM peak hour trips, and 419 PM peak hour trips on a typical Saturday.

Traffic generated by the Wingfield Commons development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with City of Sparks requirements.

It is recommended that the Vista Boulevard/Homerun Drive/Scorpius Drive intersection be improved to include one exclusive left turn lane, one shared left turn-through lane, and one exclusive right turn lane at the south approach.

It is recommended that the existing right turn lane at the west approach of the Vista Boulevard/ Homerun Drive/Scorpius Drive intersection be lengthened to provide a minimum of 465 feet of storage/deceleration length with a 180 foot taper in order to serve traffic volumes generated by a major event at the Golden Eagle Regional Park.

It is recommended that the traffic control at the Homerun Drive/Touchdown Drive intersection be modified to include stop sign control at the south and east approaches while the left turn and through movements at the north approach flow free. In addition, it is recommended that an exclusive left turn lane be provided at the north approach.

It is recommended that the Touchdown Drive/Project Access intersection be designed as a three-leg intersection with stop sign control at the east approach and contain an exclusive left turn lane at the north approach.

It is recommended that the project access roadway and the internal residential streets be designed to conform to City of Sparks standards.

It is recommended that connections be made from the proposed subdivision to the existing pedestrian/bicycle network within the Golden Eagle Regional Park.

It is recommended that the project developers provide a traffic circulation plan that discourages or prevents Golden Eagle Regional Park traffic from utilizing the project access road and internal residential streets.

INTRODUCTION

STUDY AREA

The proposed Wingfield Commons development is located in the City of Sparks, Nevada. The project site is located directly east of the Golden Eagle Regional Park (GERP) generally south of Vista Boulevard and east of Homerun Drive. Figure 1 shows the approximate location of the site. The purpose of this study is to address the project's impact upon the adjacent street network. The Vista Boulevard/Homerun Drive/Scorpius Drive, Homerun Drive/Touchdown Drive, and Touchdown Drive/Project Access intersections have been identified for weekday and Saturday AM and PM peak hour capacity analysis for the existing (without GERP event), existing (with GERP event), existing plus project (without GERP event), existing plus project (with GERP event), 2040 base (with GERP event), and 2040 base plus project (with GERP event) scenarios.

EXISTING AND PROPOSED LAND USES

The project site is currently undeveloped land except for a few single family home that will be removed. Adjacent properties generally include the Golden Eagle Regional Park to the west and undeveloped land to the north, south, and east. The proposed Wingfield Commons development will consist of the construction of 450 single family dwelling units. Project access will be provided from a new proposed access road intersecting Touchdown Drive.

EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

Vista Boulevard is a four-lane roadway with two through lanes in each direction in the vicinity of the site. The speed limit is posted for 35 miles per hour. Roadway improvements include curb, gutter, and bike lanes on both sides of the street, a sidewalk on the north side of the street, and a raised center median with openings at major intersections.

Homerun Drive is a two-lane roadway with one through lane in each direction south of Vista Boulevard. The speed limit is posted for 25 miles per hour. Roadway improvements include paved and graded shoulders with white striped edgelines and a yellow striped centerline. Homerun Drive aligns with Scorpius Drive at the Vista Boulevard intersection.

Scorpius Drive is a two-lane roadway with one through lane in each direction north of Vista Boulevard. The speed limit is not posted but assumed to be 25 miles per hour. Roadway improvements include curb, gutter, and sidewalk on both sides of the street. Scorpius Drive aligns with Homerun Drive at the Vista Boulevard intersection.

Touchdown Drive is a two-lane roadway with one through lane in each direction southeast of Homerun Drive. The speed limit is posted for 15 miles per hour. Roadway improvements include paved and graded shoulders with white striped edgelines and a yellow striped centerline.

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LEGEND

PROJECT SITE

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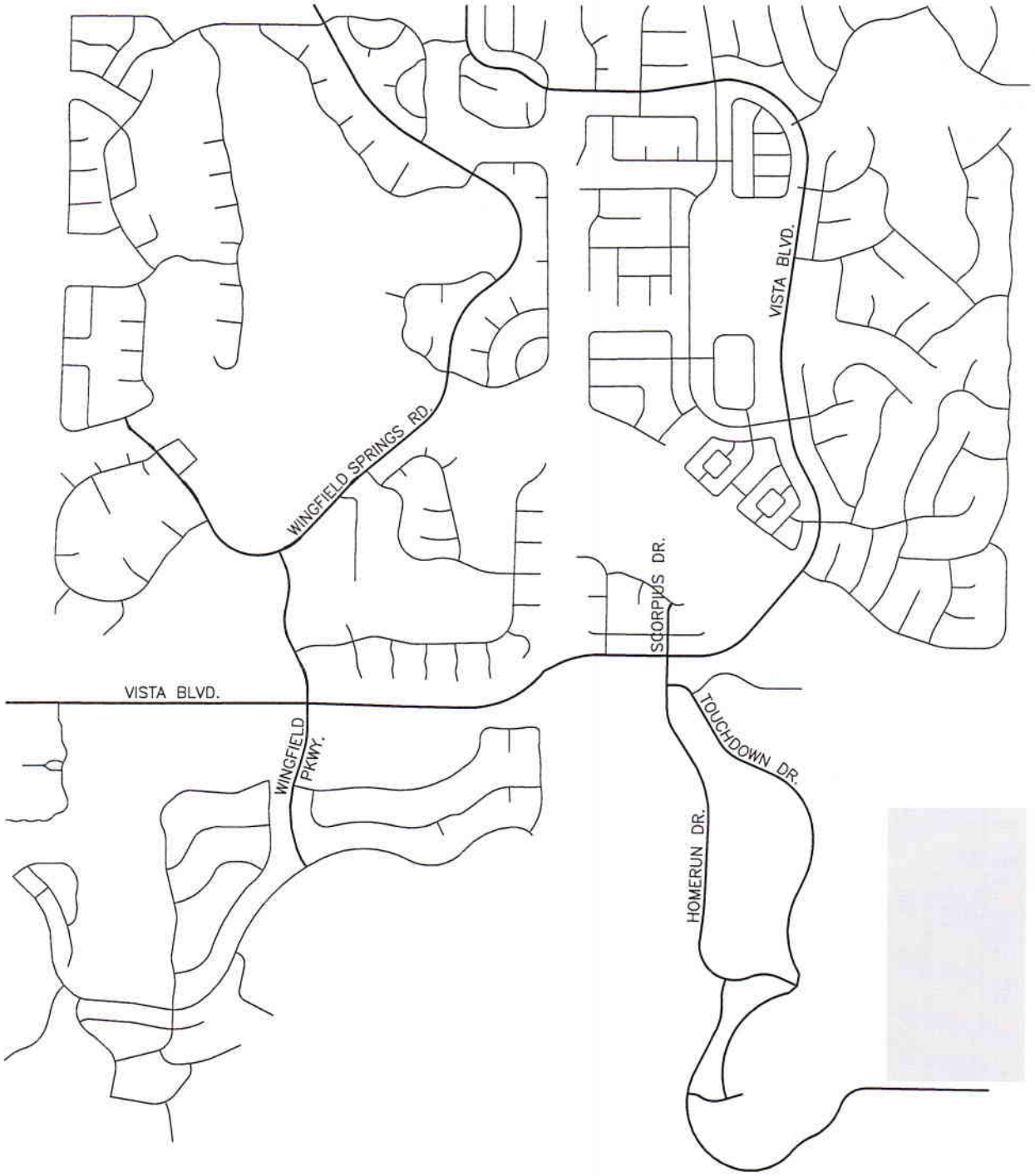

WINGFIELD COMMONS

VICINITY MAP
FIGURE 1

The Vista Boulevard/Homerun Drive/Scorpius Drive intersection is a signalized four-leg intersection with protected phasing for the eastbound and westbound left turn movements. The north approach contains one shared left turn-through-right turn lane. The south approach contains one left turn lane and one shared through-right turn lane. The east approach contains one left turn lane, one through lane, and one shared through-right turn lane. The west approach contains one left turn lane, two through lanes, and one right turn lane.

The Homerun Drive/Touchdown Drive intersection is an unsignalized three-leg intersections with stop control at the east approach. The intersection contains one shared left turn-through lane at the north approach, one shared through-right turn lane at the south approach, and one shared left turn-right turn lane at the east approach.

The Touchdown Drive/Project Access intersection does not exist but will be constructed as an unsignalized three-leg intersections with stop control at the east approach. At a minimum, the intersection will be analyzed with one shared left turn-through lane at the north approach, one shared through-right turn lane at the south approach, and one shared left turn-right turn lane at the east approach. This new intersection will be located south of an existing access intersection that will be removed.

TRIP GENERATION

In order to assess the magnitude of traffic impacts of the proposed project on the key intersections, trip generation rates and peak hours had to be determined. Trip generation was calculated based on rates obtained from the *10th Edition of ITE Trip Generation* (2017) for Land Use 210: Single Family Detached Housing. Trips generated by the project were calculated for the weekday peak hours occurring between 7:00 and 9:00 AM and 4:00 and 6:00 PM, which correspond to the peak hours of adjacent street traffic, and the Saturday peak hour of generator which is assumed to correspond to the afternoon peak hour of the Golden Eagle Regional Park. *ITE Trip Generation* does not contain rates for a Saturday AM peak hour. Existing counts on Vista Boulevard indicate that Saturday AM peak hour traffic volumes are approximately 51% of weekday AM peak hour traffic volumes. The AM peak hour trip generation for Saturday was therefore assumed to be 51% of the weekday AM peak hour trip generation. Table 1 shows a summary of the average daily traffic (ADT) volumes and peak hour volumes generated by the project for a weekday and Saturday. The trip generation worksheets are included in the Appendix.

TABLE 1
TRIP GENERATION

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing (450 D.U.)							
Weekday	4,248	83	250	333	281	165	446
Saturday	4,293	42	128	170	226	193	419

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the project trips to the key intersections was based on existing peak hour traffic patterns and the locations of attractions and productions in the area. The anticipated trip distribution is shown on Figure 2. The peak hour project trips shown in Table 1 were subsequently assigned to the key intersections based on the trip distribution. Figure 3 shows the project trip assignment at the key intersections during the weekday and Saturday AM and PM peak hours.

EXISTING AND PROJECTED TRAFFIC VOLUMES

Figure 4A shows the existing peak hour volumes at the key intersections for the weekday AM, weekday PM, Saturday AM, and Saturday PM peak hour scenarios. The existing volumes were obtained from counts taken in February of 2018. The counts were adjusted to 100% of the annual average based on the requirement of City of Sparks staff. A major sporting event was not being held at the Golden Eagle Regional Park when the counts were conducted. Figure 4B shows the existing peak hour volumes (with GERP event) at the key intersections. The weekday AM and PM peak hour volumes were obtained by supplementing the existing volumes shown on Figure 4A with peak ingress and egress traffic volumes generated by a major event at the Golden Eagle Regional Park. The major event traffic volumes were obtained from City of Sparks Parks and Recreation staff. The Saturday AM and PM peak hour traffic volumes were obtained from counts conducted on April 28, 2018 and May 19, 2018 during GERP events identified by City of Sparks staff that included simultaneous baseball/softball/soccer games with high field utilization.

Figure 5A shows the existing plus project volumes at the key intersections for the weekday and Saturday AM and PM peak hours. The existing plus project volumes were obtained by adding the trip assignment volumes shown on Figure 3 to the existing volumes shown on Figure 4A. Again, these volumes do not include a major event at the Golden Eagle Regional Park. Figure 5B shows the existing plus project peak hour volumes (with GERP event) for the weekday and Saturday AM and PM peak hours. The existing plus project volumes (with GERP event) were obtained by adding the trip assignment volumes shown on Figure 3 to the existing traffic volumes (with GERP event) shown on Figure 4B. These volumes include a major event at the Golden Eagle Regional Park.

Figure 6 shows the 2040 base traffic volumes (with GERP event) for the weekday and Saturday AM and PM peak hours. The 2040 base traffic volumes were obtained by applying a 0.5% average annual growth rate to the existing Vista Boulevard traffic volumes. A 0.2% average annual growth rate was calculated based on 2015 and 2040 average daily traffic volumes obtained from the Regional Transportation Commission's traffic forecasting model. However, the 0.5% average annual growth rate was used in order to ensure conservative results. The 2040 base traffic volumes include a major event at the Golden Eagle Regional Park. Figure 7 shows the 2040 base plus project traffic volumes (with GERP event) for the weekday and Saturday AM and PM peak hours. The 2040 base plus project traffic volumes were obtained by adding the trip assignment volumes shown on Figure 3 to the 2040 base traffic volumes shown on Figure 6. The 2040 base plus project volumes include a major event at the Golden Eagle Regional Park.

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LEGEND
- KEY INTERSECTIONS

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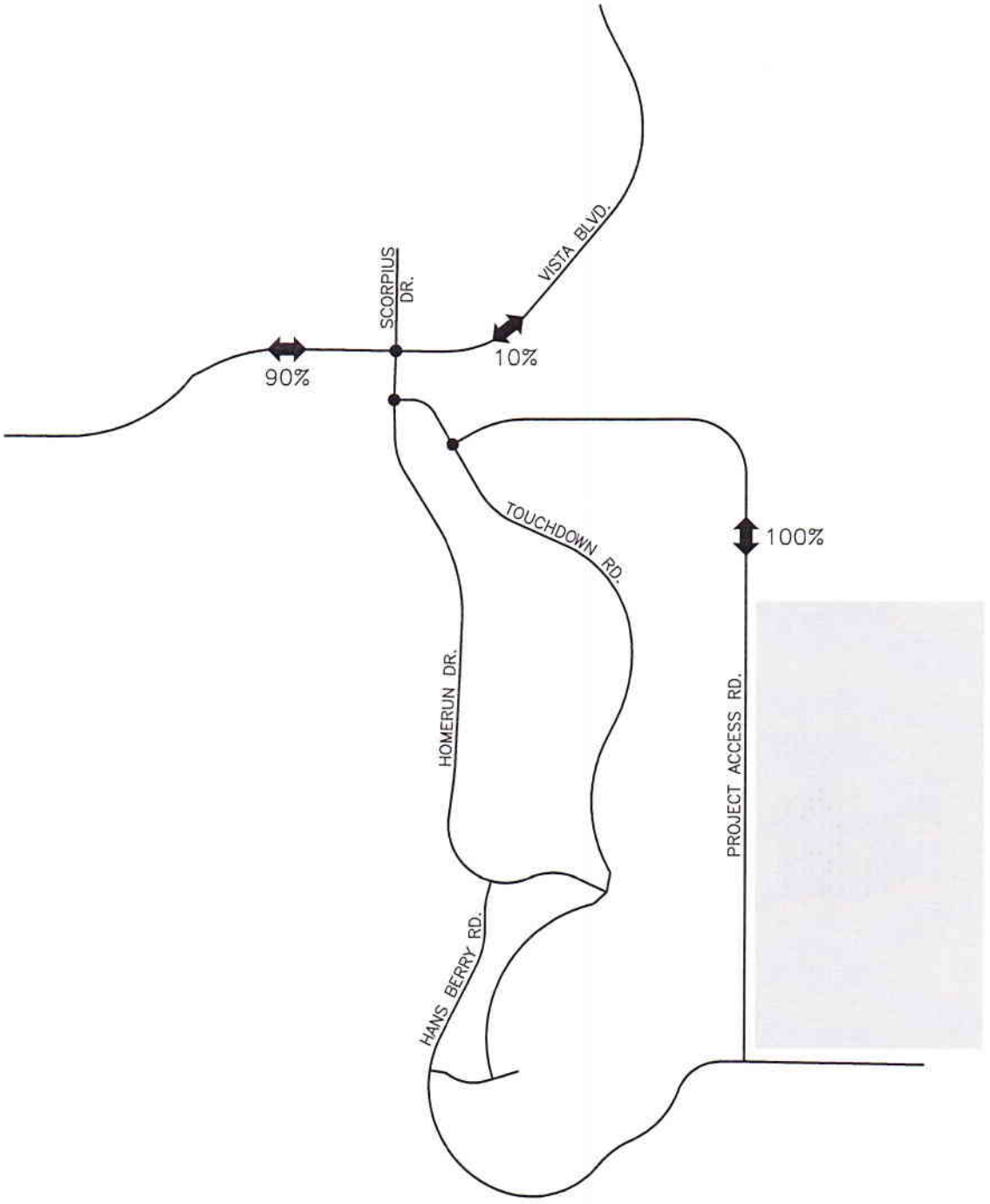

WINGFIELD COMMONS

TRIP DISTRIBUTION
FIGURE 2

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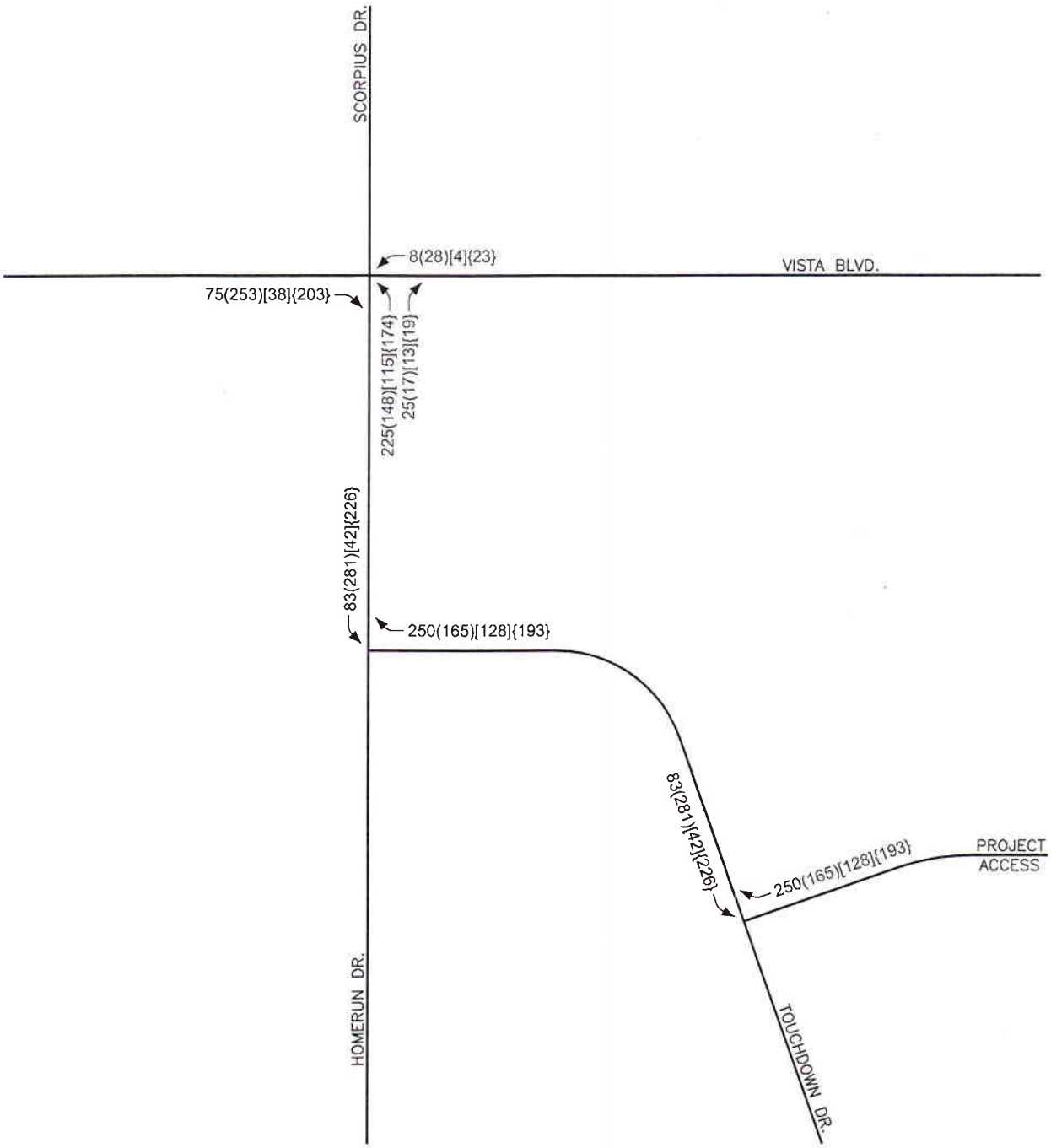
LEGEND

– WEEKDAY AM PEAK HOUR
(–) WEEKDAY PM PEAK HOUR
[–] SATURDAY AM PEAK HOUR
{–} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

TRIP ASSIGNMENT
FIGURE 3

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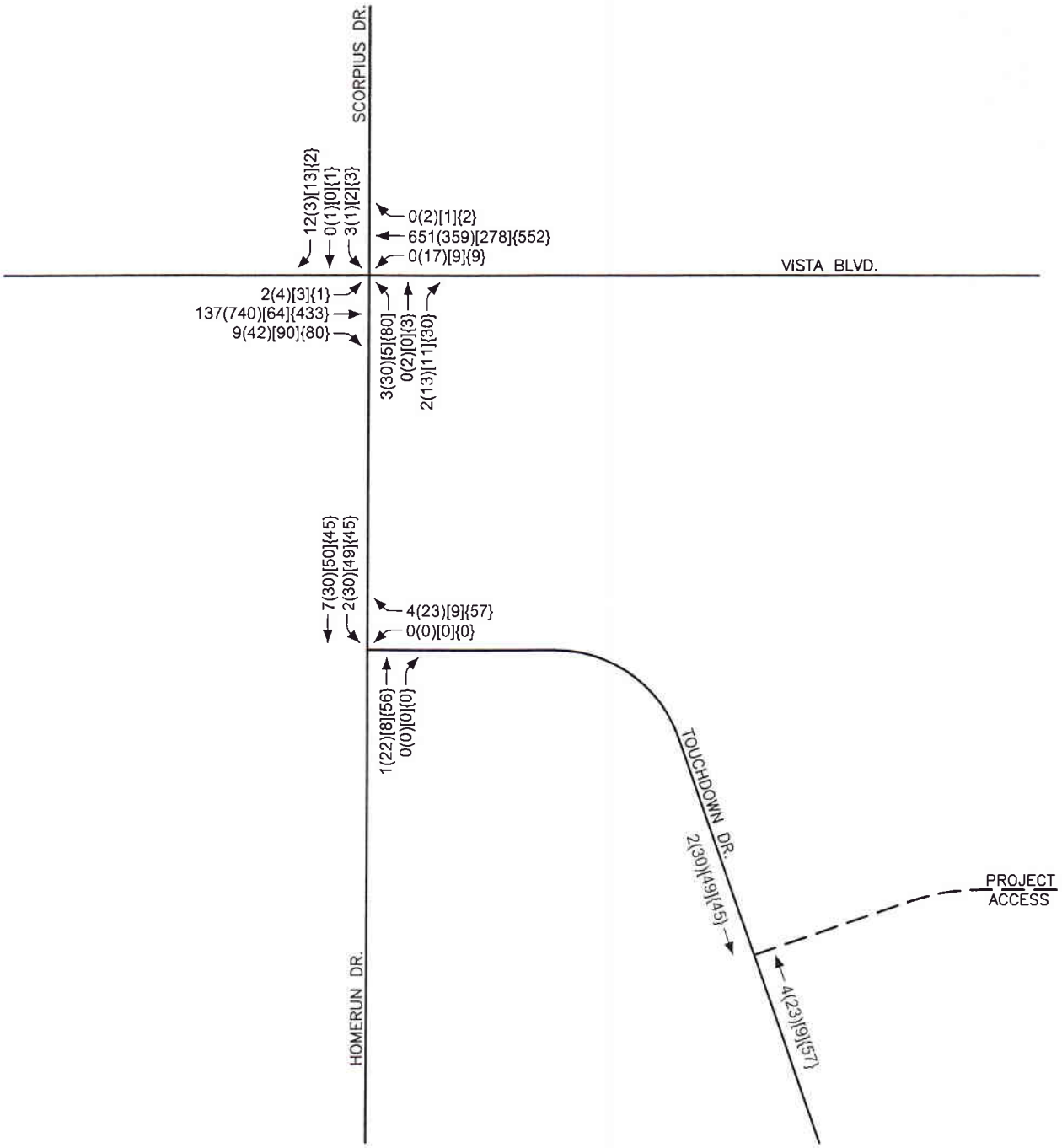
N.T.S.

LEGEND

- WEEKDAY AM PEAK HOUR
(-) WEEKDAY PM PEAK HOUR
[-] SATURDAY AM PEAK HOUR
{-} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

EXISTING TRAFFIC VOLUMES

FIGURE 4A

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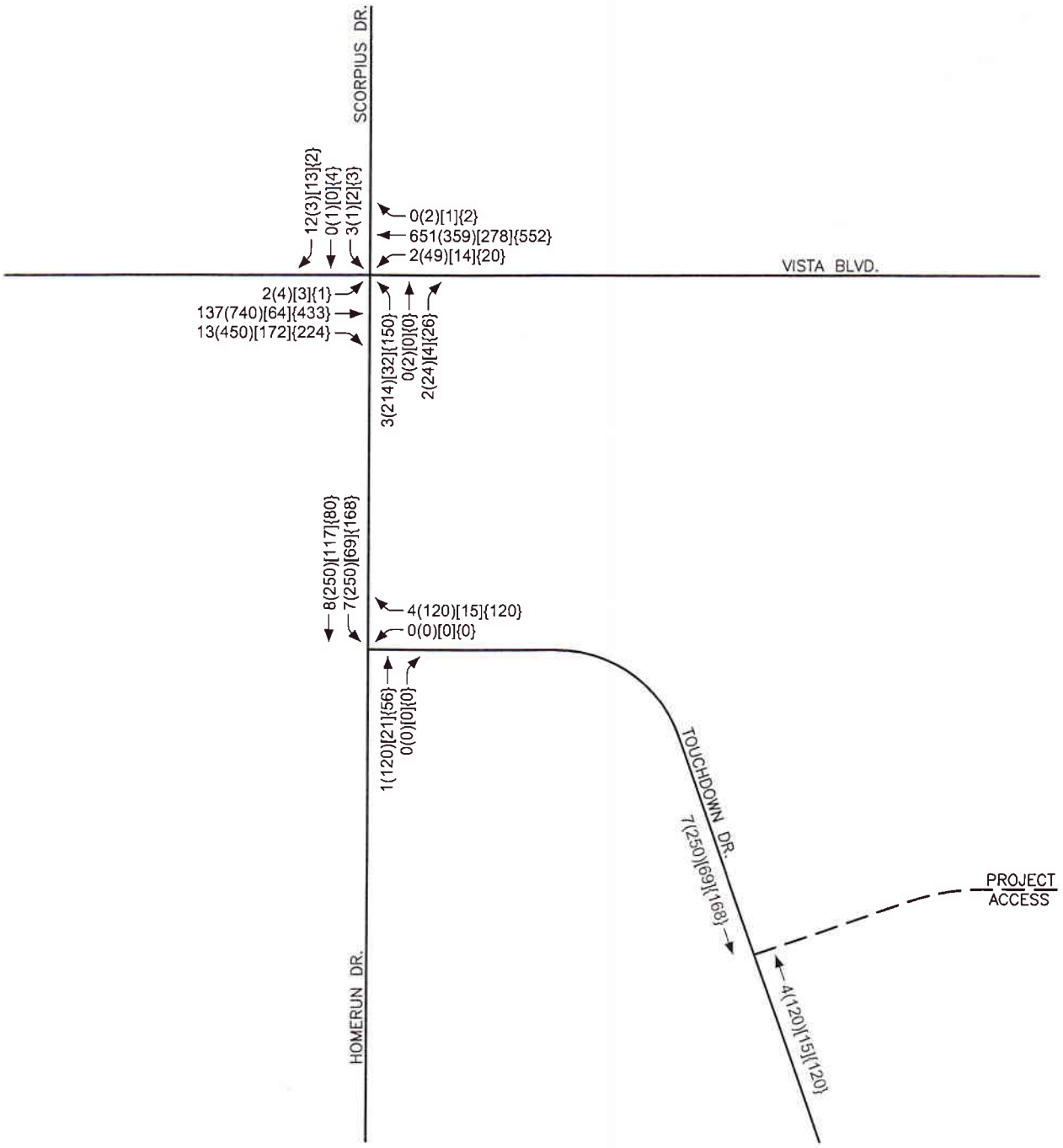
N.T.S.

LEGEND

- – WEEKDAY AM PEAK HOUR
- (–) WEEKDAY PM PEAK HOUR
- [–] SATURDAY AM PEAK HOUR
- {–} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

EXISTING TRAFFIC VOLUMES (W/EVENT)

FIGURE 4B

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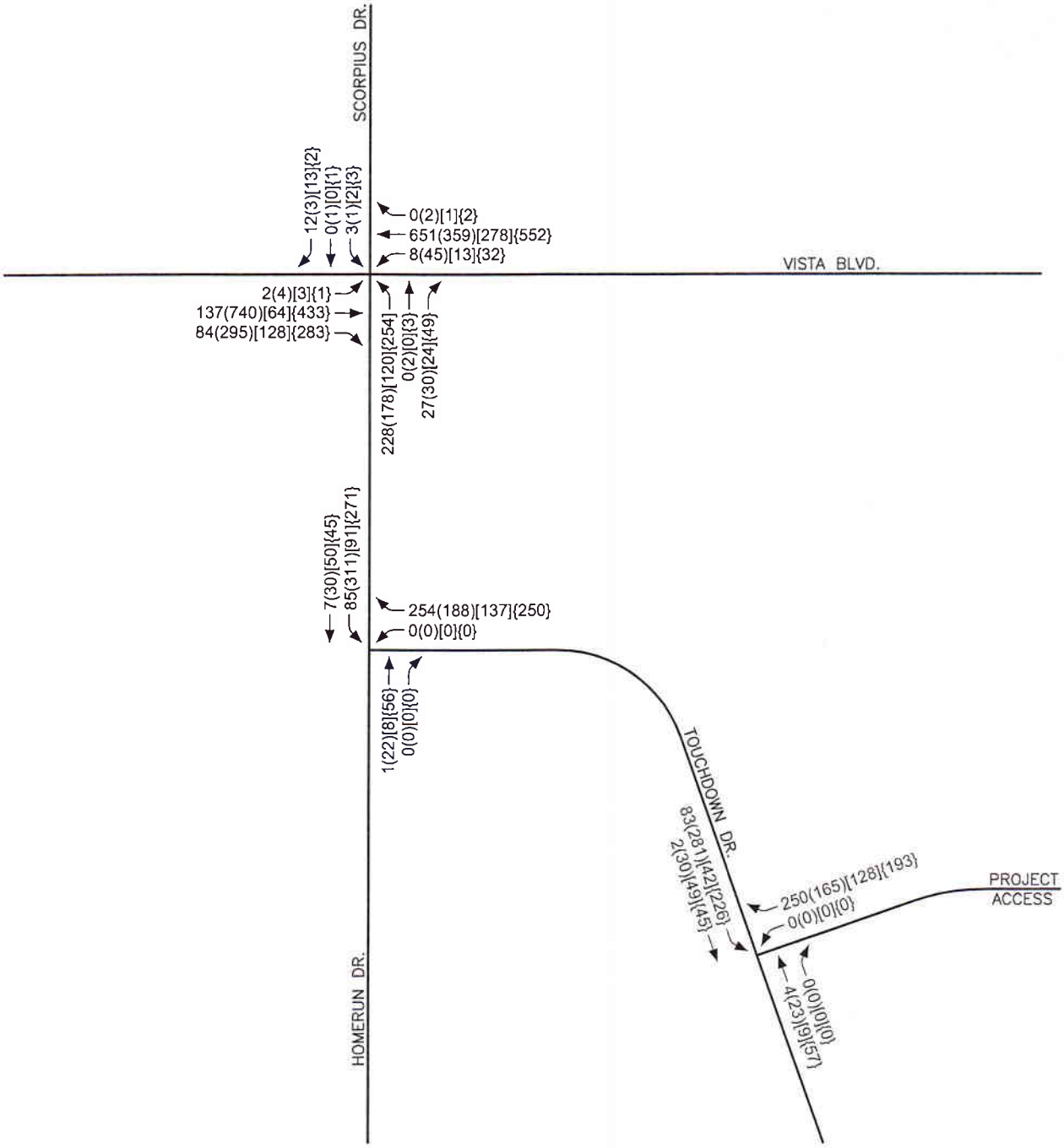
N.T.S.

LEGEND

— WEEKDAY AM PEAK HOUR
(—) WEEKDAY PM PEAK HOUR
[—] SATURDAY AM PEAK HOUR
{—} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

EXISTING PLUS PROJECT TRAFFIC VOLUMES

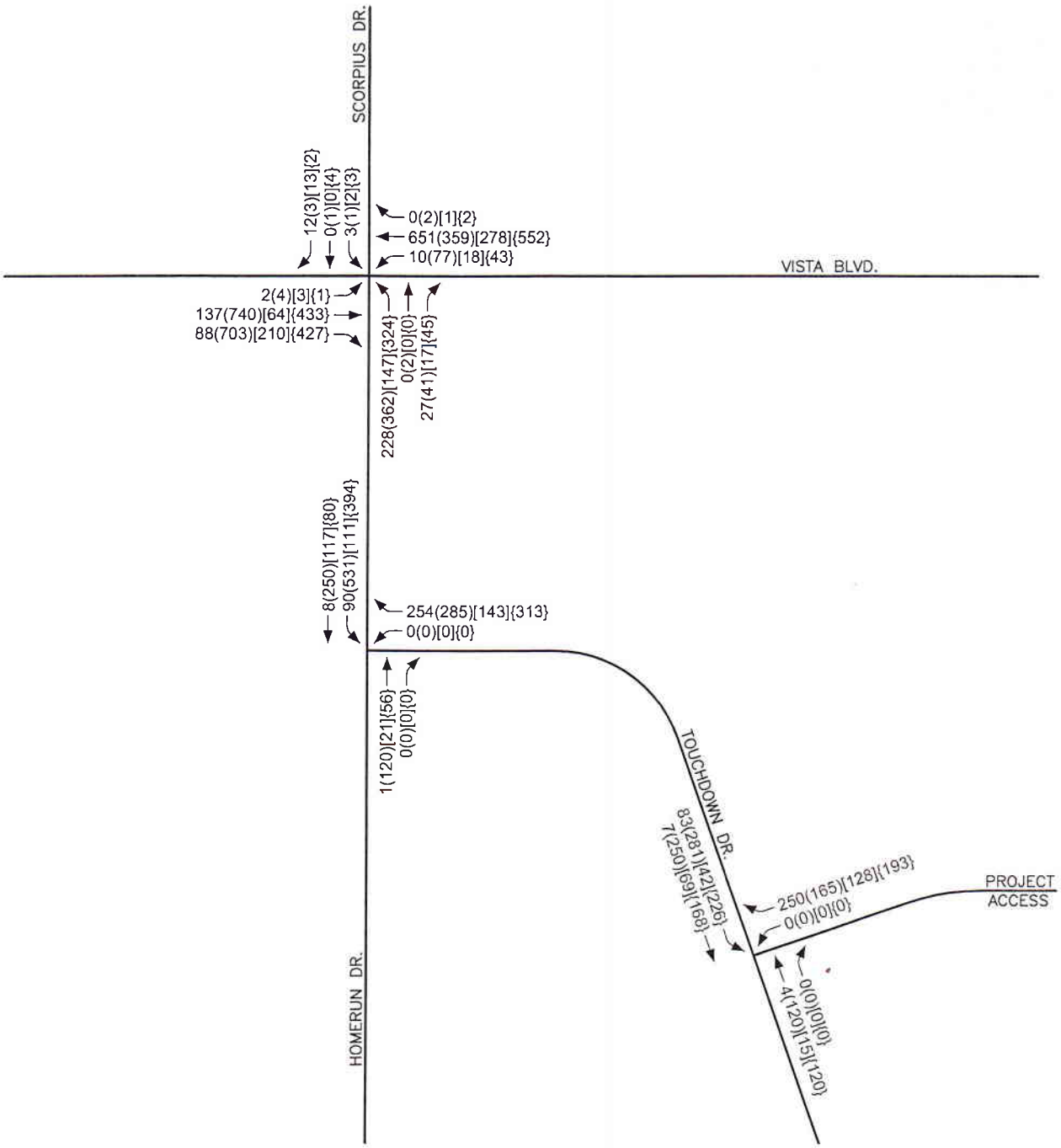
FIGURE 5A

SOLAEGUI
ENGINEERS LTD.

N.T.S.

LEGEND

– WEEKDAY AM PEAK HOUR
(–) WEEKDAY PM PEAK HOUR
[–] SATURDAY AM PEAK HOUR
{–} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

EXISTING PLUS PROJECT TRAFFIC VOLUMES (W/EVENT)

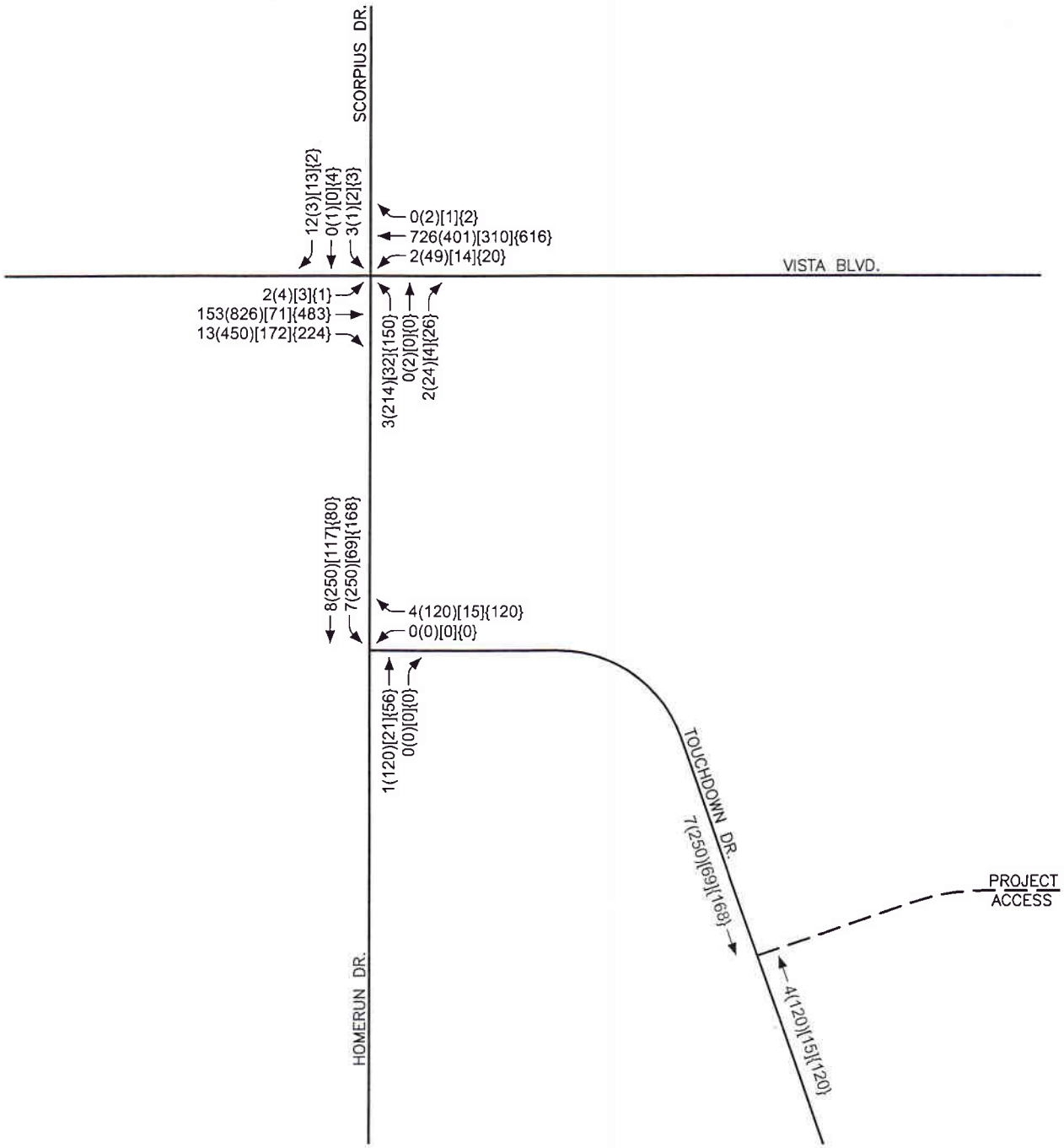
FIGURE 5B

SOLAEGUI
ENGINEERS LTD.

N.T.S.

LEGEND

– WEEKDAY AM PEAK HOUR
(–) WEEKDAY PM PEAK HOUR
[–] SATURDAY AM PEAK HOUR
{–} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

2040 BASE TRAFFIC VOLUMES (W/EVENT)

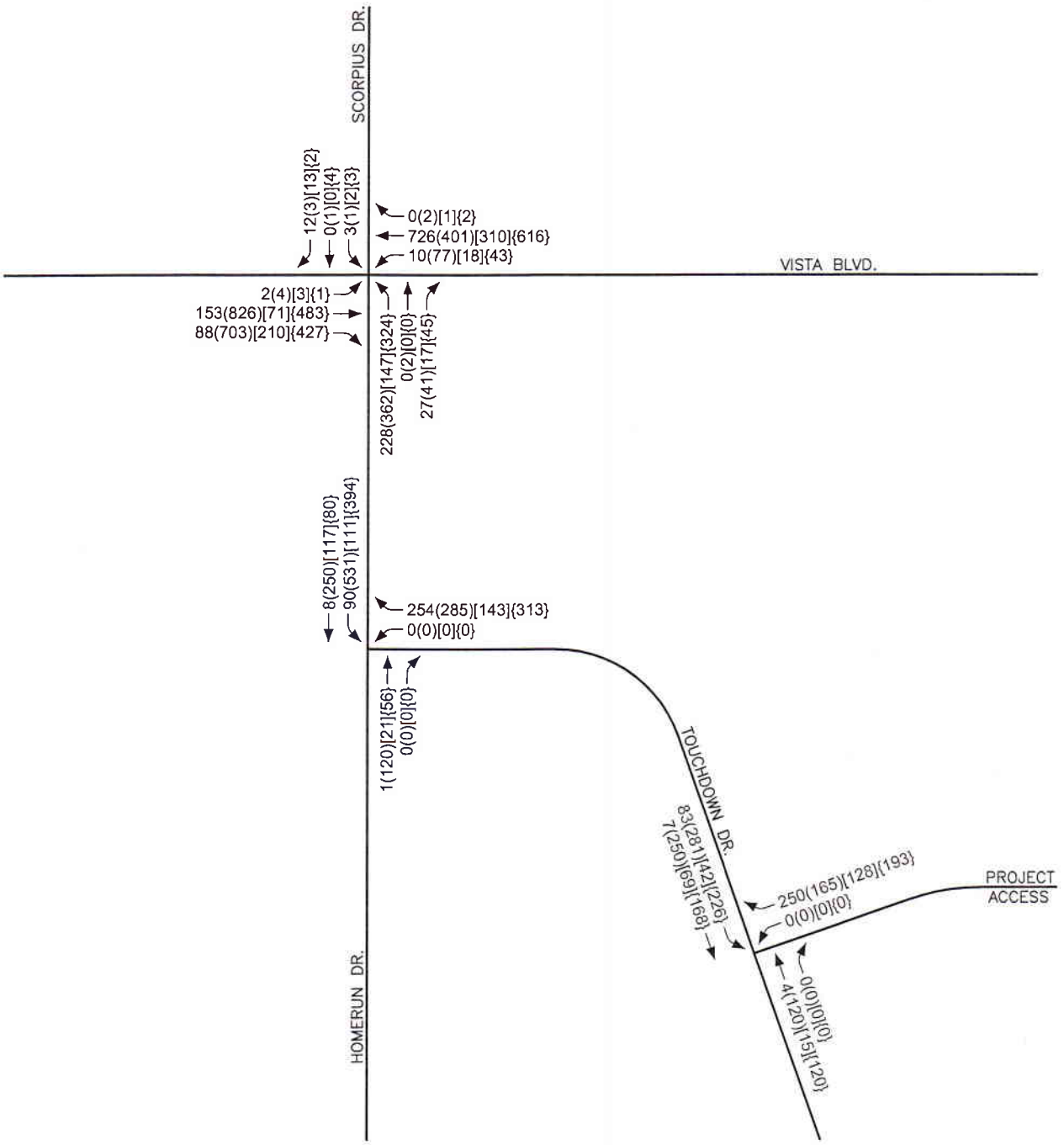
FIGURE 6

SOLAEGUI
ENGINEERS LTD.

N.T.S.

LEGEND

— WEEKDAY AM PEAK HOUR
(–) WEEKDAY PM PEAK HOUR
[–] SATURDAY AM PEAK HOUR
{–} SATURDAY PM PEAK HOUR



WINGFIELD COMMONS

2040 BASE PLUS PROJECT TRAFFIC VOLUMES (W/EVENT)

FIGURE 7

INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual (6th Edition)*, prepared by the Transportation Research Board, for unsignalized and signalized intersections using the latest version of the Synchro computer software.

The result of capacity analysis is a level of service (LOS) rating for signalized intersections or minor movements at a two-way stop controlled intersection. Level of service is a qualitative measure of traffic operating conditions where a letter grade "A" through "F", corresponding to progressively worsening traffic operation, is assigned to the intersection or minor movement.

The *Highway Capacity Manual* defines level of service for stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the intersection as a whole. The level of service criteria for unsignalized intersections is shown in Table 2.

TABLE 2
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	DELAY RANGE (SEC/VEH)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Level of service for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The level of service criteria for signalized intersections is shown in Table 3.

TABLE 3
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Table 4A shows a summary of the level of service and delay results at the key intersections for the existing and existing plus project scenarios with no GERP event. The intersection capacity worksheets are included in the Appendix.

TABLE 4A
INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS
EXISTING AND EXISTING PLUS PROJECT SCENARIOS (NO GERP EVENT)

	EXISTING				EXISTING PLUS PROJECT			
INTERSECTION	WEEK AM	WEEK PM	SAT. AM	SAT. PM	WEEK AM	WEEK PM	SAT. AM	SAT. PM
Vista/Homerun/Scorpius Signalized w/Existing Lanes	A8.6	B10.1	A8.8	B10.1	B14.4	B13.3	B11.5	B15.1
Homerun/Touchdown Stop at East Leg								
WB Left-Right	A8.3	A8.5	A8.4	A8.8	A9.5	A9.3	A8.9	B10.0
SB Left	A7.2	A7.3	A7.3	A7.4	A7.4	A7.9	A7.4	A7.9
Touchdown/Project Access Stop at East Leg								
WB Left-Right	N/A	N/A	N/A	N/A	A9.5	A9.8	A8.9	A9.6
SB Left	N/A	N/A	N/A	N/A	A7.4	A7.9	A7.3	A7.8

Table 4B shows a summary of the level of service and delay results at the key intersections for the existing and existing plus project scenarios with a GERP event. The intersection capacity worksheets are included in the Appendix.

TABLE 4B
INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS
EXISTING AND EXISTING PLUS PROJECT SCENARIOS (WITH GERP EVENT)

	EXISTING				EXISTING PLUS PROJECT			
INTERSECTION	WEEK AM	WEEK PM	SAT. AM	SAT. PM	WEEK AM	WEEK PM	SAT. AM	SAT. PM
Vista/Homerun/Scorpius Signalized w/Existing Lanes	A9.5	B15.0	B10.2	B12.2	B14.4	D41.3	B13.4	B18.4
Homerun/Touchdown Stop at East Leg								
WB Left-Right	A8.3	A9.6	A8.5	A9.1	A9.5	B11.0	A9.0	B10.5
SB Left	A7.2	A8.1	A7.4	A7.7	A7.4	A9.2	A7.5	A8.3
Touchdown/Project Access Stop at East Leg								
WB Left-Right	N/A	N/A	N/A	N/A	A9.5	A9.9	A8.9	B10.1
SB Left	N/A	N/A	N/A	N/A	A7.4	A8.2	A7.3	A8.0

Table 4C shows a summary of the level of service and delay results at the key intersections for the 2040 base and 2040 base plus project scenarios with a GERP event. The intersection capacity worksheets are included in the Appendix.

TABLE 4C
INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS
2040 BASE AND 2040 BASE PLUS PROJECT SCENARIOS (WITH GERP EVENT)

	2040 BASE				2040 BASE PLUS PROJECT			
INTERSECTION	WEEK AM	WEEK PM	SAT. AM	SAT. PM	WEEK AM	WEEK PM	SAT. AM	SAT. PM
Vista/Homerun/Scorpius Signalized w/Existing Lanes	A9.9	B15.2	A9.9	B12.5	B14.9	D41.1	B13.1	B18.9
Homerun/Touchdown Stop at East Leg								
WB Left-Right	A8.3	A9.6	A8.5	A9.1	A9.5	B11.0	A9.0	B10.5
SB Left	A7.2	A8.1	A7.4	A7.7	A7.4	A9.2	A7.5	A8.3
Touchdown/Project Access Stop at East Leg								
WB Left-Right	N/A	N/A	N/A	N/A	A9.5	A9.9	A8.9	B10.1
SB Left	N/A	N/A	N/A	N/A	A7.4	A8.2	A7.3	A8.0

Vista Boulevard/Homerun Drive/Scorpius Drive Intersection

The Vista Boulevard/Homerun Drive/Scorpius Drive intersection was analyzed for capacity as a signalized four-leg intersection for all scenarios. The intersection currently operates at LOS B or better during the weekday and Saturday AM and PM peak hours with no GERP event. For the existing plus project traffic volumes (no GERP event) the intersection operates at LOS B during the weekday and Saturday AM and PM peak hours. With a GERP event, the intersection currently operates at LOS B or better during the weekday and Saturday AM and PM peak hours. For the existing plus project traffic volumes (with GERP event) the intersection operates at LOS B during the weekday AM and Saturday AM and PM peak hours and LOS D during the weekday PM peak hour. For the 2040 base traffic volumes (with GERP Event) the intersection operates at LOS B or better during the weekday and Saturday AM and PM peak hours. For the 2040 base plus project traffic volumes (with GERP event) the intersection operates at LOS B during the weekday AM and Saturday AM and PM peak hours and LOS D during the weekday PM peak hour. The intersection was analyzed with the existing approach lanes and signal phasing for all scenarios. The existing intersection meets policy LOS D or better operation for all scenarios.

Homerun Drive/Touchdown Drive Intersection

The Homerun Drive/Touchdown Drive intersection was analyzed as an unsignalized three-leg intersection with stop control at the east approach for all scenarios. The intersection minor movements currently operate at LOS A during the weekday and Saturday AM and PM peak hours with no GERP event. For the existing plus project traffic volumes (no GERP event) the intersection minor movements operate at LOS B or better during the weekday and Saturday AM and PM peak hours. With a GERP event, the intersection minor movements currently operate at LOS A during the weekday and Saturday AM and PM peak hours. For the existing plus project traffic volumes (with GERP event) the intersection minor movements operate at LOS B or better during the weekday and Saturday AM and PM peak hours. For the 2040 base traffic volumes (with GERP Event) the intersection minor movements operate at LOS A during the weekday and Saturday AM and PM peak hours. For the 2040 base plus project traffic volumes (with GERP event) the intersection minor movements operate at LOS B or better during the weekday and Saturday AM and PM peak hours. The intersection was analyzed with the existing approach lanes and traffic control for all scenarios. In summary, the existing intersection minor movements operate at acceptable LOS B or better for all scenarios and peak hours.

Touchdown Drive/Project Access Intersection

The Touchdown Drive/Project Access intersection was analyzed as an unsignalized three-leg intersection with stop control at the east approach for the "with project" scenarios. For the existing plus project traffic volumes (no GERP event) the intersection minor movements operate at LOS A during the weekday and Saturday AM and PM peak hours. For the existing plus project traffic volumes (with GERP event) the minor movements operate at LOS B or better during the weekday and Saturday AM and PM peak hours. For the 2040 base plus project traffic volumes (with GERP event) the intersection minor movements operate at LOS B or better during the weekday and Saturday AM and PM peak hours. The intersection was analyzed with single lanes at all approaches. However, it is recommended that an exclusive left turn lane be provided at the north approach. The left turn lane should be designed to maximize storage length. The proposed intersection minor movements operate at acceptable LOS B or better for all scenarios and peak hours.

QUEUING ANALYSIS

As previously discussed, the existing Vista Boulevard/Homerun Drive/Scorpius Drive intersection, the existing Homerun Drive/Touchdown Drive intersection, and the proposed Touchdown Drive/ Project Access intersection are anticipated to operate at acceptable levels of service for all study scenarios and peak hours. However, the spacing of the Vista Boulevard/Homerun Drive and Homerun Drive/Touchdown Drive intersections could potentially result in queuing and storage conflicts on Homerun Drive. Approximately 210 feet of storage length is currently available from the stop bar at the south approach of the Vista Boulevard/Homerun Drive intersection to the north side of the Homerun Drive/Touchdown Drive intersection.

Queue lengths were subsequently reviewed at the south approach of the signalized Vista Boulevard/ Homerun Drive intersection. The capacity analysis results show 95th percentile queue lengths of less than 125 feet for the weekday and Saturday AM peak hours for the existing plus project (with and with GERP event) and 2040 base plus project (with GERP event) scenarios. These queue lengths can easily be accommodated within the ±210 feet available storage area on Homerun Drive with no impacts anticipated at the Homerun Drive/Touchdown Drive intersection. However, 95th percentile queue lengths of approximately 225 feet for the weekday PM peak hour and 200 feet for the Saturday PM peak hour are anticipated for the existing plus project (with GERP event) and the 2040 base plus project (with GERP event) scenarios. These weekday and Saturday PM peak hour queue lengths could exceed the ±210 feet available storage length on Homerun Drive resulting in potential impacts at the Homerun Drive/Touchdown Drive intersection. If the queue length extends south past Touchdown Drive then the southbound left turn movement at the Homerun Drive/ Touchdown Drive intersection could potentially be blocked which in turn could result in the left turn queue extending northward onto Vista Boulevard.

In order to prevent potential blockage of the Homerun Drive/Touchdown Drive intersection it is recommended that the Vista Boulevard/Homerun Drive intersection be improved to include an additional left turn lane at the south approach and the Homerun Drive/Touchdown Drive intersection be modified to include stop sign control at both the east and south approaches. "Do Not Block Intersection" pavement markings and appropriate signage are also suggested to inform motorists of the modified intersection operation. The south approach of the Homerun Drive/ Touchdown Drive intersection is projected to serve the lowest volume of the three approaches based on the project buildout traffic volumes. In addition, it is recommended that the Homerun Drive/ Touchdown Drive intersection be improved to include an exclusive left turn lane at the north approach. This left turn lane should be designed to maximize storage length.

Queuing was also reviewed for the existing right turn lane at the west approach of the Vista Boulevard/Homerun Drive intersection. The right turn lane currently contains approximately 125 feet of combined storage/deceleration length with a 180 foot taper. The capacity analysis results indicate 95th percentile queue lengths of approximately 100 feet or less for the eastbound right turn movement based on the existing plus project traffic volumes on a weekend and Saturday that do not include a GERP event. In addition to queue length, a desirable deceleration length of 115 feet is also needed based on the 35 mile per hour speed limit on Vista Boulevard for a total lane length of 215 feet. In summary, the right turn lane should contain a minimum of 215 feet of storage and deceleration length with a 180 foot taper in order to serve existing plus project traffic volumes during non-GERP events.

For GERP events, the Highway Capacity, Synchro, and SimTraffic results indicate an average 95th percentile queue length of ±350 feet for the weekday PM peak hour. Again, a desirable deceleration length of 115 feet is also needed based on the 35 mile per hour speed limit on Vista Boulevard which results in a total length of 465 feet. The right turn lane should therefore be modified to contain a minimum of 465 feet of storage/deceleration length with a 180 foot taper in order to serve existing plus project and 2040 base plus project traffic volumes during a GERP event.

It is suggested that the modification of the Homerun Drive/Touchdown Drive intersection to include stop sign control at the south approach occur prior to construction of the first dwelling unit. It is suggested that the additional left turn lane at the south approach and the modified right turn lane at the west approach of the Vista Boulevard/Homerun Drive intersection and the additional left turn lane at the north approach of the Homerun Drive/Touchdown Drive intersection be installed prior to the construction of the 75th dwelling unit.

TRAFFIC CRASH REVIEW

Traffic crash data at the Vista Boulevard/Homerun Drive/Scorpius Drive and Homerun Drive/ Touchdown Drive intersections was requested from NDOT Traffic Safety Engineering. Crash data was available for the Vista Boulevard/Homerun Drive/Scorpius Drive intersection for the study period from September 1, 2014 to September 1, 2017. A total of 6 crashes occurred at the Vista Boulevard/Homerun Drive/Scorpius Drive intersection during the three-year period with no fatalities reported. The crash type was 3 non-collisions, 2 rear-end collisions, and 1 sideswipe meeting collision. NDOT Traffic Safety Engineering reported that no crash data exists for the Homerun Drive/Touchdown Drive intersection.

SITE PLAN REVIEW

A copy of the preliminary site plan for the proposed Wingfield Commons development is included with this submittal. The site plan indicates that project access will be provided from a proposed access roadway that intersects Touchdown Drive. The access roadway will start at Touchdown Drive, extend easterly and then southerly along the east boundary of the Golden Eagle Regional Park, before terminating at Hans Berry Road. Various residential streets intersecting the project access road will provide access to the individual lots. The site plan indicates that an emergency access gate will be constructed at the north approach of the Hans Berry Road/Project Access intersection. It is recommended that the project access roadway and the internal residential streets be designed to conform to City of Sparks standards.

A shared pedestrian/bicycle path exists within the Golden Eagle Regional Park. This path connects with the existing sidewalk infrastructure at the signalized Vista Boulevard/Homerun Drive/Scorpius Drive intersection. It is recommended that the proposed subdivision provide a connection to the existing pedestrian/bicycle path within the Golden Eagle Regional Park. In addition, it is recommended that the project developers provide a traffic circulation plan that discourages or prevents Golden Eagle Regional Park traffic from utilizing the project access road and internal residential streets.

RECOMMENDATIONS

Traffic generated by the Wingfield Commons development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with City of Sparks requirements.

It is recommended that the Vista Boulevard/Homerun Drive/Scorpius Drive intersection be improved to include one exclusive left turn lane, one shared left turn-through lane, and one exclusive right turn lane at the south approach.

It is recommended that the existing right turn lane at the west approach of the Vista Boulevard/ Homerun Drive/Scorpius Drive intersection be lengthened to provide a minimum of 465 feet of storage/deceleration length with a 180 foot taper in order to serve traffic volumes generated by a major event at the Golden Eagle Regional Park.

It is recommended that the traffic control at the Homerun Drive/Touchdown Drive intersection be modified to include stop sign control at the south and east approaches while the left turn and through movements at the north approach flow free. In addition, it is recommended that an exclusive left turn lane be provided at the north approach.

It is recommended that the Touchdown Drive/Project Access intersection be designed as a three-leg intersection with stop sign control at the east approach and contain an exclusive left turn lane at the north approach.

It is recommended that the project access roadway and the internal residential streets be designed to conform to City of Sparks standards.

It is recommended that connections be made from the proposed subdivision to the existing pedestrian/bicycle network within the Golden Eagle Regional Park.

It is recommended that the project developers provide a traffic circulation plan that discourages or prevents Golden Eagle Regional Park traffic from utilizing the project access road and internal residential streets.

APPENDIX

Single-Family Detached Housing
(210)

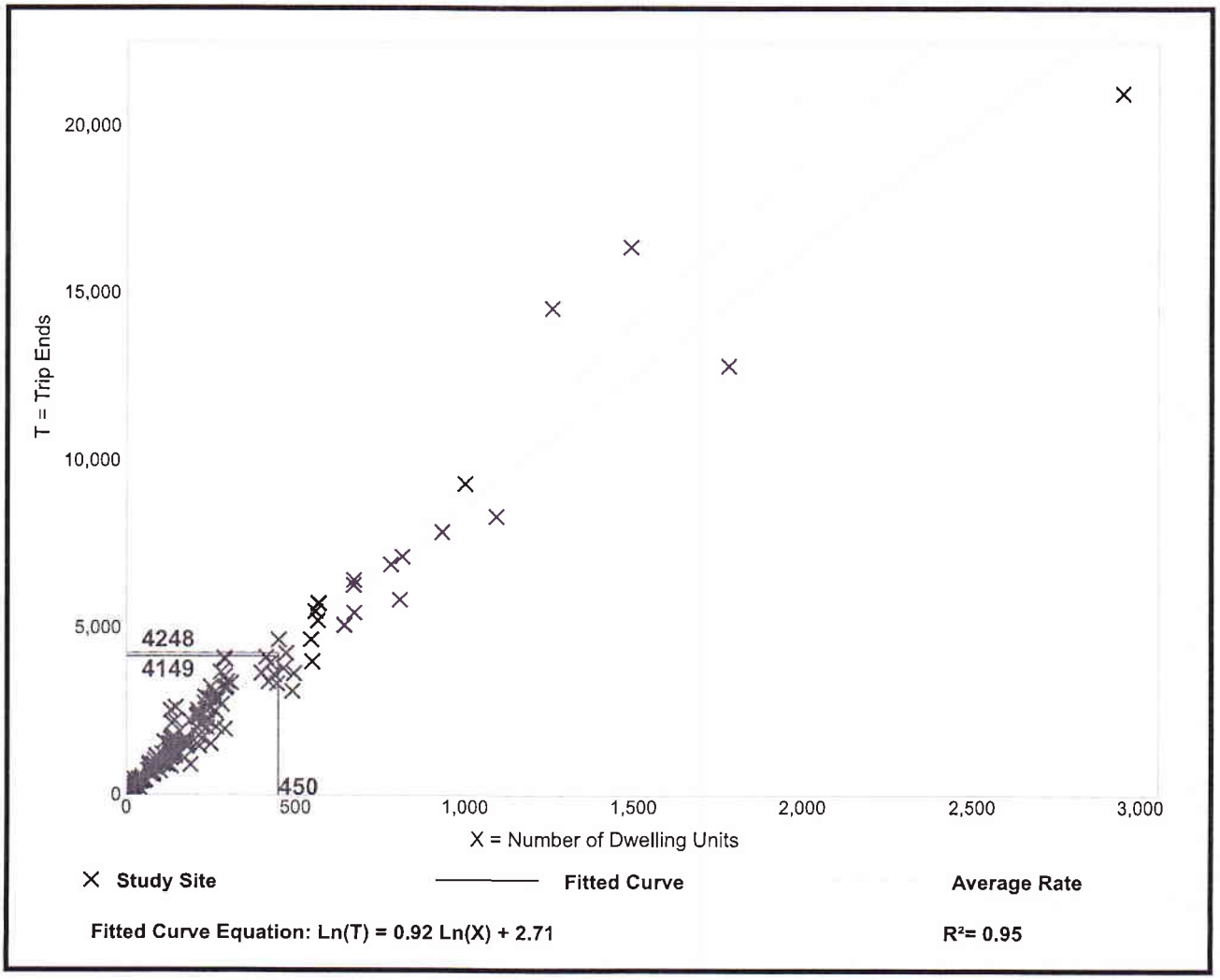
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 159
Avg. Num. of Dwelling Units: 264
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.44	4.81 - 19.39	2.10

Data Plot and Equation



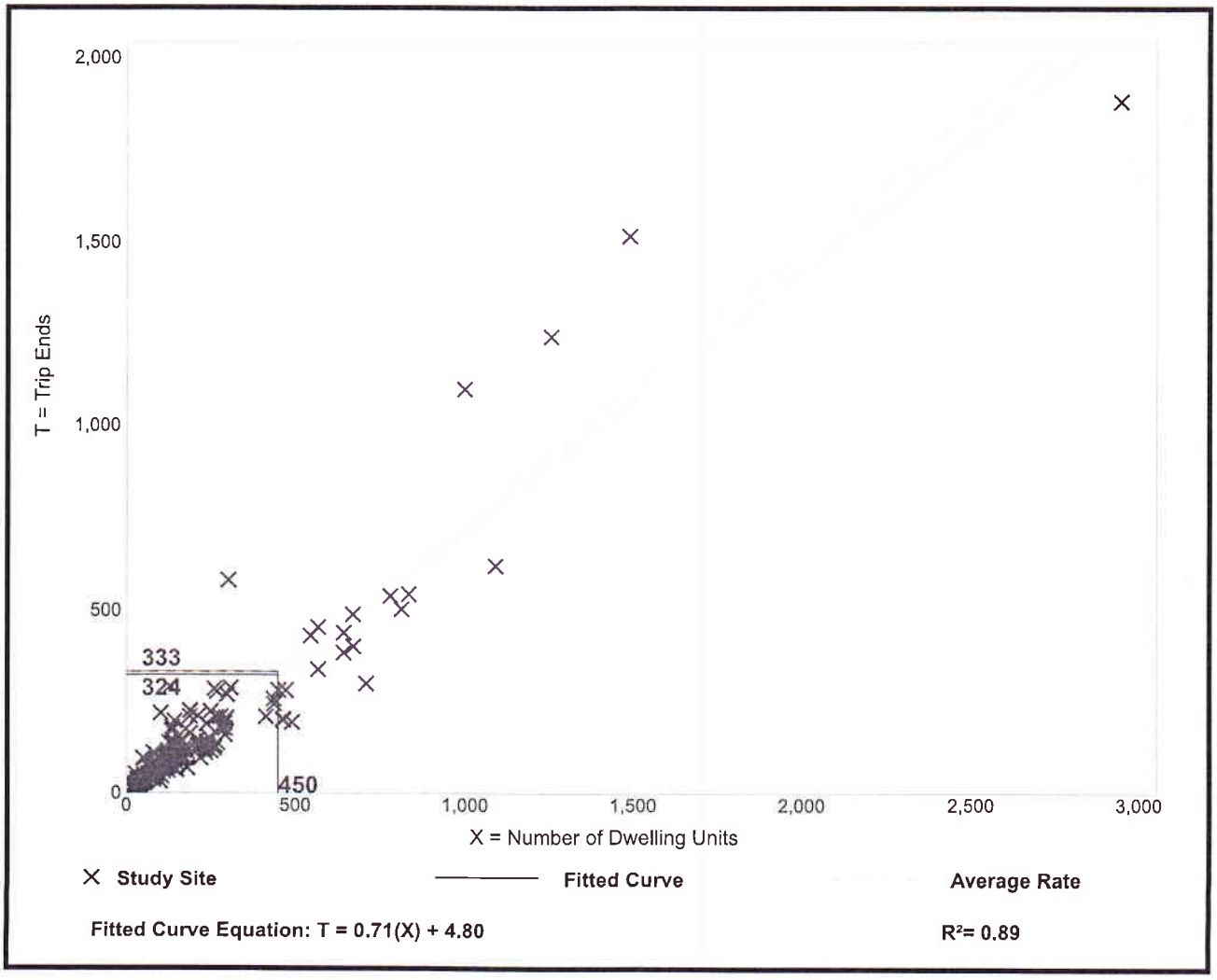
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 173
Avg. Num. of Dwelling Units: 219
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.74	0.33 - 2.27	0.27

Data Plot and Equation



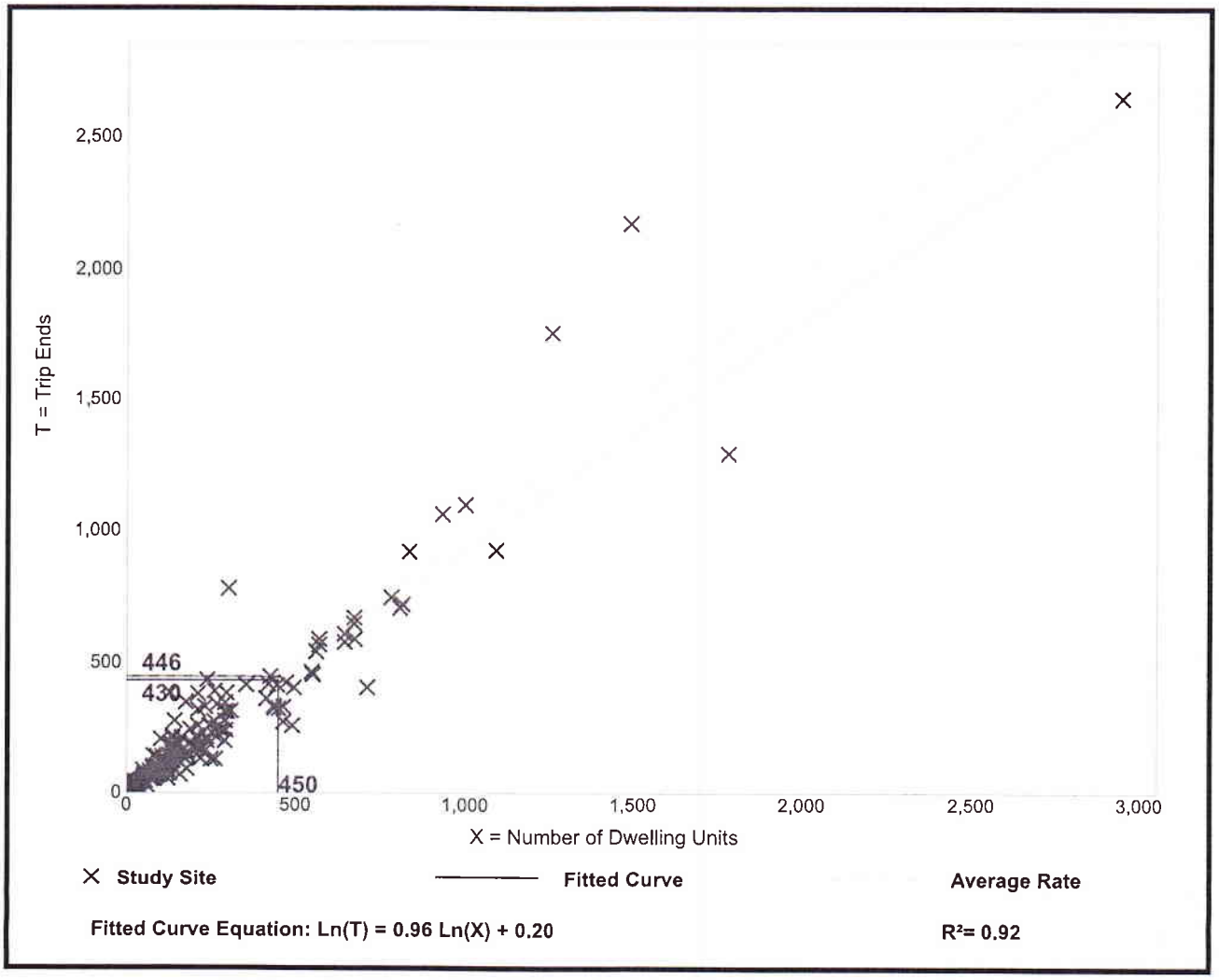
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. Num. of Dwelling Units: 242
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.44 - 2.98	0.31

Data Plot and Equation



Single-Family Detached Housing
(210)

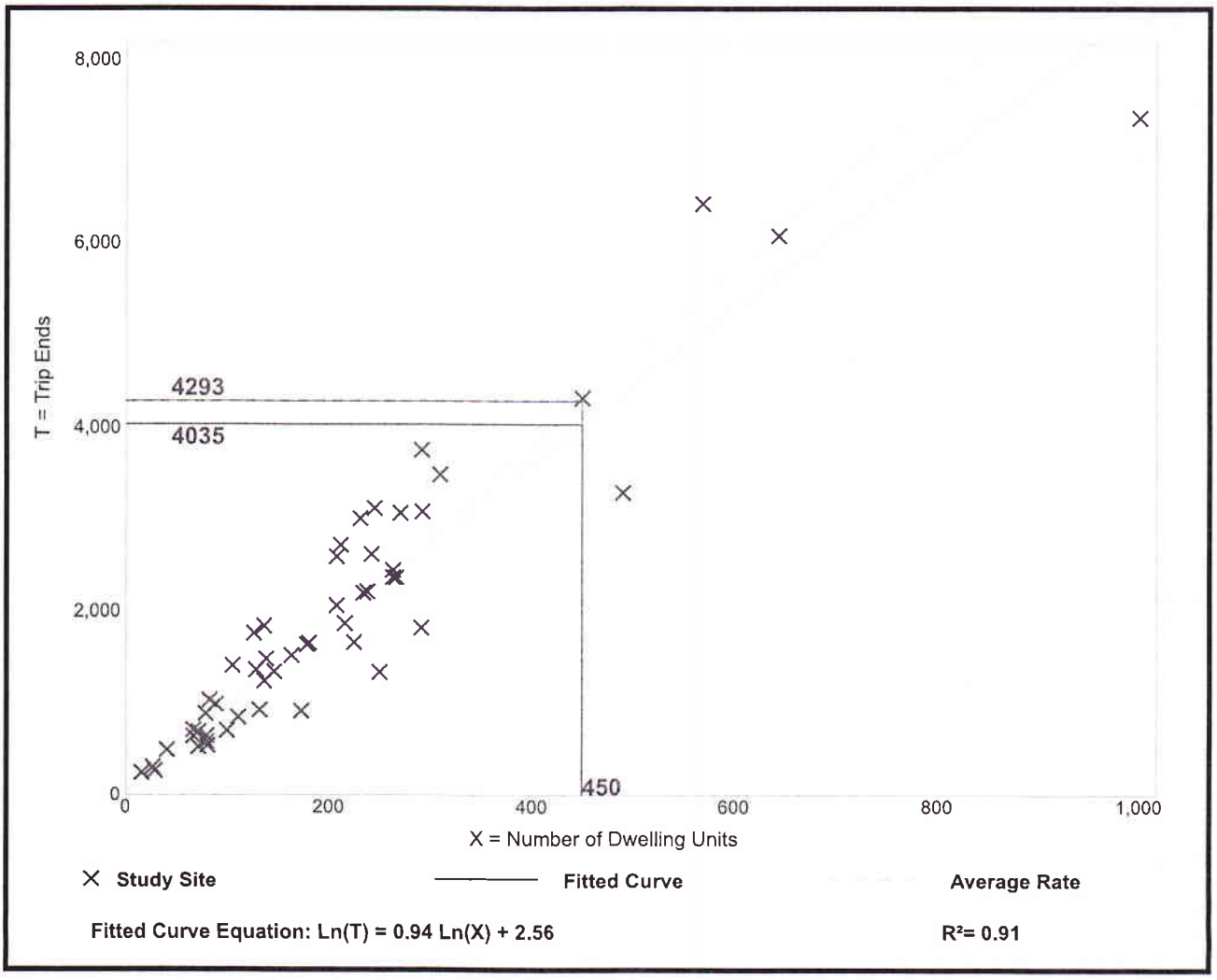
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 52
Avg. Num. of Dwelling Units: 207
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.54	5.32 - 15.25	2.17

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.94 Ln(X) + 2.56

R^2= 0.91

Single-Family Detached Housing
(210)

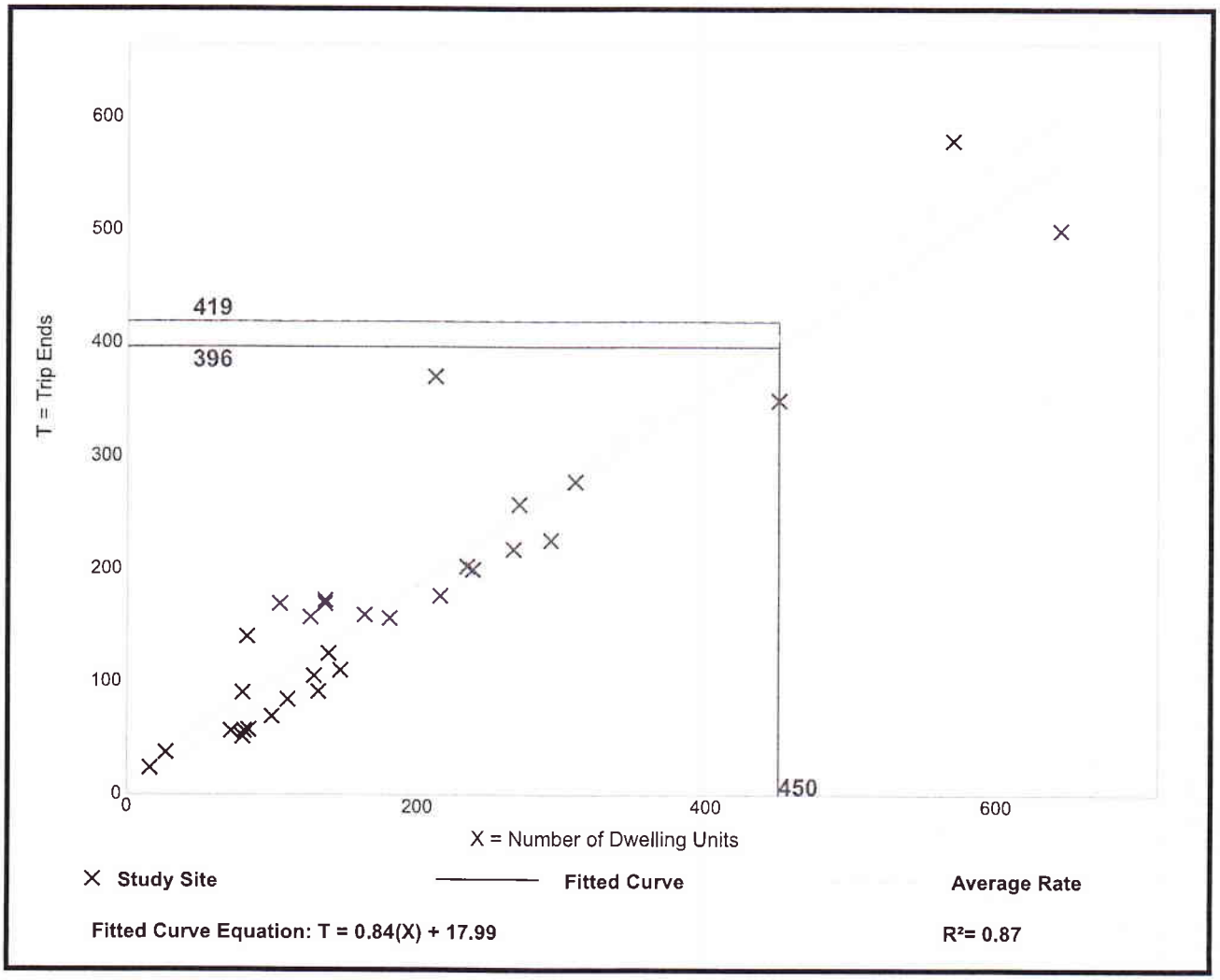
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 188
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.64 - 1.75	0.26

Data Plot and Equation



HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	137	9	0	651	0	3	0	2	3	0	12
Future Volume (veh/h)	2	137	9	0	651	0	3	0	2	3	0	12
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	2	152	10	0	723	0	3	0	2	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	2369	1057	4	1579	0	319	0	176	111	17	144
Arrive On Green	0.11	0.67	0.67	0.00	0.44	0.00	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	146	152	1292
Grp Volume(v), veh/h	2	152	10	0	723	0	3	0	2	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1591	0	0
Q Serve(g_s), s	0.0	0.7	0.1	0.0	6.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.7	0.1	0.0	6.4	0.0	0.1	0.0	0.1	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	198	2369	1057	4	1579	0	319	0	176	272	0	0
V/C Ratio(X)	0.01	0.06	0.01	0.00	0.46	0.00	0.01	0.00	0.01	0.06	0.00	0.00
Avail Cap(c_a), veh/h	198	2369	1057	198	1579	0	786	0	704	788	0	0
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	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	2.6	2.5	0.0	8.7	0.0	17.8	0.0	17.8	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.2	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	2.7	2.5	0.0	9.7	0.0	17.8	0.0	17.8	18.0	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		164			723			5			16	
Approach Delay, s/veh		2.8			9.7			17.8			18.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	10.0	0.0	35.0	10.0	10.0	25.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	5.0	20.0	20.0	5.0	20.0
Max Q Clear Time (g_c+I1), s	2.1	0.0	2.7	2.4	2.0	8.4
Green Ext Time (p_c), s	0.0	0.0	0.8	0.0	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	740	42	17	359	2	30	2	13	1	1	3
Future Volume (veh/h)	4	740	42	17	359	2	30	2	13	1	1	3
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	4	822	47	19	399	2	33	2	14	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1579	704	198	1611	8	318	22	157	112	57	110
Arrive On Green	0.11	0.44	0.44	0.11	0.44	0.44	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3626	18	1412	202	1414	144	513	986
Grp Volume(v), veh/h	4	822	47	19	195	206	33	0	16	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1616	1644	0	0
Q Serve(g_s), s	0.1	7.5	0.8	0.4	3.1	3.1	0.8	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	7.5	0.8	0.4	3.1	3.1	0.9	0.0	0.4	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.88	0.20		0.60
Lane Grp Cap(c), veh/h	198	1579	704	198	790	830	318	0	180	279	0	0
V/C Ratio(X)	0.02	0.52	0.07	0.10	0.25	0.25	0.10	0.00	0.09	0.02	0.00	0.00
Avail Cap(c_a), veh/h	198	1579	704	198	790	830	789	0	718	809	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	9.0	7.2	18.0	7.8	7.8	18.2	0.0	18.0	17.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.2	0.2	0.7	0.7	0.1	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	4.2	0.4	0.3	1.8	1.9	0.5	0.0	0.3	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	10.3	7.3	18.2	8.6	8.5	18.3	0.0	18.2	17.9	0.0	0.0
LnGrp LOS	B	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		873			420			49			5	
Approach Delay, s/veh		10.1			9.0			18.3			17.9	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.0	10.0	25.0		10.0	10.0	25.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		20.0	5.0	20.0		20.0	5.0	20.0				
Max Q Clear Time (g_c+I1), s		2.9	2.4	9.5		2.1	2.1	5.1				
Green Ext Time (p_c), s		0.1	0.0	4.1		0.0	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	60	90	9	278	1	5	0	11	2	0	13
Future Volume (veh/h)	3	60	90	9	278	1	5	0	11	2	0	13
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	3	67	100	10	309	1	6	0	12	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1579	704	198	1615	5	319	0	176	100	12	154
Arrive On Green	0.11	0.44	0.44	0.11	0.44	0.44	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1400	0	1585	94	105	1390
Grp Volume(v), veh/h	3	67	100	10	151	159	6	0	12	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1589	0	0
Q Serve(g_s), s	0.1	0.5	1.7	0.2	2.3	2.3	0.0	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.5	1.7	0.2	2.3	2.3	0.1	0.0	0.3	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	198	1579	704	198	790	830	319	0	176	267	0	0
V/C Ratio(X)	0.02	0.04	0.14	0.05	0.19	0.19	0.02	0.00	0.07	0.06	0.00	0.00
Avail Cap(c_a), veh/h	198	1579	704	198	790	830	785	0	704	786	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	7.1	7.4	17.9	7.6	7.6	17.8	0.0	17.9	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.4	0.1	0.5	0.5	0.0	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.9	0.2	1.3	1.4	0.1	0.0	0.2	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	7.1	7.8	18.0	8.1	8.1	17.9	0.0	18.1	18.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		170			320			18			16	
Approach Delay, s/veh		7.7			8.4			18.0			18.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	10.0	10.0	25.0	10.0	10.0	25.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	5.0	20.0	20.0	5.0	20.0
Max Q Clear Time (g_c+I1), s	2.3	2.2	3.7	2.4	2.1	4.3
Green Ext Time (p_c), s	0.0	0.0	0.6	0.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	433	80	9	552	2	80	3	30	3	1	2
Future Volume (veh/h)	1	433	80	9	552	2	80	3	30	3	1	2
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	1	481	89	10	613	2	89	3	33	3	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1579	704	198	1615	5	318	15	164	176	62	59
Arrive On Green	0.11	0.44	0.44	0.11	0.44	0.44	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1414	134	1472	505	556	530
Grp Volume(v), veh/h	1	481	89	10	300	315	89	0	36	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1414	0	1605	1591	0	0
Q Serve(g_s), s	0.0	3.9	1.5	0.2	5.1	5.1	2.5	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.9	1.5	0.2	5.1	5.1	2.6	0.0	0.9	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.92	0.50		0.33
Lane Grp Cap(c), veh/h	198	1579	704	198	790	830	318	0	178	297	0	0
V/C Ratio(X)	0.01	0.30	0.13	0.05	0.38	0.38	0.28	0.00	0.20	0.02	0.00	0.00
Avail Cap(c_a), veh/h	198	1579	704	198	790	830	789	0	714	799	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	8.0	7.4	17.9	8.4	8.4	18.9	0.0	18.2	17.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.4	0.1	1.4	1.3	0.5	0.0	0.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	2.1	0.8	0.2	3.0	3.2	1.5	0.0	0.6	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	8.5	7.7	18.0	9.7	9.7	19.4	0.0	18.7	17.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		571			625			125			6	
Approach Delay, s/veh		8.4			9.8			19.2			17.9	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.0	10.0	25.0		10.0	10.0	25.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		20.0	5.0	20.0		20.0	5.0	20.0				
Max Q Clear Time (g_c+I1), s		4.6	2.2	5.9		2.1	2.0	7.1				
Green Ext Time (p_c), s		0.3	0.0	2.9		0.0	0.0	2.9				

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	137	84	8	651	0	228	0	27	3	0	12
Future Volume (veh/h)	2	137	84	8	651	0	228	0	27	3	0	12
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	2	152	93	9	723	0	253	0	30	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1306	583	182	1306	0	464	0	355	117	37	289
Arrive On Green	0.10	0.37	0.37	0.10	0.37	0.00	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	134	164	1292
Grp Volume(v), veh/h	2	152	93	9	723	0	253	0	30	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1590	0	0
Q Serve(g_s), s	0.0	1.4	1.9	0.2	7.9	0.0	7.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.4	1.9	0.2	7.9	0.0	8.2	0.0	0.7	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	182	1306	583	182	1306	0	464	0	355	444	0	0
V/C Ratio(X)	0.01	0.12	0.16	0.05	0.55	0.00	0.55	0.00	0.08	0.04	0.00	0.00
Avail Cap(c_a), veh/h	182	1306	583	182	1306	0	779	0	712	791	0	0
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	10.2	10.4	19.8	12.3	0.0	17.9	0.0	15.0	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.6	0.1	1.7	0.0	1.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.8	1.1	0.2	5.0	0.0	4.6	0.0	0.5	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	10.4	11.0	20.0	14.0	0.0	18.9	0.0	15.1	14.9	0.0	0.0
LnGrp LOS	B	B	B	B	B	A	B	A	B	B	A	A
Approach Vol, veh/h		247			732			283			16	
Approach Delay, s/veh		10.7			14.1			18.5			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	16.0	10.0	23.0	16.0	10.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	5.0	18.0	22.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	10.2	2.2	3.9	2.4	2.0	9.9
Green Ext Time (p_c), s	0.7	0.0	0.9	0.0	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	740	295	45	359	2	178	2	30	1	1	3
Future Volume (veh/h)	4	740	295	45	359	2	178	2	30	1	1	3
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	4	822	245	50	399	2	198	2	33	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1449	646	182	1478	7	408	17	278	114	96	182
Arrive On Green	0.10	0.41	0.41	0.10	0.41	0.41	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3626	18	1412	91	1508	139	518	986
Grp Volume(v), veh/h	4	822	245	50	195	206	198	0	35	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1599	1643	0	0
Q Serve(g_s), s	0.1	8.7	5.3	1.3	3.6	3.6	6.4	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	8.7	5.3	1.3	3.6	3.6	6.5	0.0	0.9	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.94	0.20		0.60
Lane Grp Cap(c), veh/h	182	1449	646	182	724	761	408	0	295	391	0	0
V/C Ratio(X)	0.02	0.57	0.38	0.28	0.27	0.27	0.48	0.00	0.12	0.01	0.00	0.00
Avail Cap(c_a), veh/h	182	1449	646	218	724	761	723	0	652	745	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	11.2	10.2	20.4	9.7	9.7	18.9	0.0	16.7	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	1.7	0.8	0.9	0.9	0.9	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	5.4	3.1	0.9	2.3	2.4	3.7	0.0	0.6	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	12.8	11.9	21.2	10.6	10.5	19.8	0.0	16.8	16.4	0.0	0.0
LnGrp LOS	B	B	B	C	B	B	B	A	B	B	A	A
Approach Vol, veh/h		1071			451			233			5	
Approach Delay, s/veh		12.6			11.7			19.4			16.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.1	10.0	25.0		14.1	10.0	25.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		20.0	6.0	19.0		20.0	5.0	20.0				
Max Q Clear Time (g_c+I1), s		8.5	3.3	10.7		2.1	2.1	5.6				
Green Ext Time (p_c), s		0.6	0.0	4.0		0.0	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	64	128	13	278	1	120	0	24	2	0	13
Future Volume (veh/h)	3	64	128	13	278	1	120	0	24	2	0	13
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	3	71	114	14	309	1	133	0	27	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	1487	663	196	1521	5	359	0	223	100	17	196
Arrive On Green	0.11	0.42	0.42	0.11	0.42	0.42	0.14	0.00	0.14	0.14	0.00	0.14
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1400	0	1585	77	122	1393
Grp Volume(v), veh/h	3	71	114	14	151	159	133	0	27	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1593	0	0
Q Serve(g_s), s	0.1	0.5	2.0	0.3	2.5	2.5	3.6	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.5	2.0	0.3	2.5	2.5	4.0	0.0	0.7	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	196	1487	663	196	744	782	359	0	223	314	0	0
V/C Ratio(X)	0.02	0.05	0.17	0.07	0.20	0.20	0.37	0.00	0.12	0.05	0.00	0.00
Avail Cap(c_a), veh/h	196	1487	663	196	744	782	809	0	733	814	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.0	7.8	8.3	18.1	8.4	8.4	18.4	0.0	17.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.6	0.2	0.6	0.6	0.6	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	1.1	0.2	1.5	1.5	2.3	0.0	0.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	7.9	8.8	18.3	9.0	9.0	19.1	0.0	17.3	17.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		188			324			160			16	
Approach Delay, s/veh		8.6			9.4			18.8			17.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	11.4	10.0	24.0	11.4	10.0	24.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	5.0	19.0	21.0	5.0	19.0
Max Q Clear Time (g_c+I1), s	6.0	2.3	4.0	2.4	2.1	4.5
Green Ext Time (p_c), s	0.4	0.0	0.6	0.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	433	283	32	552	2	254	3	49	3	1	2
Future Volume (veh/h)	1	433	283	32	552	2	254	3	49	3	1	2
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	1	481	247	36	613	2	282	3	54	3	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1271	567	177	1300	4	490	21	371	261	97	125
Arrive On Green	0.10	0.36	0.36	0.10	0.36	0.36	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1414	84	1514	626	397	512
Grp Volume(v), veh/h	1	481	247	36	300	315	282	0	57	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1414	0	1598	1535	0	0
Q Serve(g_s), s	0.0	5.1	6.0	0.9	6.6	6.6	9.3	0.0	1.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.1	6.0	0.9	6.6	6.6	9.4	0.0	1.4	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.95	0.50		0.33
Lane Grp Cap(c), veh/h	177	1271	567	177	636	668	490	0	391	483	0	0
V/C Ratio(X)	0.01	0.38	0.44	0.20	0.47	0.47	0.58	0.00	0.15	0.01	0.00	0.00
Avail Cap(c_a), veh/h	177	1271	567	177	636	668	762	0	699	770	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.4	12.0	12.3	20.8	12.5	12.5	17.9	0.0	14.9	14.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	2.4	0.6	2.5	2.4	1.1	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	3.2	3.8	0.7	4.6	4.8	5.3	0.0	0.9	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	12.9	14.7	21.4	15.0	14.9	19.0	0.0	15.0	14.4	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	A
Approach Vol, veh/h		729			651			339			6	
Approach Delay, s/veh		13.5			15.3			18.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.3	10.0	23.0		17.3	10.0	23.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		22.0	5.0	18.0		22.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		11.4	2.9	8.0		2.1	2.0	8.6				
Green Ext Time (p_c), s		0.9	0.0	2.9		0.0	0.0	2.5				

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1	0	2	7
Future Vol, veh/h	0	4	1	0	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	0	2	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	13	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1006	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1005	1084	-	-	1622	-
Mov Cap-2 Maneuver	1005	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	1.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.004	0.001	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	23	22	0	30	30
Future Vol, veh/h	0	23	22	0	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	24	0	33	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	123	24	0	0	24	0
Stage 1	24	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	872	1052	-	-	1591	-
Stage 1	999	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	854	1052	-	-	1591	-
Mov Cap-2 Maneuver	854	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1052	1591	-
HCM Lane V/C Ratio	-	-	0.024	0.021	-
HCM Control Delay (s)	-	-	8.5	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	8	0	49	50
Future Vol, veh/h	0	9	8	0	49	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	9	0	54	56

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	173	9	0	0	9	0
Stage 1	9	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	817	1073	-	-	1611	-
Stage 1	1014	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	788	1073	-	-	1611	-
Mov Cap-2 Maneuver	788	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	865	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	1611	-
HCM Lane V/C Ratio	-	-	0.009	0.034	-
HCM Control Delay (s)	-	-	8.4	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	57	56	0	45	45
Future Vol, veh/h	0	57	56	0	45	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	63	62	0	50	50

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	212	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	150	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	776	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	750	1003	-	-	1541	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	878	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.063	0.032	-
HCM Control Delay (s)	-	-	8.8	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	8.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	254	1	0	85	7
Future Vol, veh/h	0	254	1	0	85	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	282	1	0	94	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	197	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	792	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	746	1084	-	-	1622	-
Mov Cap-2 Maneuver	746	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.26	0.058	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	7.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	188	22	0	311	30
Future Vol, veh/h	0	188	22	0	311	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	209	24	0	346	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	749	24	0	0	24	0
Stage 1	24	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	379	1052	-	-	1591	-
Stage 1	999	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	1052	-	-	1591	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	479	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1052	1591	-
HCM Lane V/C Ratio	-	-	0.199	0.217	-
HCM Control Delay (s)	-	-	9.3	7.9	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.8	-

Intersection	
Int Delay, s/veh	6.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	137	8	0	91	50
Future Vol, veh/h	0	137	8	0	91	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	152	9	0	101	56

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	267	9	0	0	9	0
Stage 1	9	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	722	1073	-	-	1611	-
Stage 1	1014	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	675	1073	-	-	1611	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	4.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1073	1611	-
HCM Lane V/C Ratio	-	-	0.142	0.063	-
HCM Control Delay (s)	-	-	8.9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	250	56	0	271	45
Future Vol, veh/h	0	250	56	0	271	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	278	62	0	301	50

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	714	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	398	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	318	1003	-	-	1541	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	6.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.277	0.195	-
HCM Control Delay (s)	-	-	10	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.7	-

Intersection	
Int Delay, s/veh	8.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	250	4	0	83	2
Future Vol, veh/h	0	250	4	0	83	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	278	4	0	92	2

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	190	4	0	0	4	0
Stage 1	4	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	799	1080	-	-	1618	-
Stage 1	1019	-	-	-	-	-
Stage 2	846	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	753	1080	-	-	1618	-
Mov Cap-2 Maneuver	753	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	846	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1080	1618	-
HCM Lane V/C Ratio	-	-	0.257	0.057	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	8.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	281	21	0	315	28
Future Vol, veh/h	0	281	21	0	315	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	312	23	0	350	31

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	754	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	377	1054	-	-	1592	-
Stage 1	1000	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	293	1054	-	-	1592	-
Mov Cap-2 Maneuver	293	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	476	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1054	1592	-
HCM Lane V/C Ratio	-	-	0.296	0.22	-
HCM Control Delay (s)	-	-	9.8	7.9	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.8	-

Intersection	
Int Delay, s/veh	6.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	128	9	0	42	49
Future Vol, veh/h	0	128	9	0	42	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	142	10	0	47	54

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	158	10	0	0	10	0
Stage 1	10	-	-	-	-	-
Stage 2	148	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	833	1071	-	-	1610	-
Stage 1	1013	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	808	1071	-	-	1610	-
Mov Cap-2 Maneuver	808	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1071	1610	-
HCM Lane V/C Ratio	-	-	0.133	0.029	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	193	57	0	226	45
Future Vol, veh/h	0	193	57	0	226	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	214	63	0	251	50

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	615	63	0	0	63	0
Stage 1	63	-	-	-	-	-
Stage 2	552	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	455	1002	-	-	1540	-
Stage 1	960	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	379	1002	-	-	1540	-
Mov Cap-2 Maneuver	379	-	-	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	6.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1002	1540	-
HCM Lane V/C Ratio	-	-	0.214	0.163	-
HCM Control Delay (s)	-	-	9.6	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.6	-

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	137	13	2	651	0	3	0	2	3	0	12
Future Volume (veh/h)	2	137	13	2	651	0	3	0	2	3	0	12
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	2	152	14	2	723	0	3	0	2	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1579	704	198	1579	0	319	0	176	111	17	144
Arrive On Green	0.11	0.44	0.44	0.11	0.44	0.00	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	146	152	1292
Grp Volume(v), veh/h	2	152	14	2	723	0	3	0	2	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1591	0	0
Q Serve(g_s), s	0.0	1.1	0.2	0.0	6.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.1	0.2	0.0	6.4	0.0	0.1	0.0	0.1	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	198	1579	704	198	1579	0	319	0	176	272	0	0
V/C Ratio(X)	0.01	0.10	0.02	0.01	0.46	0.00	0.01	0.00	0.01	0.06	0.00	0.00
Avail Cap(c_a), veh/h	198	1579	704	198	1579	0	786	0	704	788	0	0
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	7.3	7.0	17.8	8.7	0.0	17.8	0.0	17.8	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.6	0.1	0.0	3.5	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	7.4	7.1	17.8	9.7	0.0	17.8	0.0	17.8	18.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		168			725			5			16	
Approach Delay, s/veh		7.5			9.7			17.8			18.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.0	10.0	25.0		10.0	10.0	25.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		20.0	5.0	20.0		20.0	5.0	20.0				
Max Q Clear Time (g_c+I1), s		2.1	2.0	3.1		2.4	2.0	8.4				
Green Ext Time (p_c), s		0.0	0.0	0.8		0.0	0.0	3.7				

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	740	450	49	359	2	214	2	24	1	1	3
Future Volume (veh/h)	4	740	450	49	359	2	214	2	24	1	1	3
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	4	822	389	54	399	2	238	2	27	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	1402	626	176	1431	7	441	23	314	117	106	207
Arrive On Green	0.10	0.39	0.39	0.10	0.39	0.39	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3626	18	1412	110	1491	152	504	984
Grp Volume(v), veh/h	4	822	389	54	195	206	238	0	29	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1602	1639	0	0
Q Serve(g_s), s	0.1	9.2	10.0	1.4	3.8	3.8	7.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	9.2	10.0	1.4	3.8	3.8	8.1	0.0	0.7	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.93	0.20		0.60
Lane Grp Cap(c), veh/h	176	1402	626	176	701	737	441	0	338	431	0	0
V/C Ratio(X)	0.02	0.59	0.62	0.31	0.28	0.28	0.54	0.00	0.09	0.01	0.00	0.00
Avail Cap(c_a), veh/h	176	1402	626	211	701	737	700	0	632	723	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.6	12.1	12.3	21.2	10.4	10.4	19.0	0.0	16.1	15.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.8	4.6	1.0	1.0	0.9	1.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	5.8	6.5	1.0	2.5	2.6	4.6	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	13.9	16.9	22.2	11.4	11.4	20.0	0.0	16.2	15.8	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	A
Approach Vol, veh/h		1215			455			267			5	
Approach Delay, s/veh		14.9			12.7			19.6			15.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	15.7	10.0	25.0	15.7	10.0	25.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	6.0	19.0	20.0	5.0	20.0
Max Q Clear Time (g_c+I1), s	10.1	3.4	12.0	2.1	2.1	5.8
Green Ext Time (p_c), s	0.6	0.0	3.8	0.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	64	172	14	278	1	32	0	4	2	0	13
Future Volume (veh/h)	3	64	172	14	278	1	32	0	4	2	0	13
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	3	71	-31	16	309	1	36	0	4	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1663	742	189	1701	6	306	0	169	96	11	148
Arrive On Green	0.11	0.47	0.00	0.11	0.47	0.47	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1400	0	1585	94	104	1391
Grp Volume(v), veh/h	3	71	-31	16	151	159	36	0	4	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1589	0	0
Q Serve(g_s), s	0.1	0.5	0.0	0.4	2.3	2.3	0.6	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.5	0.0	0.4	2.3	2.3	1.0	0.0	0.1	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	189	1663	742	189	832	874	306	0	169	255	0	0
V/C Ratio(X)	0.02	0.04	-0.04	0.08	0.18	0.18	0.12	0.00	0.02	0.06	0.00	0.00
Avail Cap(c_a), veh/h	189	1663	742	189	832	874	693	0	607	687	0	0
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	6.8	0.0	18.9	7.3	7.3	19.2	0.0	18.8	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.5	0.5	0.2	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.0	0.3	1.3	1.4	0.6	0.0	0.1	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	6.8	0.0	19.1	7.7	7.7	19.4	0.0	18.9	19.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		43			326			40			16	
Approach Delay, s/veh		12.6			8.3			19.3			19.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.0	10.0	27.0		10.0	10.0	27.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		18.0	5.0	22.0		18.0	5.0	22.0				
Max Q Clear Time (g_c+I1), s		3.0	2.4	2.5		2.4	2.1	4.3				
Green Ext Time (p_c), s		0.1	0.0	0.3		0.0	0.0	1.5				

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	433	224	20	552	2	150	0	26	3	4	2
Future Volume (veh/h)	1	433	224	20	552	2	150	0	26	3	4	2
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	1	481	166	22	613	2	167	0	29	3	4	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1404	626	195	1435	5	394	0	263	158	166	62
Arrive On Green	0.11	0.39	0.39	0.11	0.39	0.39	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1410	0	1585	315	1000	376
Grp Volume(v), veh/h	1	481	166	22	300	315	167	0	29	9	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1410	0	1585	1691	0	0
Q Serve(g_s), s	0.0	4.3	3.2	0.5	5.6	5.6	4.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.3	3.2	0.5	5.6	5.6	5.0	0.0	0.7	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.33		0.22
Lane Grp Cap(c), veh/h	195	1404	626	195	702	738	394	0	263	386	0	0
V/C Ratio(X)	0.01	0.34	0.27	0.11	0.43	0.43	0.42	0.00	0.11	0.02	0.00	0.00
Avail Cap(c_a), veh/h	195	1404	626	195	702	738	840	0	765	898	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.1	9.6	9.3	18.3	10.0	10.0	17.9	0.0	16.1	15.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.0	0.3	1.9	1.8	0.7	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	2.5	1.8	0.4	3.6	3.8	2.8	0.0	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	10.3	10.4	18.5	11.9	11.8	18.7	0.0	16.3	15.9	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		648			637			196			9	
Approach Delay, s/veh		10.3			12.1			18.3			15.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.6	10.0	23.0		12.6	10.0	23.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		22.0	5.0	18.0		22.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		7.0	2.5	6.3		2.2	2.0	7.6				
Green Ext Time (p_c), s		0.5	0.0	2.9		0.0	0.0	2.6				

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

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	137	88	10	651	0	228	0	27	3	0	12
Future Volume (veh/h)	2	137	88	10	651	0	228	0	27	3	0	12
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	2	152	87	11	723	0	253	0	30	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1306	583	182	1306	0	464	0	355	117	37	289
Arrive On Green	0.10	0.37	0.37	0.10	0.37	0.00	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	134	164	1292
Grp Volume(v), veh/h	2	152	87	11	723	0	253	0	30	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1590	0	0
Q Serve(g_s), s	0.0	1.4	1.8	0.3	7.9	0.0	7.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.4	1.8	0.3	7.9	0.0	8.2	0.0	0.7	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	182	1306	583	182	1306	0	464	0	355	444	0	0
V/C Ratio(X)	0.01	0.12	0.15	0.06	0.55	0.00	0.55	0.00	0.08	0.04	0.00	0.00
Avail Cap(c_a), veh/h	182	1306	583	182	1306	0	779	0	712	791	0	0
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	10.2	10.4	19.9	12.3	0.0	17.9	0.0	15.0	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.5	0.1	1.7	0.0	1.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.8	1.1	0.2	5.0	0.0	4.6	0.0	0.5	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	10.4	10.9	20.0	14.0	0.0	18.9	0.0	15.1	14.9	0.0	0.0
LnGrp LOS	B	B	B	C	B	A	B	A	B	B	A	A
Approach Vol, veh/h		241			734			283			16	
Approach Delay, s/veh		10.7			14.1			18.5			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	16.0	10.0	23.0	16.0	10.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	5.0	18.0	22.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	10.2	2.3	3.8	2.4	2.0	9.9
Green Ext Time (p_c), s	0.7	0.0	0.9	0.0	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	740	703	77	359	2	362	2	41	1	1	3
Future Volume (veh/h)	4	740	703	77	359	2	362	2	41	1	1	3
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	4	822	587	86	399	2	402	2	46	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	1146	511	160	1169	6	581	21	488	139	145	311
Arrive On Green	0.09	0.32	0.32	0.09	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3554	1585	1781	3626	18	1412	66	1529	194	455	973
Grp Volume(v), veh/h	4	822	587	86	195	206	402	0	48	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1595	1622	0	0
Q Serve(g_s), s	0.1	11.4	18.0	2.6	4.7	4.7	15.0	0.0	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	11.4	18.0	2.6	4.7	4.7	15.1	0.0	1.2	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.96	0.20		0.60
Lane Grp Cap(c), veh/h	160	1146	511	160	573	602	581	0	510	596	0	0
V/C Ratio(X)	0.03	0.72	1.15	0.54	0.34	0.34	0.69	0.00	0.09	0.01	0.00	0.00
Avail Cap(c_a), veh/h	160	1146	511	160	573	602	686	0	628	713	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.2	16.7	18.9	24.3	14.4	14.4	18.0	0.0	13.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	3.9	87.7	3.6	1.6	1.5	2.4	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	8.1	27.2	2.1	3.4	3.5	8.4	0.0	0.7	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	20.6	106.7	27.9	16.0	15.9	20.4	0.0	13.4	13.0	0.0	0.0
LnGrp LOS	C	C	F	C	B	B	C	A	B	B	A	A
Approach Vol, veh/h		1413			487			450			5	
Approach Delay, s/veh		56.3			18.1			19.7			13.0	
Approach LOS		E			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	22.8	10.0	23.0	22.8	10.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	5.0	18.0	22.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	17.1	4.6	20.0	2.1	2.1	6.7
Green Ext Time (p_c), s	0.8	0.0	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	64	210	18	278	1	147	0	17	2	0	13
Future Volume (veh/h)	3	64	210	18	278	1	147	0	17	2	0	13
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	3	71	11	20	309	1	163	0	19	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1701	759	164	1739	6	350	0	243	84	21	214
Arrive On Green	0.09	0.48	0.48	0.09	0.48	0.48	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1400	0	1585	65	135	1397
Grp Volume(v), veh/h	3	71	11	20	151	159	163	0	19	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1597	0	0
Q Serve(g_s), s	0.1	0.6	0.2	0.6	2.6	2.6	5.5	0.0	0.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.6	0.2	0.6	2.6	2.6	5.9	0.0	0.6	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	164	1701	759	164	851	894	350	0	243	319	0	0
V/C Ratio(X)	0.02	0.04	0.01	0.12	0.18	0.18	0.47	0.00	0.08	0.05	0.00	0.00
Avail Cap(c_a), veh/h	164	1701	759	164	851	894	625	0	554	626	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	7.5	7.4	22.6	8.1	8.1	21.9	0.0	19.7	19.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.5	0.4	1.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.3	0.1	0.4	1.6	1.7	3.5	0.0	0.4	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	7.6	7.5	23.0	8.5	8.5	22.9	0.0	19.9	19.7	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	C	A	B	B	A	A
Approach Vol, veh/h		85			330			182			16	
Approach Delay, s/veh		8.1			9.4			22.6			19.7	
Approach LOS		A			A			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	13.3	10.0	31.0	13.3	10.0	31.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	5.0	26.0	19.0	5.0	26.0
Max Q Clear Time (g_c+I1), s	7.9	2.6	2.6	2.5	2.1	4.6
Green Ext Time (p_c), s	0.4	0.0	0.4	0.0	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	433	427	43	552	2	324	0	45	3	4	2
Future Volume (veh/h)	1	433	427	43	552	2	324	0	45	3	4	2
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	1	481	363	48	613	2	360	0	50	3	4	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1176	524	164	1202	4	559	0	478	211	264	111
Arrive On Green	0.09	0.33	0.33	0.09	0.33	0.33	0.30	0.00	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1585	1781	3633	12	1410	0	1585	409	874	366
Grp Volume(v), veh/h	1	481	363	48	300	315	360	0	50	9	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1410	0	1585	1649	0	0
Q Serve(g_s), s	0.0	5.7	10.8	1.4	7.4	7.4	12.8	0.0	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.7	10.8	1.4	7.4	7.4	13.0	0.0	1.2	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.33		0.22
Lane Grp Cap(c), veh/h	164	1176	524	164	588	618	559	0	478	586	0	0
V/C Ratio(X)	0.01	0.41	0.69	0.29	0.51	0.51	0.64	0.00	0.10	0.02	0.00	0.00
Avail Cap(c_a), veh/h	164	1176	524	164	588	618	1222	0	1224	1339	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	14.1	15.8	23.1	14.7	14.7	17.8	0.0	13.7	13.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	7.3	1.0	3.1	3.0	1.3	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	3.8	7.8	1.0	5.5	5.7	7.2	0.0	0.8	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	15.1	23.1	24.0	17.8	17.6	19.0	0.0	13.8	13.3	0.0	0.0
LnGrp LOS	C	B	C	C	B	B	B	A	B	B	A	A
Approach Vol, veh/h		845			663			410			9	
Approach Delay, s/veh		18.6			18.2			18.4			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	21.4	10.0	23.0	21.4	10.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	42.0	5.0	18.0	42.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	15.0	3.4	12.8	2.2	2.0	9.4
Green Ext Time (p_c), s	1.4	0.0	2.1	0.0	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1	0	7	8
Future Vol, veh/h	0	4	1	0	7	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	0	8	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	26	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	989	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	984	1084	-	-	1622	-
Mov Cap-2 Maneuver	984	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.004	0.005	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	120	0	250	250
Future Vol, veh/h	0	120	120	0	250	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	133	0	278	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	967	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	282	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	218	916	-	-	1452	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.146	0.191	-
HCM Control Delay (s)	-	-	9.6	8.1	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.7	-

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	15	21	0	69	117
Future Vol, veh/h	0	15	21	0	69	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	17	23	0	77	130

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	307	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	685	1054	-	-	1592	-
Stage 1	1000	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	649	1054	-	-	1592	-
Mov Cap-2 Maneuver	649	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	764	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1054	1592	-
HCM Lane V/C Ratio	-	-	0.016	0.048	-
HCM Control Delay (s)	-	-	8.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.2	-

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	56	0	168	80
Future Vol, veh/h	0	120	56	0	168	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	62	0	187	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	525	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	513	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	447	1003	-	-	1541	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	5.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.133	0.121	-
HCM Control Delay (s)	-	-	9.1	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.4	-

Intersection	
Int Delay, s/veh	8.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	254	1	0	90	8
Future Vol, veh/h	0	254	1	0	90	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	282	1	0	100	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	210	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	778	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	730	1084	-	-	1622	-
Mov Cap-2 Maneuver	730	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.26	0.062	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	285	120	0	531	250
Future Vol, veh/h	0	285	120	0	531	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	317	133	0	590	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1591	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	1458	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	118	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	61	916	-	-	1452	-
Mov Cap-2 Maneuver	61	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	214	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	6.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.346	0.406	-
HCM Control Delay (s)	-	-	11	9.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	2	-

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	143	21	0	111	117
Future Vol, veh/h	0	143	21	0	111	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	159	23	0	123	130

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	399	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	607	1054	-	-	1592	-
Stage 1	1000	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	557	1054	-	-	1592	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1054	1592	-
HCM Lane V/C Ratio	-	-	0.151	0.077	-
HCM Control Delay (s)	-	-	9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	313	56	0	394	80
Future Vol, veh/h	0	313	56	0	394	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	348	62	0	438	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1027	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	260	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	182	1003	-	-	1541	-
Mov Cap-2 Maneuver	182	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	370	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	6.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.347	0.284	-
HCM Control Delay (s)	-	-	10.5	8.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	1.2	-

Intersection	
Int Delay, s/veh	8.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	250	4	0	83	7
Future Vol, veh/h	0	250	4	0	83	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	278	4	0	92	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	4	0	0	4	0
Stage 1	4	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1080	-	-	1618	-
Stage 1	1019	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	748	1080	-	-	1618	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1080	1618	-
HCM Lane V/C Ratio	-	-	0.257	0.057	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	165	120	0	281	250
Future Vol, veh/h	0	165	120	0	281	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	183	133	0	312	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1035	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	257	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	192	916	-	-	1452	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	396	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	4.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.2	0.215	-
HCM Control Delay (s)	-	-	9.9	8.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.8	-

Intersection	
Int Delay, s/veh	5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	128	15	0	42	69
Future Vol, veh/h	0	128	15	0	42	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	142	17	0	47	77

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	188	17	0	0	17	0
Stage 1	17	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	801	1062	-	-	1600	-
Stage 1	1006	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	776	1062	-	-	1600	-
Mov Cap-2 Maneuver	776	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1062	1600	-
HCM Lane V/C Ratio	-	-	0.134	0.029	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	193	120	0	226	168
Future Vol, veh/h	0	193	120	0	226	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	214	133	0	251	187

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	822	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	344	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	278	916	-	-	1452	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	4.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.234	0.173	-
HCM Control Delay (s)	-	-	10.1	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.6	-

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	153	13	2	726	0	3	0	2	3	0	12
Future Volume (veh/h)	2	153	13	2	726	0	3	0	2	3	0	12
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	2	170	14	2	807	0	3	0	2	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1579	704	198	1579	0	319	0	176	111	17	144
Arrive On Green	0.11	0.44	0.44	0.11	0.44	0.00	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	146	152	1292
Grp Volume(v), veh/h	2	170	14	2	807	0	3	0	2	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1591	0	0
Q Serve(g_s), s	0.0	1.3	0.2	0.0	7.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.3	0.2	0.0	7.3	0.0	0.1	0.0	0.1	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	198	1579	704	198	1579	0	319	0	176	272	0	0
V/C Ratio(X)	0.01	0.11	0.02	0.01	0.51	0.00	0.01	0.00	0.01	0.06	0.00	0.00
Avail Cap(c_a), veh/h	198	1579	704	198	1579	0	786	0	704	788	0	0
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	7.3	7.0	17.8	9.0	0.0	17.8	0.0	17.8	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.7	0.1	0.0	4.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	7.4	7.1	17.8	10.2	0.0	17.8	0.0	17.8	18.0	0.0	0.0
LnGrp LOS	B	A	A	B	B	A	B	A	B	B	A	A
Approach Vol, veh/h		186			809			5			16	
Approach Delay, s/veh		7.5			10.2			17.8			18.0	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.0	10.0	25.0		10.0	10.0	25.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		20.0	5.0	20.0		20.0	5.0	20.0				
Max Q Clear Time (g_c+I1), s		2.1	2.0	3.3		2.4	2.0	9.3				
Green Ext Time (p_c), s		0.0	0.0	0.9		0.0	0.0	4.0				

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	826	450	49	401	2	214	2	24	1	1	3
Future Volume (veh/h)	4	826	450	49	401	2	214	2	24	1	1	3
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	4	918	417	54	446	2	238	2	27	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	1475	658	168	1506	7	430	23	309	113	104	204
Arrive On Green	0.09	0.42	0.42	0.09	0.42	0.42	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3628	16	1412	110	1491	154	501	983
Grp Volume(v), veh/h	4	918	417	54	218	230	238	0	29	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1602	1639	0	0
Q Serve(g_s), s	0.1	10.8	11.1	1.5	4.3	4.3	8.3	0.0	0.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	10.8	11.1	1.5	4.3	4.3	8.5	0.0	0.8	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.93	0.20		0.60
Lane Grp Cap(c), veh/h	168	1475	658	168	738	775	430	0	332	421	0	0
V/C Ratio(X)	0.02	0.62	0.63	0.32	0.30	0.30	0.55	0.00	0.09	0.01	0.00	0.00
Avail Cap(c_a), veh/h	168	1475	658	168	738	775	617	0	544	631	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	12.2	12.3	22.4	10.3	10.3	20.0	0.0	17.0	16.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	2.0	4.6	1.1	1.0	1.0	1.1	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	6.8	7.1	1.1	2.8	3.0	4.9	0.0	0.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	14.2	16.9	23.5	11.4	11.3	21.1	0.0	17.1	16.7	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	C	A	B	B	A	A
Approach Vol, veh/h		1339			502			267			5	
Approach Delay, s/veh		15.1			12.6			20.7			16.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	16.0	10.0	27.0	16.0	10.0	27.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	18.0	5.0	22.0	18.0	5.0	22.0
Max Q Clear Time (g_c+I1), s	10.5	3.5	13.1	2.1	2.1	6.3
Green Ext Time (p_c), s	0.5	0.0	5.0	0.0	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	71	172	14	310	1	32	0	4	2	0	13
Future Volume (veh/h)	3	71	172	14	310	1	32	0	4	2	0	13
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	3	79	-26	16	344	1	36	0	4	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1663	742	189	1701	5	306	0	169	96	11	148
Arrive On Green	0.11	0.47	0.00	0.11	0.47	0.47	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3635	11	1400	0	1585	94	104	1391
Grp Volume(v), veh/h	3	79	-26	16	168	177	36	0	4	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1589	0	0
Q Serve(g_s), s	0.1	0.6	0.0	0.4	2.6	2.6	0.6	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.6	0.0	0.4	2.6	2.6	1.0	0.0	0.1	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	189	1663	742	189	832	875	306	0	169	255	0	0
V/C Ratio(X)	0.02	0.05	-0.04	0.08	0.20	0.20	0.12	0.00	0.02	0.06	0.00	0.00
Avail Cap(c_a), veh/h	189	1663	742	189	832	875	693	0	607	687	0	0
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	6.8	0.0	18.9	7.3	7.3	19.2	0.0	18.8	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.5	0.5	0.2	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.0	0.3	1.5	1.6	0.6	0.0	0.1	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	6.9	0.0	19.1	7.9	7.9	19.4	0.0	18.9	19.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		56			361			40			16	
Approach Delay, s/veh		10.7			8.4			19.3			19.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	10.0	10.0	27.0	10.0	10.0	27.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	18.0	5.0	22.0	18.0	5.0	22.0
Max Q Clear Time (g_c+I1), s	3.0	2.4	2.6	2.4	2.1	4.6
Green Ext Time (p_c), s	0.1	0.0	0.3	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	483	224	20	616	2	150	0	26	3	4	2
Future Volume (veh/h)	1	483	224	20	616	2	150	0	26	3	4	2
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	1	537	166	22	684	2	167	0	29	3	4	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1404	626	195	1436	4	394	0	263	158	166	62
Arrive On Green	0.11	0.39	0.39	0.11	0.39	0.39	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3635	11	1410	0	1585	315	1000	376
Grp Volume(v), veh/h	1	537	166	22	334	352	167	0	29	9	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1410	0	1585	1691	0	0
Q Serve(g_s), s	0.0	4.9	3.2	0.5	6.4	6.4	4.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.9	3.2	0.5	6.4	6.4	5.0	0.0	0.7	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.33		0.22
Lane Grp Cap(c), veh/h	195	1404	626	195	702	738	394	0	263	386	0	0
V/C Ratio(X)	0.01	0.38	0.27	0.11	0.48	0.48	0.42	0.00	0.11	0.02	0.00	0.00
Avail Cap(c_a), veh/h	195	1404	626	195	702	738	840	0	765	898	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.1	9.8	9.3	18.3	10.3	10.3	17.9	0.0	16.1	15.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.0	0.3	2.3	2.2	0.7	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	2.9	1.8	0.4	4.2	4.4	2.8	0.0	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	10.6	10.4	18.5	12.6	12.5	18.7	0.0	16.3	15.9	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B	A	B	B	A	A
Approach Vol, veh/h		704			708			196			9	
Approach Delay, s/veh		10.6			12.7			18.3			15.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	12.6	10.0	23.0	12.6	10.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	5.0	18.0	22.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	7.0	2.5	6.9	2.2	2.0	8.4
Green Ext Time (p_c), s	0.5	0.0	3.1	0.0	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	153	88	10	726	0	228	0	27	3	0	12
Future Volume (veh/h)	2	153	88	10	726	0	228	0	27	3	0	12
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	2	170	87	11	807	0	253	0	30	3	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1306	583	182	1306	0	464	0	355	117	37	289
Arrive On Green	0.10	0.37	0.37	0.10	0.37	0.00	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1401	0	1585	134	164	1292
Grp Volume(v), veh/h	2	170	87	11	807	0	253	0	30	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1401	0	1585	1590	0	0
Q Serve(g_s), s	0.0	1.6	1.8	0.3	9.1	0.0	7.9	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.6	1.8	0.3	9.1	0.0	8.2	0.0	0.7	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.19		0.81
Lane Grp Cap(c), veh/h	182	1306	583	182	1306	0	464	0	355	444	0	0
V/C Ratio(X)	0.01	0.13	0.15	0.06	0.62	0.00	0.55	0.00	0.08	0.04	0.00	0.00
Avail Cap(c_a), veh/h	182	1306	583	182	1306	0	779	0	712	791	0	0
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	10.3	10.4	19.9	12.7	0.0	17.9	0.0	15.0	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.5	0.1	2.2	0.0	1.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.9	1.1	0.2	5.9	0.0	4.6	0.0	0.5	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	10.5	10.9	20.0	14.9	0.0	18.9	0.0	15.1	14.9	0.0	0.0
LnGrp LOS	B	B	B	C	B	A	B	A	B	B	A	A
Approach Vol, veh/h		259			818			283			16	
Approach Delay, s/veh		10.7			14.9			18.5			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.0	10.0	23.0		16.0	10.0	23.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		22.0	5.0	18.0		22.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		10.2	2.3	3.8		2.4	2.0	11.1				
Green Ext Time (p_c), s		0.7	0.0	1.0		0.0	0.0	3.0				

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	826	703	77	401	2	362	2	41	1	1	3
Future Volume (veh/h)	4	826	703	77	401	2	362	2	41	1	1	3
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	4	918	587	86	446	2	402	2	46	1	1	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	1146	511	160	1169	5	581	21	488	139	145	311
Arrive On Green	0.09	0.32	0.32	0.09	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3554	1585	1781	3628	16	1412	66	1529	194	455	973
Grp Volume(v), veh/h	4	918	587	86	218	230	402	0	48	5	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1412	0	1595	1622	0	0
Q Serve(g_s), s	0.1	13.2	18.0	2.6	5.3	5.3	15.0	0.0	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	13.2	18.0	2.6	5.3	5.3	15.1	0.0	1.2	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.96	0.20		0.60
Lane Grp Cap(c), veh/h	160	1146	511	160	573	602	581	0	510	596	0	0
V/C Ratio(X)	0.03	0.80	1.15	0.54	0.38	0.38	0.69	0.00	0.09	0.01	0.00	0.00
Avail Cap(c_a), veh/h	160	1146	511	160	573	602	686	0	628	713	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.2	17.3	18.9	24.3	14.6	14.6	18.0	0.0	13.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	5.9	87.7	3.6	1.9	1.8	2.4	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	9.4	27.2	2.1	3.9	4.0	8.4	0.0	0.7	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	23.2	106.7	27.9	16.5	16.5	20.4	0.0	13.4	13.0	0.0	0.0
LnGrp LOS	C	C	F	C	B	B	C	A	B	B	A	A
Approach Vol, veh/h		1509			534			450			5	
Approach Delay, s/veh		55.7			18.3			19.7			13.0	
Approach LOS		E			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.8	10.0	23.0		22.8	10.0	23.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		22.0	5.0	18.0		22.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		17.1	4.6	20.0		2.1	2.1	7.3				
Green Ext Time (p_c), s		0.8	0.0	0.0		0.0	0.0	1.9				

Intersection Summary												
HCM 6th Ctrl Delay			41.1									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	71	210	18	310	1	147	0	17	2	0	13
Future Volume (veh/h)	3	71	210	18	310	1	147	0	17	2	0	13
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	3	79	16	20	344	1	163	0	19	2	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1701	759	164	1740	5	350	0	243	84	21	214
Arrive On Green	0.09	0.48	0.48	0.09	0.48	0.48	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1781	3554	1585	1781	3635	11	1400	0	1585	65	135	1397
Grp Volume(v), veh/h	3	79	16	20	168	177	163	0	19	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1400	0	1585	1597	0	0
Q Serve(g_s), s	0.1	0.6	0.3	0.6	3.0	3.0	5.5	0.0	0.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.6	0.3	0.6	3.0	3.0	5.9	0.0	0.6	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.12		0.87
Lane Grp Cap(c), veh/h	164	1701	759	164	851	894	350	0	243	319	0	0
V/C Ratio(X)	0.02	0.05	0.02	0.12	0.20	0.20	0.47	0.00	0.08	0.05	0.00	0.00
Avail Cap(c_a), veh/h	164	1701	759	164	851	894	625	0	554	626	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	7.5	7.5	22.6	8.2	8.2	21.9	0.0	19.7	19.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.3	0.5	0.5	1.0	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.4	0.2	0.4	1.8	1.9	3.5	0.0	0.4	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	7.6	7.5	23.0	8.7	8.6	22.9	0.0	19.9	19.7	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	C	A	B	B	A	A
Approach Vol, veh/h		98			365			182			16	
Approach Delay, s/veh		8.0			9.4			22.6			19.7	
Approach LOS		A			A			C			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.3	10.0	31.0		13.3	10.0	31.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		19.0	5.0	26.0		19.0	5.0	26.0				
Max Q Clear Time (g_c+I1), s		7.9	2.6	2.6		2.5	2.1	5.0				
Green Ext Time (p_c), s		0.4	0.0	0.4		0.0	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary
3: Homerun/Scorpius & Vista

07/20/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	483	427	43	616	2	324	0	45	3	4	2
Future Volume (veh/h)	1	483	427	43	616	2	324	0	45	3	4	2
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	1	537	368	48	684	2	360	0	50	3	4	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1176	524	164	1202	4	559	0	478	211	264	111
Arrive On Green	0.09	0.33	0.33	0.09	0.33	0.33	0.30	0.00	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3554	1585	1781	3635	11	1410	0	1585	409	874	366
Grp Volume(v), veh/h	1	537	368	48	334	352	360	0	50	9	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1868	1410	0	1585	1649	0	0
Q Serve(g_s), s	0.0	6.5	11.0	1.4	8.4	8.4	12.8	0.0	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.5	11.0	1.4	8.4	8.4	13.0	0.0	1.2	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.33		0.22
Lane Grp Cap(c), veh/h	164	1176	524	164	588	618	559	0	478	586	0	0
V/C Ratio(X)	0.01	0.46	0.70	0.29	0.57	0.57	0.64	0.00	0.10	0.02	0.00	0.00
Avail Cap(c_a), veh/h	164	1176	524	164	588	618	1222	0	1224	1339	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.4	14.4	15.9	23.1	15.0	15.0	17.8	0.0	13.7	13.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	7.6	1.0	4.0	3.8	1.3	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	4.4	7.9	1.0	6.4	6.6	7.2	0.0	0.8	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	15.6	23.5	24.0	19.0	18.8	19.0	0.0	13.8	13.3	0.0	0.0
LnGrp LOS	C	B	C	C	B	B	B	A	B	B	A	A
Approach Vol, veh/h		906			734			410			9	
Approach Delay, s/veh		18.8			19.2			18.4			13.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.4	10.0	23.0		21.4	10.0	23.0				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		42.0	5.0	18.0		42.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s		15.0	3.4	13.0		2.2	2.0	10.4				
Green Ext Time (p_c), s		1.4	0.0	2.2		0.0	0.0	2.4				

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	1	0	7	8
Future Vol, veh/h	0	4	1	0	7	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	0	8	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	26	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	989	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	984	1084	-	-	1622	-
Mov Cap-2 Maneuver	984	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.3	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.004	0.005	-
HCM Control Delay (s)	-	-	8.3	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	120	0	250	250
Future Vol, veh/h	0	120	120	0	250	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	133	0	278	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	967	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	282	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	218	916	-	-	1452	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.146	0.191	-
HCM Control Delay (s)	-	-	9.6	8.1	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.7	-

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	15	21	0	69	117
Future Vol, veh/h	0	15	21	0	69	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	17	23	0	77	130

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	307	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	685	1054	-	-	1592	-
Stage 1	1000	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	649	1054	-	-	1592	-
Mov Cap-2 Maneuver	649	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	764	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1054	1592	-
HCM Lane V/C Ratio	-	-	0.016	0.048	-
HCM Control Delay (s)	-	-	8.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.2	-

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	120	56	0	168	80
Future Vol, veh/h	0	120	56	0	168	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	133	62	0	187	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	525	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	513	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	447	1003	-	-	1541	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	5.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.133	0.121	-
HCM Control Delay (s)	-	-	9.1	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.4	-

Intersection	
Int Delay, s/veh	8.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	254	1	0	90	8
Future Vol, veh/h	0	254	1	0	90	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	282	1	0	100	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	210	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	778	1084	-	-	1622	-
Stage 1	1022	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	730	1084	-	-	1622	-
Mov Cap-2 Maneuver	730	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1084	1622	-
HCM Lane V/C Ratio	-	-	0.26	0.062	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	285	120	0	531	250
Future Vol, veh/h	0	285	120	0	531	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	317	133	0	590	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1591	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	1458	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	118	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	61	916	-	-	1452	-
Mov Cap-2 Maneuver	61	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	214	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	6.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.346	0.406	-
HCM Control Delay (s)	-	-	11	9.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	2	-

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	143	21	0	111	117
Future Vol, veh/h	0	143	21	0	111	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	159	23	0	123	130

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	399	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	607	1054	-	-	1592	-
Stage 1	1000	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	557	1054	-	-	1592	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	3.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1054	1592	-
HCM Lane V/C Ratio	-	-	0.151	0.077	-
HCM Control Delay (s)	-	-	9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	313	56	0	394	80
Future Vol, veh/h	0	313	56	0	394	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	348	62	0	438	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1027	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	260	1003	-	-	1541	-
Stage 1	961	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	182	1003	-	-	1541	-
Mov Cap-2 Maneuver	182	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	370	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	6.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1541	-
HCM Lane V/C Ratio	-	-	0.347	0.284	-
HCM Control Delay (s)	-	-	10.5	8.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	1.2	-

Intersection	
Int Delay, s/veh	8.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	250	4	0	83	7
Future Vol, veh/h	0	250	4	0	83	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	278	4	0	92	8

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	4	0	0	4	0
Stage 1	4	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1080	-	-	1618	-
Stage 1	1019	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	748	1080	-	-	1618	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1080	1618	-
HCM Lane V/C Ratio	-	-	0.257	0.057	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	165	120	0	281	250
Future Vol, veh/h	0	165	120	0	281	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	183	133	0	312	278

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1035	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	257	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	192	916	-	-	1452	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	396	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	4.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.2	0.215	-
HCM Control Delay (s)	-	-	9.9	8.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.8	-

Intersection	
Int Delay, s/veh	5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	128	15	0	42	69
Future Vol, veh/h	0	128	15	0	42	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	142	17	0	47	77

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	188	17	0	0	17	0
Stage 1	17	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	801	1062	-	-	1600	-
Stage 1	1006	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	776	1062	-	-	1600	-
Mov Cap-2 Maneuver	776	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1062	1600	-
HCM Lane V/C Ratio	-	-	0.134	0.029	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	193	120	0	226	168
Future Vol, veh/h	0	193	120	0	226	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	214	133	0	251	187

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	822	133	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	344	916	-	-	1452	-
Stage 1	893	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	278	916	-	-	1452	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	721	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	4.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	1452	-
HCM Lane V/C Ratio	-	-	0.234	0.173	-
HCM Control Delay (s)	-	-	10.1	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.6	-