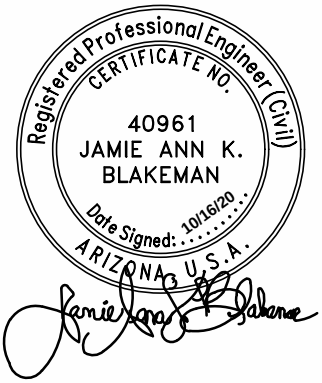
The Triangle

Traffic Impact & Mitigation Analysis



Prepared for:

PEG Development
180 N. University Avenue
Suite 200
Provo, UT 84601

Prepared by:

Lōkahi, LLC
4657 E. Cotton Gin Loop,
Suite 102
Phoenix, AZ 85040

Project Number: 20.5108
October 16, 2020

10-ZN-2020
10/22/20

TABLE OF CONTENTS:

FIGURES:

TABLES:

APPENDICES:

1. INTRODUCTION AND EXECUTIVE SUMMARY

1.1. PURPOSE OF REPORT AND STUDY OBJECTIVES

Lōkahi, LLC (Lōkahi) was retained by PEG Development to complete a Traffic Impact & Mitigation Analysis for The Triangle. The objective of this Traffic Impact & Mitigation Analysis is to analyze the traffic related impacts of the proposed development to the adjacent roadway network. See **Figure 1** for the vicinity map.

1.2. EXECUTIVE SUMMARY

The proposed development is located on the north side of Indian School Road approximately 300 feet west of Scottsdale Road in Scottsdale, Arizona.

The proposed development will include the following land uses:

- Multi-Family Residential — 230 units
  - *41 studio units*
  - *98 one-bedroom units*
  - *79 two-bedroom units*
  - *12 three-bedroom units*
- Hotel — 168-rooms
- Restaurant — 4,000 square feet

This Traffic Impact and Mitigation Analysis includes:

- Level of service analysis of existing conditions for the weekday AM and PM peak hours
- Trip Generation for the existing and proposed development
- Trip Generation comparison for the existing and proposed development
- Most recent 3-year collision history
- Level of service analysis for the opening year (2024) weekday AM and PM peak hours
  - 2024 No Build
  - 2024 Build

The following are the thirteen (13) intersections included in this study:

- Goldwater Boulevard and 3rd Avenue (1)
- 3rd Avenue and Alley – 175 feet west of Craftsman Court (2)
- 3rd Avenue and Craftsman Court (3)
- 3rd Avenue and Driveway A – 130 feet east of Craftsman Court (4)
- Scottsdale Road and 3rd Avenue (5)

- Indian School Road and Goldwater Boulevard (6)
- Indian School Road and Marshall Way (7)
- Indian School Road and Alley – 200 feet east of Marshall Way (8)
- Indian School Road (north side) and Driveway B – 550 feet west of Scottsdale Road (9)
- Indian School Road (north side) and Driveway C – 450 feet west of Scottsdale Road (10)
- Indian School Road and Scottsdale Road (11)
- Indian School Road and Buckboard Trail (12)
- Indian School Road and Drinkwater Boulevard (13)

Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analysis were completed for the existing study intersections. The results of the capacity analysis reveal the following locations with an existing level of service (LOS) E or F:

Indian School Road and Goldwater Boulevard (6) – Signalized

- EB left PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E
- NB left PM peak hour operates at LOS E
- SB left PM peak hour operates at LOS E

Indian School Road and Scottsdale Road (11) – Signalized

- WB through AM peak hour operates at LOS E
- WB shared through-right AM peak hour operates at LOS E

Indian School Road and Buckboard Trail and Indian School Road (12) – Signalized

- SB shared left-through AM peak hour operates at LOS E
- SB right AM peak hour operates at LOS E

Drinkwater Boulevard and Indian School Road (13) – Signalized

- Overall PM peak hour operates at LOS E
- EB through PM peak hour operates at LOS E
- EB shared through-right PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E and F, respectively
- NB left PM peak hour operates at LOS F
- NB right PM peak hour operates at LOS F

Trip Generation

The proposed development is anticipated to generate 3,106 weekday trips, with 196 trips occurring during the AM peak hour and 239 trips occurring during the PM peak hour.

Trip Generation Comparison

EXISTING DEVELOPMENT VS. THE TRIANGLE

A comparison between the trips generated by the existing development and The Triangle development was calculated. The peak hour trips generated by the existing development were calculated based upon operations of the existing site.

The Triangle development will produce 1,525 more weekday daily trips, with 121 more trips during the AM peak hour, and 76 (24%) fewer trips during the PM peak hour than the existing development.

EXISTING ZONING VS. THE TRIANGLE

Currently, this parcel is zoned for C-2 (Central Business) development with an allowed floor area ratio of 0.8. Two (2) trip generation calculations were completed with potential uses with the build out under the existing zoning:

Option 1

With a total lot area of 136,010 SF (3.12-acres), and a maximum floor-to-area ratio (FAR) of 0.80, a 108,808 square foot retail use was assumed for potential buildout. The Triangle development will generate **3,262 (51%) fewer weekday trips, with 11 (5%) fewer trips during the AM peak hour, and 340 (59%) fewer trips during the PM peak hour** than the build out of retail uses under the existing zoning.

Option 2

The second option considers a 54,404 SF retail use (0.4 FAR) combined with two (2) 6,000 SF high-turnover (sit down) restaurants. This results in a total FAR of 0.49. The Triangle development will generate **2,214 (42%) fewer weekday trips, with 102 (34%) fewer trips during the AM peak hour, and 225 (48%) fewer trips during the PM peak hour** than the build out of a mix of retail and restaurant uses under the existing zoning.

Future Conditions - Year 2024

Year 2024 analyses was completed with and without the build out of the proposed development. An annual growth rate of 2.0% was applied to the existing traffic volumes.

A capacity analysis was completed for both the AM and PM peak hours for year 2024, with and without the build out of the proposed development. **All movements operate at a LOS D or better or are maintained at the year 2024 no build level of service with the build out of the proposed development. Therefore, it is anticipated that The Triangle development will result in minimal traffic related impacts to the surrounding roadway network.**

Recommendations

The recommendations with the build out of The Triangle development include:

Signal Timing

As with any new development and potential change in traffic patterns, the following is recommended:

- Monitor and Adjust Signal Timing
  Monitor traffic patterns in the area and if necessary, adjust nearby signal timing

2. PROPOSED DEVELOPMENT

The study area is located in the City of Scottsdale, Arizona, approximately 2 ¼ miles west of State Route Loop 101 (SR 101L) and 4 miles north of State Route Loop 202 (SR 202L). The proposed development is located on the north side of Indian School Road approximately 300 feet west of Scottsdale Road.

The proposed development will include the following land uses:

- Multi-Family Residential — 230 units
  - *41 studio units*
  - *98 one-bedroom units*
  - *79 two-bedroom units*
  - *12 three-bedroom units*
- Hotel — 168-rooms
- Restaurant — 4,000 square feet

See **Figure 2** and **Appendix A** for the proposed site plan.

There are five (5) access points to the proposed site, three (3) located along Indian School Road and two (2) located along 3rd Avenue.

3rd Avenue and Alley (2) is located approximately 175 feet west of Craftsman Court and will allow all movements into and out of the existing alley connecting to the site.

3rd Avenue and Driveway A (4) is located approximately 130 feet east of Craftsman Court and will allow all movements into and out of the site. This driveway provides direct access to the hotel drop-off area.

Indian School Road and Alley (8) is located approximately 200 feet east of Marshall Way and will allow right in and right out movements to the existing alley connecting to the site.

Indian School Road and Driveway B (9) is located approximately 475 feet west of Scottsdale Road and will allow right out movements only out of the site

Indian School Road and Driveway C (10) is located approximately 350 feet west of Scottsdale Road and will allow right in and left in movements only into the site.

See **Figure 3** for study area.

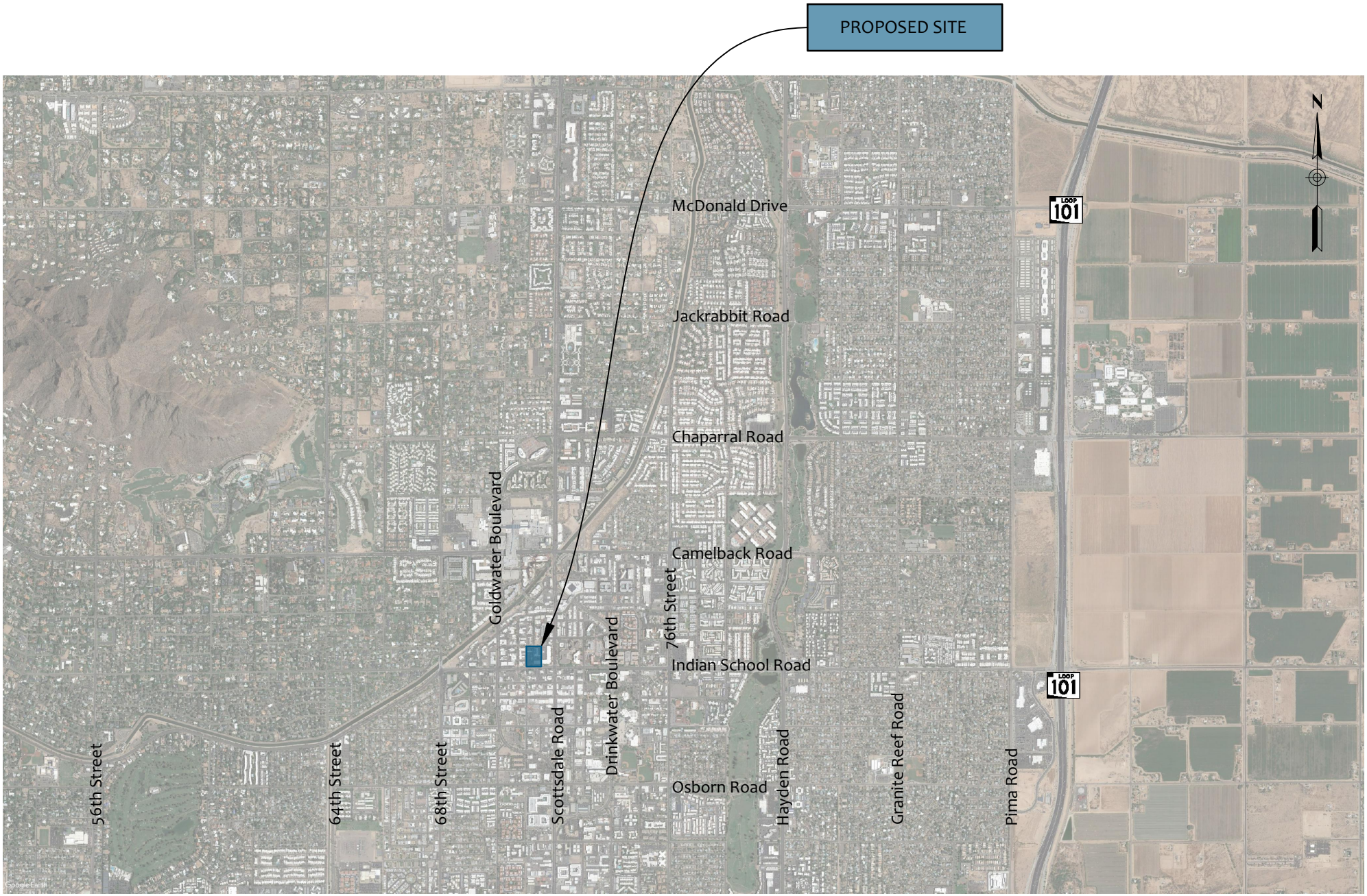


FIGURE 1 | VICINITY MAP

10-ZN-2020
10/22/20

FIGURE 2 | SITE PLAN

Legend

X Intersection

FIGURE 3 | STUDY AREA

10-ZN-2020
10/22/20

3. AREA CONDITIONS

The study area is located in the City of Scottsdale, Arizona. **Sections 3.1** and **3.2** provide detailed descriptions of the study roadway segments and intersections.

3.1. STUDY ROADWAY SEGMENTS

Goldwater Boulevard runs north-south and in the vicinity of the site provides two (2) through lanes for northbound travel and three (3) through lanes for southbound direction of travel with a two-way-left-turn-lane (TWLTL) and intermittent landscaped median. Goldwater Boulevard is approximately one-tenth (0.1) of a mile west of the proposed development. There is a posted speed limit of 35 miles per hour (mph). The City of Scottsdale classifies Goldwater Boulevard as a couplet, according to *The Scottsdale Master Transportation Plan,* dated July 2016. The City of Scottsdale's *2018 Average Daily Segment Traffic (ADT) Volumes* map reports an ADT of 17,700 vehicles per day along Goldwater Boulevard, between Indian School Road and Camelback Road.

Marshall Way runs north-south, approximately 200 feet west of the proposed site and provides one (1) through lane in each direction of travel. There is an unposted speed limit of 25 mph. Angled on-street parking is provided on both sides of the Marshall Way, north of Indian School Road.

Craftsman Court runs north-south, directly north of the proposed site and provides one (1) through lane in each direction of travel. There is an unposted speed limit of 25 mph. Angled on-street parking is provided on both sides of the Craftsman Court.

Scottsdale Road runs north-south, approximately 300 feet east of the proposed site and provides two (2) through lanes in each direction of travel with a landscaped median, within the study area. There is a posted speed limit of 30 mph and 25 mph north and south of Indian School Road, respectively. The City of Scottsdale classifies Scottsdale Road as a major collector within the study area, according to *The Scottsdale Master Transportation Plan,* dated July 2016. The City of Scottsdale's *2018 Average Daily Segment Traffic Volumes* map reports an ADT of 22,400 vehicles per day along Scottsdale Road, between Indian School Road and Camelback Road.

Buckboard Trail runs north-south and in the vicinity of the site provides one (1) through lane in each direction of travel. Buckboard Trail is approximately two-tenths (0.2) of a mile east of the proposed development. There is an unposted speed limit of 25 mph. Parallel on-street parking is provided on both sides of the Buckboard Trail.

Drinkwater Boulevard runs north-south in the vicinity of the site and provides two (2) through lanes for southbound travel and two (2) through lanes for northbound travel which transition to three (3) through lanes north of Indian School Road with a raised landscaped median. Drinkwater Boulevard is approximately three-tenths (0.3) of a mile east of the proposed development. There is a posted speed limit of 35 mph. The City of Scottsdale classifies Drinkwater Boulevard as a couplet,

according to *The Scottsdale Master Transportation Plan,* dated July 2016. The City of Scottsdale's *2018 Average Daily Segment Traffic (ADT) Volumes* map reports an ADT of 8,300 vehicles per day along Drinkwater Boulevard, between Indian School Road and Scottsdale Road.

3rd Avenue runs east-west and in the vicinity of the site provides one (1) through lane in each direction of travel. 3rd Avenue is the northern border of the proposed development. There is an unposted speed limit of 25 mph. Parallel on-street parking is provided on both sides of the 3rd Avenue.

Indian School Road runs east-west along the southern border of the proposed development. In the vicinity of the site Indian School Road provides two (2) through lanes for eastbound travel and two (2) through lanes for westbound travel, which transition to three (3) through lanes west of Goldwater Boulevard. A center two-way-left-turn-lane (TWLTL) with an intermittent landscaped median is provided throughout, as well as a bike lane in each direction of travel along Indian School Road. There is a posted speed limit of 35 mph. The City of Scottsdale classifies Indian School Road as a major arterial and minor arterial west and east of Goldwater Boulevard, respectively, within the study area, according to *The Scottsdale Master Transportation Plan,* dated July 2016. The City of Scottsdale's *2018 Average Daily Segment Traffic Volumes* map reports an ADT of 25,500 vehicles per day along Indian School Road, west of Goldwater Boulevard, 19,600 vehicles per day, between Goldwater Boulevard and Scottsdale Road, and 27,700 vehicles per day between Scottsdale Road and Drinkwater Boulevard.

3.2. STUDY INTERSECTIONS

Goldwater Boulevard and 3rd Avenue (1) currently operates as a one-way stop-controlled T-intersection with stop control on the westbound approach. The westbound approach provides one (1) shared left-right turn lane. The northbound approach provides one (1) through lane and one (1) shared through-right turn lane. The southbound approach provides one (1) left turn lane and three (3) through lanes.

3rd Avenue and Craftsman Court (3) currently operates as a one-way stop-controlled T-intersection with stop control on the southbound approach. The eastbound approach provides one (1) shared left turn-through lane. The westbound approach provides one (1) shared through-right turn lane. The southbound approach provides one (1) shared left-right turn lane.

Scottsdale Road 3rd Avenue (5) currently operates as a signalized intersection. The eastbound and westbound approaches provide one (1) dedicated left turn lane and one (1) shared through-right turn lane. The northbound approach provides one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The southbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane.

Indian School Road and Goldwater Boulevard (6) currently operates as signalized intersection. The eastbound approach provides two (2) dedicated left turn lanes, two (2) through lanes, and one (1) dedicated right turn lane. The westbound approach provides two (2) dedicated left turn lanes, one (1) through lane, and one (1) shared through-right turn lane. The northbound approach provides one (1) dedicated left turn lane, one (1) through lane and one (1) shared through-right turn lane. The southbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) shared through-right turn lane.

Indian School Road and Marshall Way (7) currently operates as a signalized intersection. The eastbound and westbound approaches provide one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The northbound and southbound approaches provide one (1) shared left-through-right turn lane.

Indian School Road and Scottsdale Road (11) currently operates as a signalized intersection. The eastbound, westbound, and northbound approaches provide one (1) dedicated left turn lane, one (1) through lane and one (1) shared through-right turn lane. The southbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane.

Indian School Road and Buckboard Tail (12) currently operates as a signalized intersection. The eastbound and westbound approaches provide one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The northbound approach provides one (1) shared left-through-right turn lane. The southbound approach provides one (1) shared left-through turn lane and one (1) dedicated right turn lane.

Indian School Road and Drinkwater Boulevard (13) currently operates as a signalized intersection. The eastbound approach provides one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane. The westbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The northbound approach provides one (1) dedicated left turn lane, two (2) through lanes, and one (1) dedicated right turn lane. The southbound approach provides two (2) dedicated left turn lanes, one (1) through lane, and one (1) shared through-right turn lane.

3.3. SURROUNDING AREA LAND USE

The Triangle development is located in Old Town Scottsdale, just north of the historic Arts District. The proposed development is bordered by 3rd Avenue and Indian School Road to the north and south, respectively, and retail, commercial and office developments directly east and west.

3.4. SITE ACCESSIBILITY

Pedestrian Facilities, Bicycle Facilities, and Shared-Use Paths

Continuous sidewalks are provided along adjacent roadways bordering the proposed site. Within the vicinity of the study area, bike lanes are currently provided along the north and south sides of Indian School Road and bike routes are provided along Goldwater Boulevard, Scottsdale Road, and Drinkwater Boulevard. The Mountain Vista self-guided bike tour route begins and ends at the intersection of Main Street and Brown Avenue and routes along Marshall Way, adjacent to the proposed development. Additionally, the Arizona Canal is located approximately one-quarter (0.25) mile northwest of the proposed site and provides approximately 70 miles of shared use paths.

Transit Facilities

Valley Metro Route 41 operates along Indian School Road within the study area. This route connects Avondale to Scottsdale. According to the Valley Metro System Map, there are two (2) stops located near the intersection of Indian School Road and Goldwater Boulevard (6), two (2) stops located near the intersection of Indian School Road and Scottsdale Road (11), and two (2) stops located near the intersection of Indian School Road and Drinkwater Boulevard (13). This route operates Monday through Sunday.

Valley Metro Route 72 operates along Scottsdale Road within the study area. This route connects the City of Chandler to the northern portion of the City of Scottsdale. According to the Valley Metro System Map, there are two (2) stops located near the intersection of Scottsdale Road and 3rd Avenue (5) and two (2) stops located near the intersection of Indian School Road and Scottsdale Road (11). This route operates Monday through Sunday.

In addition, the City of Scottsdale provides five trolley routes. The Old Town Route (OLDT) circulates around Old Town Scottsdale. In the vicinity of the site, trolley stops are located near the intersection of 3rd Avenue and Craftsman Court (3) and Indian School Road and Buckboard Trail (12). This trolley route operates every 15 minutes between 10:00 AM and 9:25 PM every day of the week.

3.5. COLLISION HISTORY

The most recent three-year collision history, from January 2017 to December 2019, was obtained from the City of Scottsdale. See **Appendix B** for collision data. The data included the following intersections and segments:

- Goldwater Boulevard and 3rd Avenue (1)
- 3rd Avenue and Craftsman Court (3)
- Scottsdale Road and 3rd Avenue (5)
- Indian School Road and Goldwater Boulevard (6)
- Indian School Road and Marshall Way (7)
- Indian School Road and Scottsdale Road (11)
- Indian School Road and Buckboard Trail (12)
- Indian School Road and Drinkwater Boulevard (13)
- Indian School Road Segment, between Goldwater Boulevard and Scottsdale Road
- Indian School Road Segment, between Scottsdale Road and Drinkwater Boulevard
- 3rd Avenue, between Goldwater Boulevard and Scottsdale Road
- Goldwater Boulevard, between Indian School Road and 3rd Avenue
- Marshall Way, between Indian School Road and 3rd Avenue
- Scottsdale Road, between Indian School Road and 3rd Avenue

Goldwater Boulevard and 3rd Avenue (1)

During the three-year period, there was a total of one (1) rear-end crash, which resulted in one (1) report of no injuries.

The violation included one (1) speed too fast for conditions.

3rd Avenue and Craftsman Court (3)

During the three-year period, there was a total of three 3 crashes, of which there was one (1) angle, one (1) left turn, and one (1) rear-end crash. Two (2) reported possible injuries and one (1) reported no injuries.

One (1) violation included speed too fast for conditions, and two (2) disregarded a traffic signal.

Scottsdale Road and 3rd Avenue (5)

During the three-year period, there was a total of twenty-one (21) crashes, of which there were two (2) angle, two (2) left turn, thirteen (13) rear-end, two (2) sideswipe – same direction, and two (2) other crashes. Two (2) reported non-incapacitating injuries, four (4) reported possible injuries, thirteen (13) no injuries, and the severity of the remaining two (2) crashes is unknown.

Ten (10) violations included speed too fast for conditions, one (1) followed too closely, one (1) disregarded a traffic signal, one (1) made an improper turn, one (1) knowingly operated with faulty/missing equipment, one (1) unsafe lane change, two (2) failed to yield right of way, one (1) no improper action, and the three (3) remaining violations are either unknown or other type violations.

Indian School Road and Goldwater Boulevard (6)

During the three-year period, there was a total of thirty-five (35) crashes, of which there were five (5) angle, five (5) left turn, fifteen (15) rear-end, two (2) head-on, and eight (8) sideswipe – same direction crashes. Two (2) reported incapacitating injuries, four (4) reported non-incapacitating injuries, five (5) possible injuries, nineteen (19) no injuries, and the severity of the remaining five (5) is unknown.

Thirteen (13) violations included speed too fast for conditions, three (3) followed too closely, two (2) disregarded a traffic signal, two (2) unsafe lane changes, one (1) failed to keep in proper lane, four (4) failed to yield right of way, six (6) no improper action, and the four (4) remaining violations are either unknown or other type violations.

Indian School Road and Marshall Way (7)

During the three-year period, there was a total of eight (8) crashes, of which there were two (2) angle, three (3) left turn, two (2) sideswipe – same direction, and one (1) other crash. One (1) reported incapacitating injuries, one (1) reported possible injuries, five (5) no injuries, and the severity of the remaining one (1) crash is unknown.

One (1) violation included speed too fast for conditions, two (2) disregarded a traffic signal, two (2) unsafe lane changes, two (2) failed to yield right of way, and one (1) other type violation.

Indian School Road and Scottsdale Road (11)

During the three-year period, there was a total of seventy-four (74) crashes, of which there were two (2) single vehicle, eighteen (18) angle, six (6) left turn, thirty-six (36) rear-end, one (1) head-on, eight (8) sideswipe – same direction, and three (3) other crashes. Eleven (11) reported possible injuries, fifty (50) reported no injuries, and the severity of the one (1) remaining crash is unknown.

Twenty-two (22) violations included speed too fast for conditions, five (5) followed too closely, fourteen (14) disregarded traffic signal, one (1) made an improper turn, three (3) unsafe lane changes, one (1) failed to keep in proper lane, one (1) other unsafe passing, ten (10) failed to yield right of way, eight (8) no improper actions, and the nine (9) remaining violations are either unknown or other type violations.

Indian School Road and Buckboard Trail (12)

During the three-year period, there was a total of fourteen (14) crashes, of which there was one (1) single vehicle, four (4) angle, eight (8) rear end, and one (1) sideswipe – same direction crashes.

One (1) reported non-incapacitating injuries, ten (10) reported no injuries, and the severity of the remaining three (3) crashes is unknown.

Seven (7) violations included speed too fast for conditions, one (1) disregarded traffic signal, two (2) failed to yield right of way, two (2) no improper action, and the two (2) remaining violations are either unknown or other type violations.

Indian School Road and Drinkwater Boulevard (13)

During the three-year period, there was a total of twenty-nine (29) crashes, of which there was one (1) single vehicle, four (4) angle, three (3) left turn, fifteen (15) rear-end, two (2) head-on, two (2) sideswipe – same direction, and the manner of collision of the remaining two (2) crashes is unknown. One (1) reported incapacitating injuries, two (2) reported non-incapacitating injuries, two (2) possible injuries, twenty-two (22) no injuries, and the severity of the remaining two (2) crashes is unknown

Fifteen (15) violations included speed too fast for conditions, one (1) followed too closely, one (1) disregarded traffic signal, two (2) unsafe lane change, three (3) failed to yield right of way, and the seven (7) remaining violations are either unknown or other type violations.

Indian School Road, between Goldwater Boulevard and Scottsdale Road

During the three-year period, there was a total of eleven (11) crashes, of which there was one (1) single vehicle, one (1) angle, seven (7) rear-end, and two (2) sideswipe – same direction. One (1) reported non-incapacitating injuries, one (1) reported possible injuries, seven (7) no injuries, and the severity of the remaining two (2) crashes is unknown

Five (5) violations included speed too fast for conditions, two (2) followed too closely, two (2) made an improper turn, and two (2) unsafe lane changes.

Indian School Road, between Scottsdale Road and Drinkwater Boulevard

During the three-year period, there was a total of twelve (12) crashes, of which there was one (1) angle, five (5) rear-end, and six (6) sideswipe – same direction. Three (3) reported non-incapacitating injuries, two (2) reported possible injuries, and the seven (7) remaining crashes reported no injuries.

Four (4) violations included speed too fast for conditions, five (5) unsafe lane changes, one (1) failed to yield right of way, and the two (2) remaining violations are other type violations.

3rd Avenue, between Goldwater Boulevard and Scottsdale Road

During the three-year period, there were no reported crashes along this segment.

Goldwater Boulevard, between Indian School Road and 3rd Avenue

During the three-year period, there was a total of two (2) crashes, of which there was one (1) single vehicle, and one (1) rear-end. One (1) reported non-incapacitating injuries and the severity of the remaining one (1) crash is unknown.

One (1) violation included speed too fast for conditions and the one (1) remaining violation included no improper action.

Marshall Way, between Indian School Road and 3rd Avenue

During the three-year period, there were no reported crashes along this segment.

Scottsdale Road, between Indian School Road and 3rd Avenue

During the three-year period, there was a total of eight (8) crashes, of which there was one (1) single vehicle, four (4) rear-end, and three (3) sideswipe – same direction. One (1) reported non-incapacitating injuries, one (1) reported possible injuries, and the six (6) remaining crashes reported no injuries.

Three (3) violations included speed too fast for conditions, two (2) unsafe lane changes, and the three (3) remaining violations are either unknown or other type violations.

3.6. COLLISION RATES

The City of Scottsdale's *2018 Traffic Volume and Collision Rate Data* report provides collision rate and traffic volume information on major roadway segments and at major intersections within the City. Segment collisions are collisions that occur on a major street more than 100 feet from the major intersections that define the segment, including at minor intersections within the segment. Intersection collisions are collisions that occur at or within 100 feet of a major intersection.

The collision rates and city-wide rankings for the study roadway segments are shown in **Table 1**. The collision rates and city-wide rankings for the study intersections are shown in **Table 2**.

Table 1 – Collision Rates - Study Roadway Segments

Segment	From	To	Collision Rate	Rank
Scottsdale Road	Indian School Road	Camelback Road	6.6	5
Indian School Road	Goldwater Boulevard	Scottsdale Road	5.03	13
Indian School Road	Scottsdale Road	Drinkwater Boulevard	4.35	17
Drinkwater Boulevard	Indian School Road	Scottsdale Road	3.37	36
Goldwater Boulevard	Indian School Road	Camelback Road	1.37	129
2018 City of Scottsdale Average Segment Collision Rate			1.53	

Table 2 – Collision Rates - Study Intersections

Intersection	Collision Rate	Rank
Scottsdale Road and Indian School Road	1.48	3
Goldwater Boulevard and Indian School Road	0.81	50
Drinkwater Boulevard and Indian School Road	0.65	77
2018 Average Intersection Collision Rate	0.58	

4. EXISTING CONDITIONS

4.1. EXISTING LAND USE

According to the Maricopa County Assessor's website, the proposed development will be made up of three (3) existing developed parcels that are zoned for Central Business (C-2) land uses. Of these three parcels the first includes a hotel and the second is comprised of a comedy club, cocktail bar, event venue, and custom invitation and stationary shop. The final parcel includes a vaporizer store, nail salon, hair salon, architectural firm, and a vacation home rental agency. The Triangle development will be located on the combined 3.12-acre lot. See **Appendix C** for detailed parcel information.

4.2. EXISTING TRAFFIC COUNTS

During recent weeks Arizona was under "stay at home" orders due to COVID-19 and therefore, was experiencing a decline in traffic as well as non-typical traffic patterns. Therefore, this was discussed with the City of Scottsdale Transportation staff and it was agreed that collecting data at this time is not ideal. Fortunately, there was a recent traffic study nearby completed in 2019 which included traffic count data from 2018. Adjustment factors including annual growth rates as well as seasonal adjustment factors were applied to these traffic counts to create year 2020 existing traffic counts. Traffic count data from the prior study included all the major intersections including arterial and collector roadways.

The traffic count data included in the *Southbridge Expansion Traffic Impact and Mitigation Analysis*, completed by CivTech, dated May 2019 was used for the following eight (8) intersections:

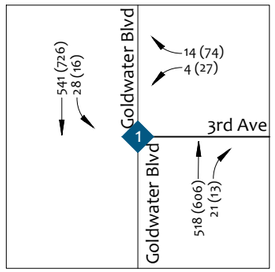
- Goldwater Boulevard and 3rd Avenue (1)
- 3rd Avenue and Craftsman Court (3)
- Scottsdale Road and 3rd Avenue (5)
- Indian School Road and Goldwater Boulevard (6)
- Indian School Road and Marshall Way (7)
- Indian School Road and Scottsdale Road (11)
- Indian School Road and Buckboard Trail (12)
- Indian School Road and Drinkwater Boulevard (13)

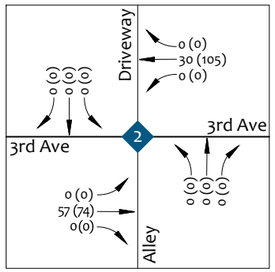
The intersections where prior traffic count data was not available included the stop-controlled intersections. Typically, at these types of intersections recommendations tend to be minimal, particularly in built out areas such as this. At the time of the report, any traffic count data at the following five (5) intersections were unavailable:

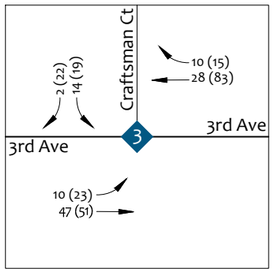
- 3rd Avenue and Alley – 175 feet west of Craftsman Court (2)
- 3rd Avenue and Driveway A – 130 feet east of Craftsman Court (4)

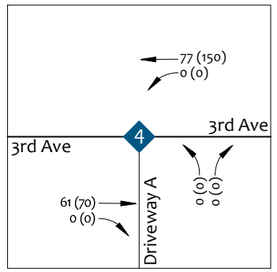
- Indian School Road and Alley – 200 feet east of Marshall Way (8)
- Indian School Road (north side) and Driveway B – 450 feet west of Scottsdale Road (9)
- Indian School Road (north side) and Driveway C – 325 feet west of Scottsdale Road (10)

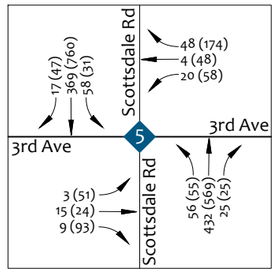
The peak hour identified in the *Southbridge Expansion Traffic Impact and Mitigation Analysis* was analyzed throughout this study. Additionally, the City of Scottsdale seasonal adjustment factors were used to adjust the traffic counts. The traffic volumes were adjusted based on the month the counts were taken. See **Appendix D** for detailed count data. See **Figure 4** for the existing adjusted AM and PM peak hour weekday traffic volumes.





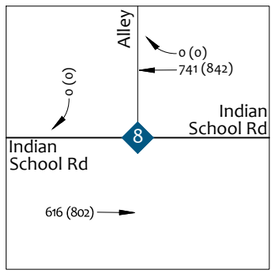


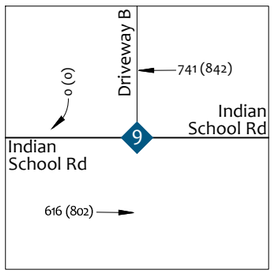


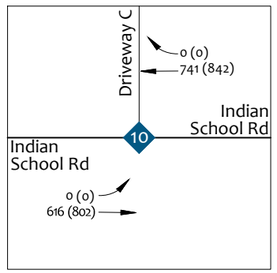


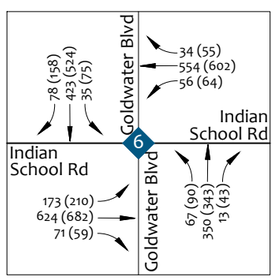
Legend

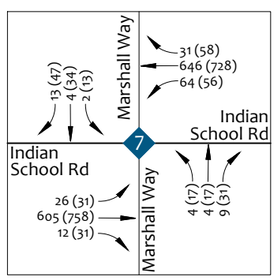
AM (PM)	Peak Hour Traffic Volumes
X	Intersection
	Proposed Development

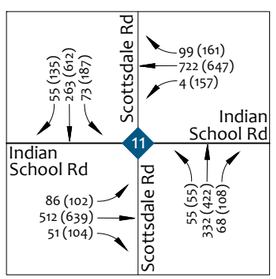


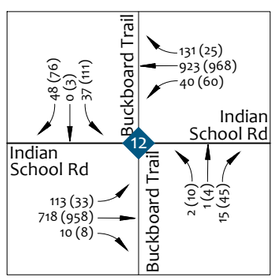












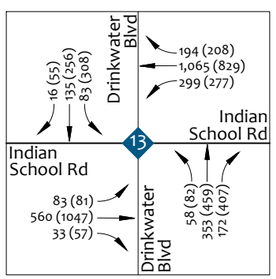


FIGURE 4 | EXISTING TRAFFIC VOLUMES

10-ZN-2020
10/22/20

4.3. EXISTING CAPACITY ANALYSIS

The existing conditions capacity analysis was completed for the existing study intersections. The capacity and level of service for the study area intersections were evaluated using the methodology presented in the 6th *Edition of the Highway Capacity Manual*. Traffic analysis software, Synchro Version 10.3, was used to perform the analyses using an assumed Peak Hour Factor (PHF) of 0.92 and the existing signal timing provided by the City of Scottdale. See **Appendix E** for the existing signal timing.

Table 3 is from the 6th *Edition of the Highway Capacity Manual* Exhibit 20-2, which lists the Level of Service (LOS) thresholds for signalized and unsignalized intersections.

Table 3 – Level of Service Criteria

Level of Service (LOS)	Control Delay per Vehicle (s/veh)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	0 - 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

The results of the capacity analysis reveal the following locations with an existing level of service (LOS) E or F:

Goldwater Boulevard and Indian School Road (6) – Signalized

- EB left PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E
- NB left PM peak hour operates at LOS E
- SB left PM peak hour operates at LOS E

Indian School Road and Scottsdale Road (11) – Signalized

- WB through AM peak hour operates at LOS E
- WB shared through-right AM peak hour operates at LOS E

Indian School Road and Buckboard Trail (12) – Signalized

- SB shared left-through AM peak hour operates at LOS E
- SB right AM peak hour operates at LOS E

Drinkwater Boulevard and Indian School Road (13) – Signalized

- Overall PM peak hour operates at LOS E

- EB through PM peak hour operates at LOS E
- EB shared through-right PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E and F, respectively
- NB left PM peak hour operates at LOS F
- NB right PM peak hour operates at LOS F

The existing AM and PM peak hour level of service and delay for unsignalized intersections are shown in **Table 4** and signalized intersections are shown in **Table 5** and **Table 6**.

See **Figure 5** for the existing AM and PM peak hour capacity analysis. The detailed capacity analysis sheets can be found in **Appendix F.**

Table 4 – Existing Level of Service and Delay – Unsignalized

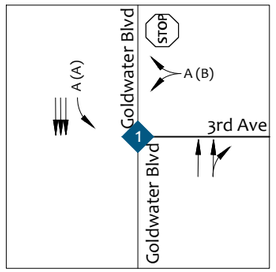
Intersection	Existing Conditions			
	AM PEAK		PM PEAK	
Unsignalized Intersections	LOS	DELAY	LOS	DELAY
Goldwater Boulevard and 3rd Avenue (1)				
Westbound Shared Left-Right	A	9.4	B	10.1
Southbound Left	A	7.8	A	7.9
3rd Avenue and Craftsman Court (3)				
Eastbound Left	A	7.3	A	7.5
Southbound Shared Left-Right	A	9.1	A	9.3

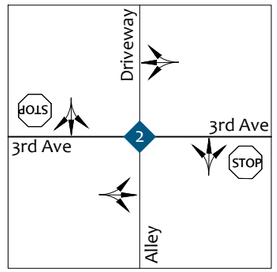
Table 5 – Existing Level of Service and Delay – Signalized

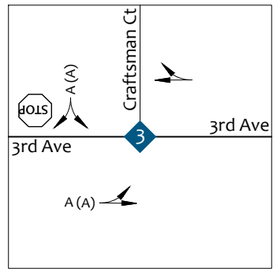
Intersection	Existing Conditions			
	AM PEAK		PM PEAK	
Signalized Intersections	LOS	DELAY	LOS	DELAY
Scottsdale Road and 3rd Avenue (5)				
Oveall Intersection	A	4.0	A	8.6
Eastbound Left	C	24.0	C	26.5
Eastbound Shared Through-Right	C	22.7	B	19.9
Westbound Left	C	23.3	C	22.6
Westbound Shared Through-Right	C	23.3	C	22.1
Northbound Left	A	0.3	A	1.7
Northbound Through	A	0.4	A	0.7
Northbound Shared Through-Right	A	0.4	A	0.7
Southbound Left	A	3.9	A	5.8
Southbound Through	A	4.0	A	7.5
Southbound Right	A	3.5	A	5.6
Goldwater Boulevard and Indian School Road (6)				
Oveall Intersection	D	37.0	D	40.4
Eastbound Left	D	51.7	E	59.5
Eastbound Through	C	27.4	C	28.2
Eastbound Right	A	9.9	B	11.9
Westbound Left	E	58.5	E	59.5
Westbound Through	D	41.1	D	47.6
Westbound Shared Through-Right	D	41.1	D	47.6
Northbound Left	D	49.3	E	75.4
Northbound Through	D	36.3	C	34.9
Northbound Shared Through-Right	D	36.2	C	35.0
Southbound Left	D	51.0	E	61.8
Southbound Through	D	38.0	D	35.7
Southbound Shared Through-Right	D	39.6	D	37.7
Marshall Way and Indian School Road (7)				
Oveall Intersection	A	7.7	A	9.1
Eastbound Left	A	8.7	A	7.1
Eastbound Through	A	6.8	A	5.5
Eastbound Shared Through-Right	A	6.8	A	5.5
Westbound Left	A	8.9	A	7.6
Westbound Through	A	6.9	A	5.4
Westbound Shared Through-Right	A	6.8	A	5.4
Northbound Shared Left-Through-Right	D	38.3	D	45.3
Southbound Shared Left-Through-Right	D	38.4	D	47.2

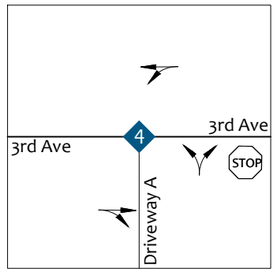
Table 6 – Existing Level of Service and Delay – Signalized - Continued

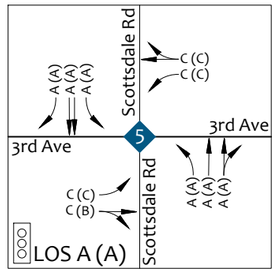
Intersection	Existing Conditions			
	AM PEAK		PM PEAK	
Signalized Intersections	LOS	DELAY	LOS	DELAY
Scottsdale Road and Indian School Road (11)				
Oveall Intersection	D	44.9	D	38.2
Eastbound Left	D	51.3	D	36.2
Eastbound Through	D	54.4	D	39.9
Eastbound Shared Through-Right	D	54.4	D	39.9
Westbound Left	D	36.8	D	38.0
Westbound Through	E	65.4	D	50.1
Westbound Shared Through-Right	E	65.3	D	50.4
Northbound Left	C	21.1	D	39.2
Northbound Through	C	25.3	D	38.3
Northbound Shared Through-Right	C	25.3	D	38.6
Southbound Left	C	25.7	D	48.9
Southbound Through	A	7.3	C	21.4
Southbound Right	A	7.2	B	18.8
Buckboard Trail and Indian School Road (12)				
Oveall Intersection	A	4.3	B	11.1
Eastbound Left	A	1.9	A	4.1
Eastbound Through	A	0.4	A	1.1
Eastbound Shared Through-Right	A	0.4	A	1.0
Westbound Left	A	1.5	B	11.6
Westbound Through	A	2.3	B	14.5
Westbound Shared Through-Right	A	2.3	B	14.5
Northbound Shared Left-Through-Right	D	54.2	C	32.1
Southbound Shared Left-Through	E	55.1	D	46.9
Southbound Right	E	57.3	C	28.2
Drinkwater Boulevard and Indian School Road (13)				
Oveall Intersection	D	39.4	E	72.1
Eastbound Left	D	52.3	D	44.8
Eastbound Through	C	29.3	E	72.6
Eastbound Shared Through-Right	C	29.3	E	72.6
Westbound Left	E	61.0	F	131.6
Westbound Through	D	39.2	D	36.7
Westbound Right	C	27.3	C	31.1
Northbound Left	D	46.7	F	81.3
Northbound Through	D	39.5	D	47.2
Northbound Right	D	42.4	F	198.6
Southbound Left	D	46.1	D	52.9
Southbound Through	D	36.3	C	35.0
Southbound Shared Through-Right	D	36.4	D	35.2





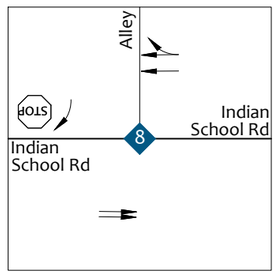


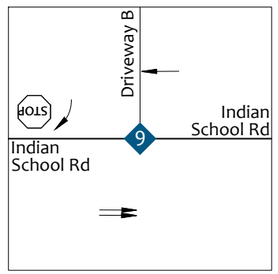


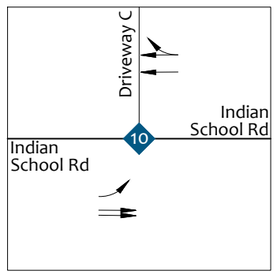


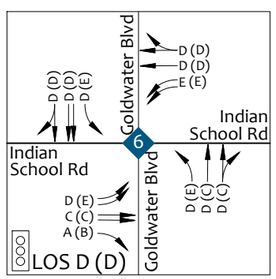
Legend

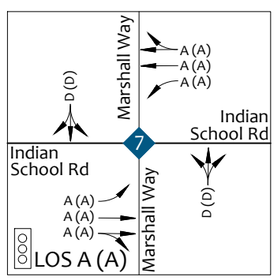
AM (PM)	Peak Hour Capacity Analysis
X	Intersection
	Proposed Development

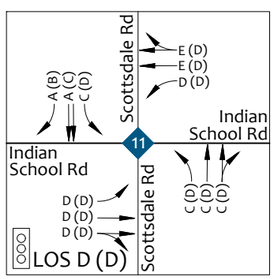


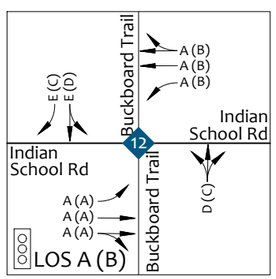












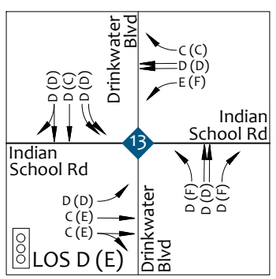


FIGURE 5 | EXISTING CAPACITY ANALYSIS

10-ZN-2020
10/22/20

5. PROJECTED TRAFFIC

5.1. TRIP GENERATION

The trip generation was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 10th Edition.* Land Use 826 – Specialty Retail Center has been removed from the most recent ITE publication. Hence, *Trip Generation, 9th Edition* of the ITE Publication was utilized for Land Use 826 – Specialty Retail Center. The ITE trip generation rates and fitted curve equations are based on studies that measure trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is the standard for the transportation engineering profession.

EXISTING DEVELOPMENT

According to the Maricopa County Assessor's website, the existing site is approximately 3.12-acres and comprised of three (3) developed parcels.

Parcel 1 (1.19-acres)

The west parcel includes the 65-room Howard Johnson by Wyndham Scottsdale Old Town motel.

Parcel 2 (1.10-acres)

The northeast parcel includes The Venue Scottsdale (event venue), The Scottsdale Comedy Spot (comedy club), Virtue Vice (cocktail bar), and Celebrations in Paper (invitation printing service).

The Venue Scottsdale operates as a bar and restaurant where it hosts a variety of events, primarily corporate events and meetings, along with live entertainment, weddings and other private events. The *Trip Generation, 10th Edition* as well as *9th Edition* does not provide trip generation rates or formulas for this land use type.

The following information regarding The Venue's business operations was provided through contact with the establishment.

> Prior to COVID-19 conditions, The Venue typically hosted events Monday through Sunday, during various times throughout the day. Non-event days were not a common occurrence. Events may vary by the time of day, day of week as well as the size and scale of each event.
>
> During current conditions, The Venue is closed and not expected to reopen for the remainder of the year.

In efforts to estimate the trips generated by The Venue, a combination of ITE Land Use 925 – Drinking Place and ITE Land Use 932 – High-Turnover (Sit-Down) Restaurant were used. The square footage utilized for the respective land use was categorized according to the *Space Guide* provided

on The Venue website. This guide provides detailed descriptions as well as dimensions for each event space within The Venue. See **Appendix G** for the *Space Guide.*

The event spaces within The Venue were categorized per land use as follows:

- Land Use 925 – Drinking Place: Billiards Room, Ballroom, Rooftop Deck, Observation Deck, Virtue Vice – 1st Floor, and Virtue Vice – 2nd Floor.

- Land Use 932 – High-Turnover (Sit-Down) Restaurant: Main Courtyard, Courtyard Bar, VIP Lounge.

Parcel 3 (0.83-acres)

The southeast parcel includes the Haver Building, a business complex, comprised of the Kimberly at Michael V. Salon, a beauty salon, Terés A Nail Bar, a nail salon, 40 Winks, a vacation home rental agency, Vape Sky, a vaporizer store, and Sixty First Place Architects, an architectural firm.

The 3.12-acre site is occupied by the following land uses:

- Motel 65-rooms
- Specialty Retail Center 18,030 square feet
- Drinking Place 16,8400 square feet
- High-Turnover (Sit-Down) Restaurant 5,020 square feet

The trip generation for the existing land uses was calculated utilizing ITE Land Use 320 – Motel, Land Use 826 – Specialty Retail Center, ITE Land Use 925 – Drinking Place, and ITE Land Use 932 – High-Turnover (Sit-Down) Restaurant. Trip generation calculations are shown in **Table 7** below. Detailed trip generation calculations are provided in **Appendix G**.

Table 7 – Trip Generation – Existing Development

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Motel	320	65	Rooms	218	25	9	16	25	14	11
Specialty Retail Center	826	18.03	1000 SF GFA	800	N/A	N/A	N/A	49	22	27
Drinking Place	925	16.84	1000 SF GFA	N/A	N/A	N/A	N/A	192	127	65
High-Turnover (Sit-Down) Restaurant	932	5.02	1000 SF GFA	563	50	28	22	49	30	19
			Total	1,581	75	37	38	315	193	122

POTENTIAL DEVELOPMENT UNDER EXISTING ZONING

The existing site is currently zoned for Central Business (C-2) land uses. C-2 zoning is intended to permit uses for recurring shopping and service needs for multiple neighborhoods. A total lot area of 136,010 SF (3.12-acres), and a maximum floor-to-area (FAR) of 0.80, allows for 108,808 SF of developable area. Two (2) trip generation calculations were completed with potential uses with the build out under the existing zoning.

Option 1

With a total lot area of 136,010 SF (3.12-acres), and a maximum floor-to-area ratio (FAR) of 0.80, a 108,808 square foot retail use was assumed for potential buildout.

Utilizing ITE Land Use 820 – Shopping Center, the trip generation for the potential development under existing zoning was calculated as shown in **Table 8** below. Detailed trip generation calculations are provided in **Appendix G**.

Table 8 - Trip Generation (Existing Zoning– Option 1)

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Shopping Center	820	108.81	1000 SF GLA	6,368	207	129	78	579	278	301
Total - Existing Zoning				6,368	207	129	78	579	278	301

Option 2

The second option considers a 54,404 SF retail use (0.4 FAR) combined with two (2) 6,000 SF high-turnover (sit down) restaurants. This results in a total FAR of 0.49.

Utilizing ITE Land Use 820 – Shopping Center and Land Use 932 High Turnover (Sit Down) Restaurant, the trip generation for the potential development under existing zoning was calculated as shown in **Table 9** below. Detailed trip generation calculations are provided in **Appendix G**.

Table 9 - Trip Generation (Existing Zoning– Option 2)

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Shopping Center	820	54.4	1000 SF GLA	3,974	179	111	68	347	167	180
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	1,346	119	65	54	117	73	44
Total - Existing Zoning				5,320	298	176	122	464	240	224

PROPOSED DEVELOPMENT

The Triangle development will include the following land uses:

- Multi-Family Residential 230 units
  - *41 studio units*
  - *98 one-bedroom units*
  - *79 two-bedroom units*
  - *12 three-bedroom units*
- Hotel 168-rooms
- Restaurant 4,000 square feet

The trip generation for The Triangle development was calculated utilizing ITE Land Use 221 – Multifamily Housing (Mid-Rise), Land Use (310) – Hotel, and Land Use (932) – High-Turnover (Sit-Down) Restaurant. Trip generation calculations are shown in **Table 10** below. Detailed trip generation calculations are provided in **Appendix G**.

Table 10 – Trip Generation – Proposed Development

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	1,252	77	20	57	99	60	39
Hotel	310	168	Rooms	1,405	79	47	32	101	52	49
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	449	40	22	18	39	24	15
			Total	3,106	196	89	107	239	136	103

The proposed development is anticipated to generate 3,106weekday trips with 196 occurring during the AM peak hour and 239 trips during the PM peak hour.

5.2. TRIP GENERATION COMPARISON

EXISTING DEVELOPMENT VS. THE TRIANGLE

A trip generation comparison between the existing developments currently occupying the 3.12-acre site and The Triangle development is shown in **Table 11**.

Table 11 – Trip Generation Comparison
(Existing Development vs. The Triangle)

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Motel	320	65	Rooms	218	25	9	16	25	14	11
Specialty Retail Center	826	18.03	1000 SF GFA	800	N/A	N/A	N/A	49	22	27
Drinking Place	925	16.84	1000 SF GFA	N/A	N/A	N/A	N/A	192	127	65
High-Turnover (Sit-Down) Restaurant	932	5.02	1000 SF GFA	563	50	28	22	49	30	19
Total - Existing				1,581	75	37	38	315	193	122
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	1252	77	20	57	99	60	39
Hotel	310	168	Rooms	1405	79	47	32	101	52	49
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	449	40	22	18	39	24	15
Total - Proposed				3,106	196	89	107	239	136	103
Difference				1,525	121	52	69	-76	-57	-19
% Difference				96%	161%	141%	182%	-24%	-30%	-16%

The build out of The Triangle development is anticipated to generate 1,525 more weekday trips, with 121 more trips during the AM peak hour, and 76 (24%) fewer trips during the PM peak hour than the existing development.

The Venue is not considered to operate with "typical" daily traffic patterns due to the variations in event time, size, and scale of events. Therefore, its trip generation estimation may not capture all the trips associated with this land use. The existing trips to and from The Venue Scottsdale in reality may be greater or lesser than what is shown and calculated.

EXISTING ZONING VS. THE TRIANGLE

Option 1

A comparison between the trips generated with the buildout under the existing zoning for Option 1 – 0.8 FAR Shopping Center and The Triangle development is shown in **Table 12**.

Table 12 - Trip Generation Comparison – Option 1
(Existing Zoning – 0.8 FAR Retail vs The Triangle)

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Shopping Center	820	108.81	1000 SF GLA	6,368	207	129	78	579	278	301
Total - Existing Zoning				6,368	207	129	78	579	278	301
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	1252	77	20	57	99	60	39
Hotel	310	168	Rooms	1405	79	47	32	101	52	49
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	449	40	22	18	39	24	15
Total - Proposed				3,106	196	89	107	239	136	103
Difference				-3,262	-11	-40	29	-340	-142	-198
% Difference				-51%	-5%	-31%	37%	-59%	-51%	-66%

The buildout of The Triangle development is anticipated to generate 3,262 (51%) fewer weekday trips, with 11 (5%) fewer trips during the AM peak hour, and 340 (59%) fewer trips during the PM peak hour than the build-out of Option 1 under existing zoning.

Option 2

A comparison between the trips generated with the buildout under the existing zoning for Option 2 – 0.4 FAR Shopping Center with High-Turnover (Sit-Down) Restaurants and The Triangle development is shown in **Table 13**.

Table 13 - Trip Generation Comparison – Option 2
(Existing Zoning – Retail and Restaurant vs The Triangle)

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Shopping Center	820	54.4	1000 SF GLA	3,974	179	111	68	347	167	180
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	1,346	119	65	54	117	73	44
Total - Existing Zoning				5,320	298	176	122	464	240	224
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	1,252	77	20	57	99	60	39
Hotel	310	168	Rooms	1,405	79	47	32	101	52	49
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	449	40	22	18	39	24	15
Total - Proposed				3,106	196	89	107	239	136	103
Difference				-2,214	-102	-87	-15	-225	-104	-121
% Difference				-42%	-34%	-49%	-12%	-48%	-43%	-54%

The buildout of The Triangle development is anticipated to generate 2,214 (42%) fewer weekday trips, with 102 (34%) fewer trips during the AM peak hour, and 225 (48%) fewer trips during the PM peak hour than the build-out of Option 2 under existing zoning.

5.3. TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution procedure determines the general pattern of travel for vehicles entering and leaving the proposed development. The trip distribution for The Triangle development is based on the distribution of the existing traffic. This project is being developed in a primarily developed area, so it can be assumed that the existing trip distribution will remain. The trip distribution is shown in **Figure 6**.

The trip assignment was generally based on proximity of the driveways, permitted turn movements, as well as ease and probability of use. The site generated traffic volumes are shown in **Figure 7**.

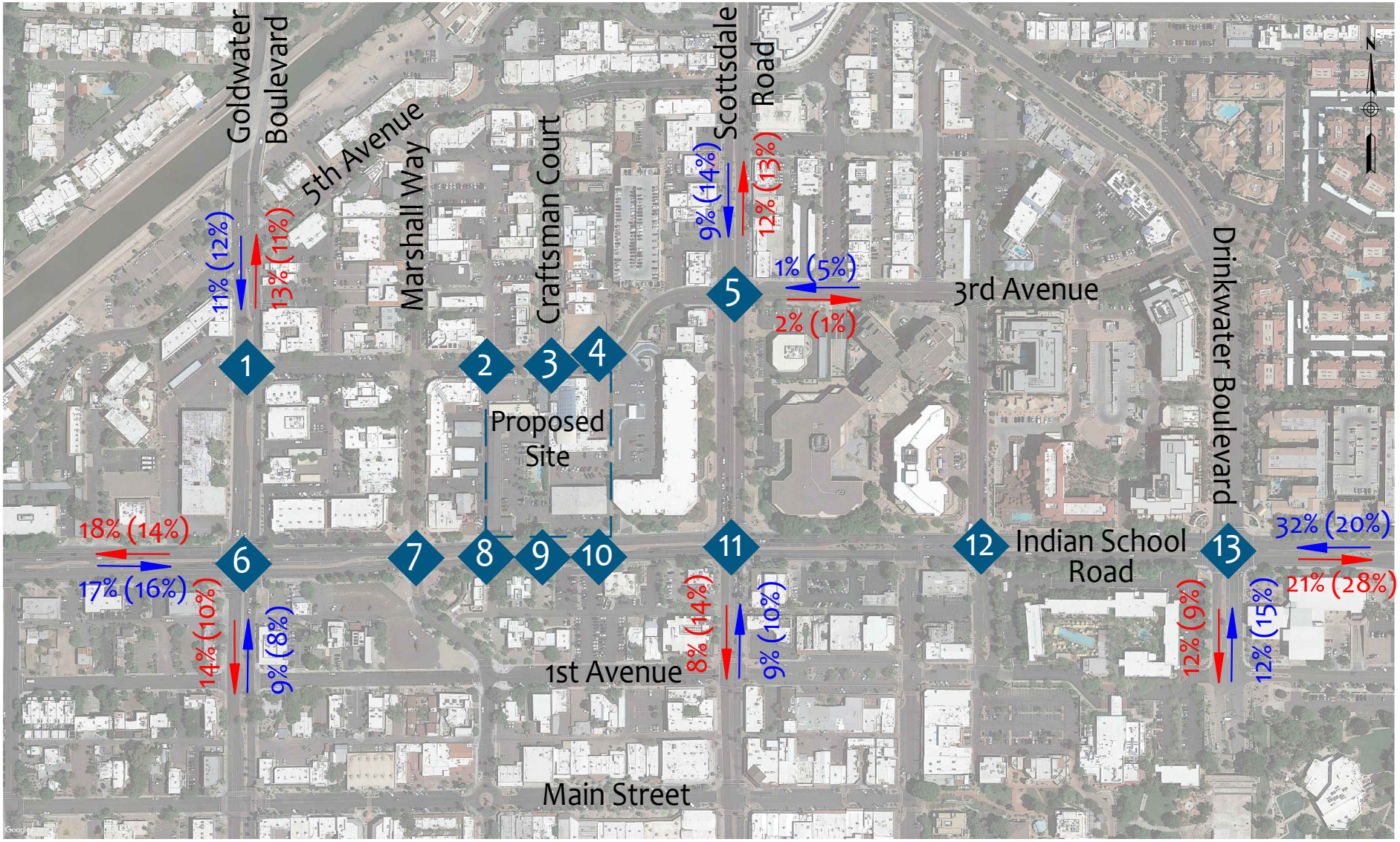
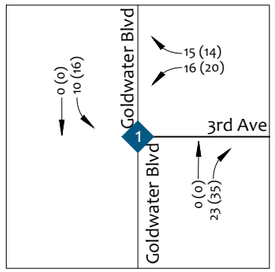
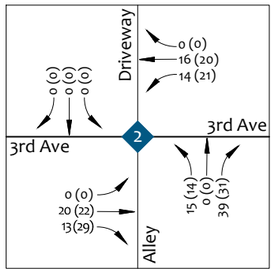


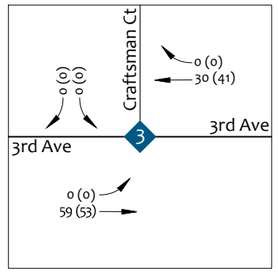
FIGURE 6 | TRIP DISTRIBUTION

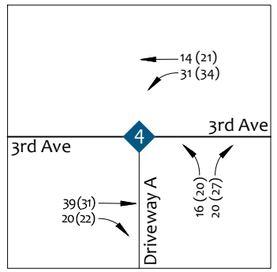
Legend

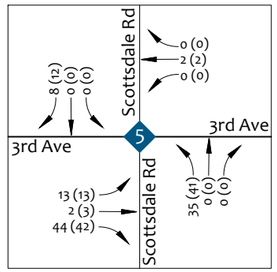
- Intersection
- Proposed Site
- AM(PM) Inbound Trip Distribution Percentages
- AM(PM) Outbound Trip Distribution Percentages





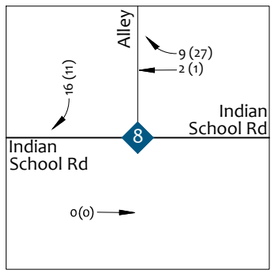


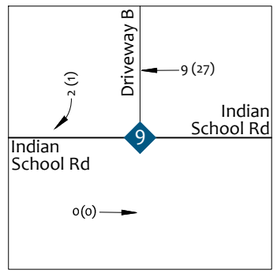


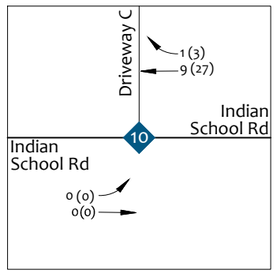


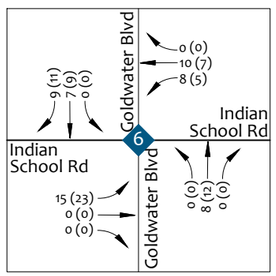
Legend

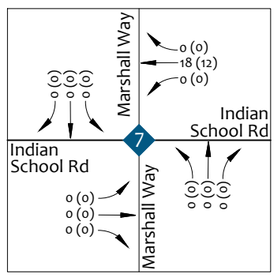
AM (PM)	Peak Hour Traffic Volumes
X	Intersection
	Proposed Development

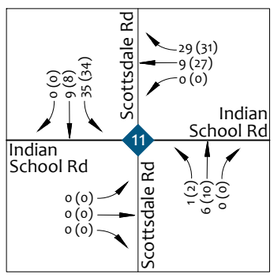


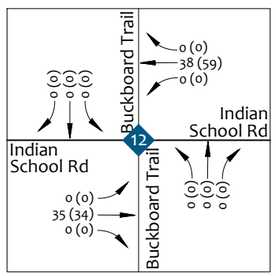












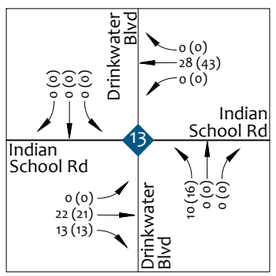


FIGURE 7 | SITE TRAFFIC VOLUMES

10-ZN-2020
10/22/20

6. FUTURE CONDITIONS (YEAR 2024)

The Triangle development is anticipated to be constructed and ready to open in the year 2024. This section analyzes the effects the proposed development will have on the surrounding roadway network during the opening year of 2024.

6.1. YEAR 2024 BACKGROUND TRAFFIC VOLUMES

According to the 2019 Maricopa Associations of Governments (MAG) socioeconomic projections in the City of Scottsdale within the study area (RAZ 272), it is estimated that in the year 2018 the population was approximately 68,987. MAG estimates that the 2030 population of the surrounding area to be 71,910. This results in an approximate annual growth rate of 1.23%.

As a conservative approach, a 2.0% annual growth rate was utilized. See **Appendix H** for the MAG socioeconomic projections. See **Figure 8** for the year 2024 background traffic volumes.

6.2. YEAR 2024 BUILD TRAFFIC VOLUMES

When the site traffic (**Figure 7**) is added to the year 2024 background traffic (**Figure 8**), the result is the 2024 build traffic volumes. This represents the traffic volumes with the build out of the proposed development. The year 2024 build traffic volumes are shown in **Figure 9**.

6.3. YEAR 2024 NO BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the 2024 no build scenario. The signal timing splits were optimized and adjusted for the future traffic volumes. PHF was assumed to be 0.92.

The year 2024 no build AM and PM peak hour level of service and delay for unsignalized intersections are shown in **Table 14** and signalized intersections are shown in **Table 15** and **Table 16**. The detailed capacity analysis sheets can be found in **Appendix I**.

The results of the year 2024 no build capacity analysis are shown in **Figure 10**. All movements operate at a LOS D or better or are maintained at the existing level of service, with the exception of the following:

Indian School Road and Buckboard Trail (12) – Signalized

- SB shared left-through PM peak hour operates at LOS E

Indian School Road and Drinkwater Boulevard (13) – Signalized

- Overall intersection PM peak hour operates at LOS F
- EB left AM peak hour operates at LOS E

- EB through PM peak hour operates at LOS F
- EB shared through-right PM peak hour operates at LOS F
- NB right PM peak hour operates at LOS E
- SB left PM peak hour operates LOS F

6.4. YEAR 2024 BUILD CAPACITY ANALYSIS

The capacity and level of service for the study area intersections were evaluated for the year 2024 build traffic volumes. See **Figure 9**. The signal timing splits were optimized and adjusted for the future traffic volumes, and a PHF of 0.92 was used.

The year 2024 build AM and PM peak hour level of service and delay for unsignalized intersections are shown in **Table 14** and signalized intersections are shown in **Table 15** and **Table 16**. The detailed capacity analysis sheets can be found in **Appendix I**.

The results of the year 2024 build capacity analysis are shown in **Figure 10**. All movements operate at a LOS D or better or are maintained at the year 2024 no build level of service.

Table 14 – Year 2024 Level of Service and Delay – Unsignalized

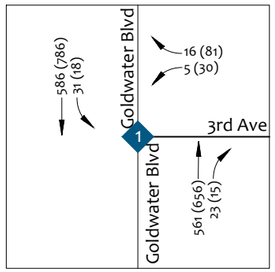
Intersection	2024 No Build Conditions				2024 Build Conditions			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
Unsignalized Intersections	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
Goldwater Boulevard and 3rd Avenue (1)								
Westbound Shared Left-Right	A	9.8	B	10.5	B	10.4	B	13.7
Southbound Left	A	7.8	A	8.0	A	7.9	A	8.0
3rd Avenue and Alley (2)								
Eastbound Left	-	-	-	-	A	0.0	A	0.0
Westbound Left	-	-	-	-	A	7.4	A	7.5
Northbound Shared Left-Through-Right	-	-	-	-	A	9.3	A	9.7
Southbound Shared Left-Through-Right	-	-	-	-	A	0.0	A	0.0
3rd Avenue and Craftsman Court (3)								
Eastbound Left	A	7.3	A	7.5	A	7.4	A	7.6
Southbound Shared Left-Right	A	9.1	A	9.3	A	9.6	A	9.8
3rd Avenue and Driveway A (4)								
Westbound Left	-	-	-	-	A	7.5	A	7.6
Northbound Shared Left-Through-Right	-	-	-	-	A	9.7	B	10.0
Indian School Road and Alley (8)								
Southbound Right	-	-	-	-	B	11.6	B	12.3
Indian School Road and Driveway B (9)								
Southbound Right	-	-	-	-	B	11.4	B	12.1

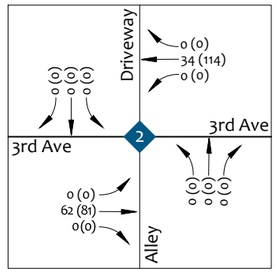
Table 15 – Year 2024 Level of Service and Delay – Signalized

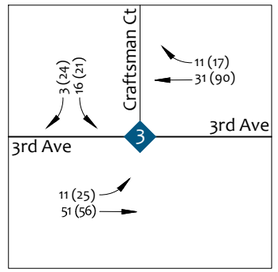
Intersection	2024 No Build Conditions				2024 Build Conditions			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
Signalized Intersections	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
Scottsdale Road and 3rd Avenue (5)								
Oveall Intersection	A	4.1	A	8.8	A	5.1	A	9.2
Eastbound Left	C	23.9	C	26.3	C	23.4	C	25.8
Eastbound Shared Through-Right	C	22.4	B	19.2	C	22.5	B	19.2
Westbound Left	C	23.2	C	22.0	C	23.9	C	22.8
Westbound Shared Through-Right	C	23.1	C	21.4	C	22.3	C	20.6
Northbound Left	A	0.4	A	2.2	A	0.6	A	3.4
Northbound Through	A	0.4	A	0.6	A	0.4	A	0.6
Northbound Shared Through-Right	A	0.4	A	0.6	A	0.4	A	0.6
Southbound Left	A	4.1	A	6.3	A	4.5	A	6.7
Southbound Through	A	4.2	A	8.5	A	4.6	A	9.0
Southbound Right	A	3.6	A	6.1	A	4.0	A	6.6
Goldwater Boulevard and Indian School Road (6)								
Oveall Intersection	D	38.7	D	42.2	D	39.3	D	42.8
Eastbound Left	D	52.0	D	54.3	D	53.9	D	54.3
Eastbound Through	C	31.6	C	33.3	C	32.5	C	32.5
Eastbound Right	B	10.9	B	10.5	B	11.0	B	10.1
Westbound Left	E	58.6	E	58.8	E	58.8	E	59.0
Westbound Through	D	46.8	D	51.1	D	47.2	D	51.3
Westbound Shared Through-Right	D	46.7	D	51.0	D	47.1	D	51.2
Northbound Left	D	47.7	D	47.6	D	46.9	D	47.4
Northbound Through	C	33.2	D	37.1	C	33.3	D	38.4
Northbound Shared Through-Right	C	33.2	D	37.2	C	33.3	D	38.5
Southbound Left	D	51.2	D	49.1	D	50.4	D	49.0
Southbound Through	D	36.7	D	40.4	D	36.9	D	42.0
Southbound Shared Through-Right	D	38.2	D	43.6	D	38.5	D	45.8
Marshall Way and Indian School Road (7)								
Oveall Intersection	A	10.0	B	14.9	B	10.1	B	15.0
Eastbound Left	B	11.9	B	17.7	B	12.1	B	17.9
Eastbound Through	A	9.0	B	12.9	A	9.0	B	12.9
Eastbound Shared Through-Right	A	9.0	B	12.9	A	9.0	B	12.9
Westbound Left	B	12.3	B	19.0	B	12.4	B	19.3
Westbound Through	A	9.3	B	12.9	A	9.5	B	13.2
Westbound Shared Through-Right	A	9.2	B	12.9	A	9.5	B	13.2
Northbound Shared Left-Through-Right	C	34.5	C	31.5	C	34.5	C	31.5
Southbound Shared Left-Through-Right	C	34.6	C	32.4	C	34.6	C	32.4

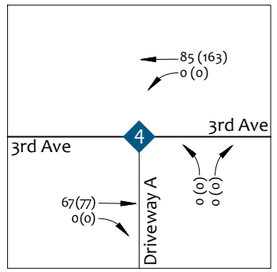
Table 16 – Year 2024 Level of Service and Delay – Signalized - Continued

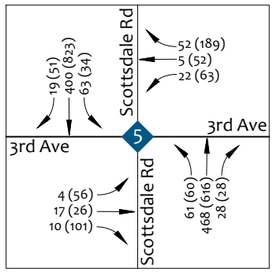
Intersection	2024 No Build Conditions				2024 Build Conditions			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
Signalized Intersections	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
Scottsdale Road and Indian School Road (11)								
Oveall Intersection	C	27.6	D	43.5	C	32.8	D	42.5
Eastbound Left	C	30.1	D	49.1	D	38.8	D	47.7
Eastbound Through	A	3.7	D	53.3	C	23.2	D	42.0
Eastbound Shared Through-Right	A	3.7	D	53.3	C	23.2	D	42.0
Westbound Left	B	16.2	D	44.6	C	25.2	D	44.0
Westbound Through	C	29.1	D	35.8	C	32.2	D	42.8
Westbound Shared Through-Right	C	29.1	D	35.8	C	32.2	D	43
Northbound Left	D	39.6	D	52.8	D	39.3	D	52.5
Northbound Through	D	42.6	D	53.4	D	44.1	D	54.2
Northbound Shared Through-Right	D	42.8	D	54.0	D	44.4	D	54.8
Southbound Left	D	45.0	D	50.7	D	44.2	D	52.1
Southbound Through	D	41.1	C	32.4	C	30.4	C	30.1
Southbound Right	D	38.9	C	28.0	C	28.8	C	26.1
Buckboard Trail and Indian School Road (12)								
Oveall Intersection	A	4.5	B	11.2	A	4.5	B	11
Eastbound Left	A	2.7	A	4.6	A	3.0	A	4.9
Eastbound Through	A	0.4	A	1.1	A	0.5	A	1.1
Eastbound Shared Through-Right	A	0.4	A	1.0	A	0.4	A	1
Westbound Left	A	1.6	B	10.8	A	1.6	B	10.2
Westbound Through	A	2.5	B	13.5	A	2.5	B	13
Westbound Shared Through-Right	A	2.5	B	13.4	A	2.5	B	12.9
Northbound Shared Left-Through-Right	D	54.3	C	32.8	D	54.3	C	33.3
Southbound Shared Left-Through	E	55.2	E	55.7	E	55.2	E	57.6
Southbound Right	E	57.9	C	29.0	E	57.9	C	29.8
Drinkwater Boulevard and Indian School Road (13)								
Oveall Intersection	D	36.5	F	82.5	D	39.0	F	83.5
Eastbound Left	E	56.8	D	48.8	E	62.9	D	49.8
Eastbound Through	C	32.4	F	91.6	D	44.0	F	97.0
Eastbound Shared Through-Right	C	32.4	F	91.6	D	44.0	F	97.4
Westbound Left	D	43.3	F	96.5	D	45.4	F	102.2
Westbound Through	C	31.7	C	29.5	C	33.1	C	30.5
Westbound Right	C	22.2	C	25.0	C	22.5	C	25.2
Northbound Left	D	47.6	D	52.6	D	49.8	D	52.4
Northbound Through	D	42.7	D	50.4	D	39.7	D	49.2
Northbound Right	D	47.0	F	263.9	D	43.0	F	248.8
Southbound Left	D	49.6	F	81.8	D	52.0	F	93.7
Southbound Through	D	41.5	D	44.8	D	39.3	D	46.7
Southbound Shared Through-Right	D	41.6	D	45.1	D	39.4	D	47.0





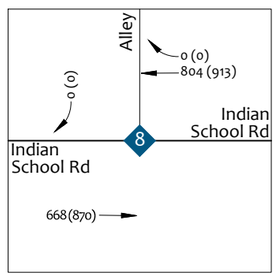


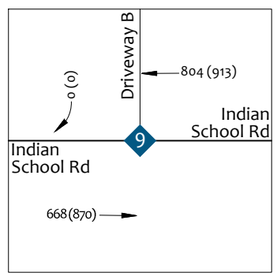


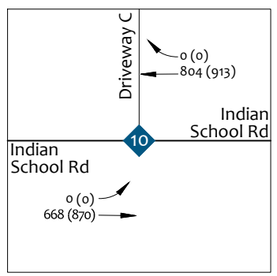


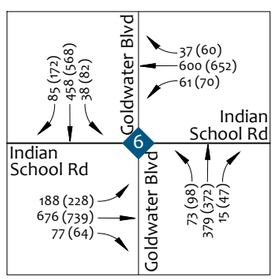
Legend

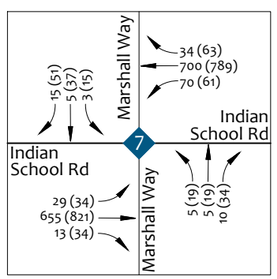
AM (PM)	Peak Hour Traffic Volumes
X	Intersection
	Proposed Development

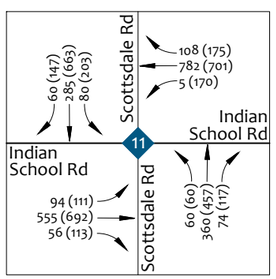


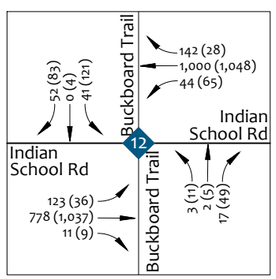












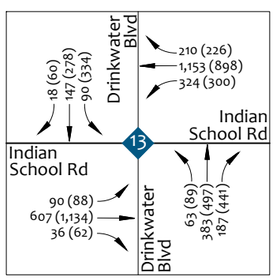
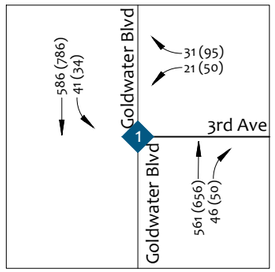
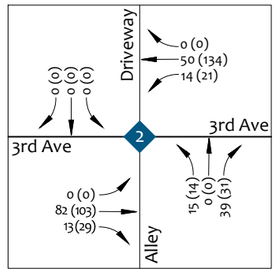
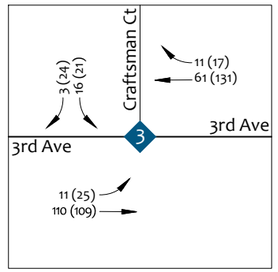


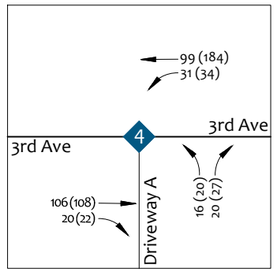
FIGURE 8 | 2024 NO BUILD TRAFFIC VOLUMES

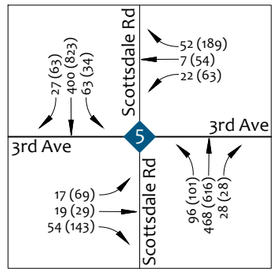
10-ZN-2020
10/22/20





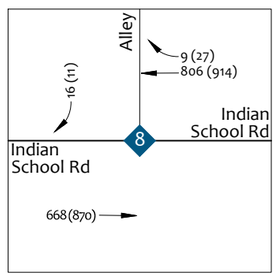


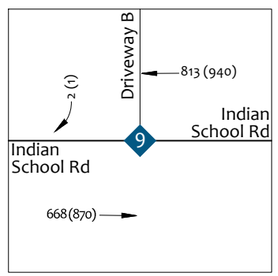


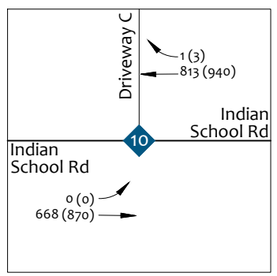


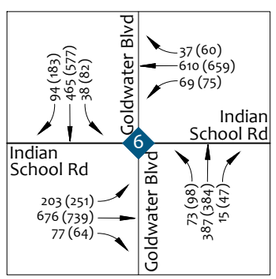
Legend

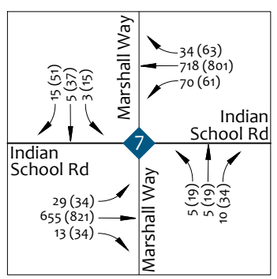
AM (PM)	Peak Hour Traffic Volumes
X	Intersection
	Proposed Development

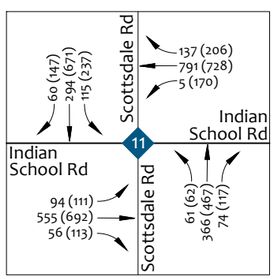


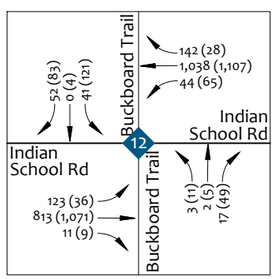












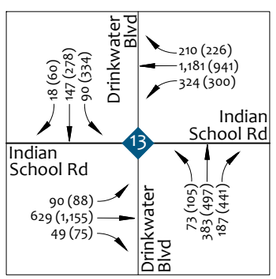
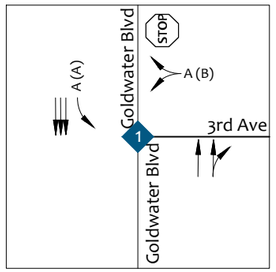
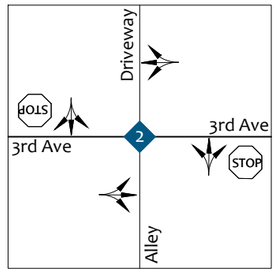
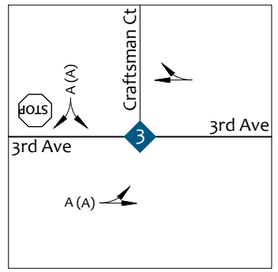


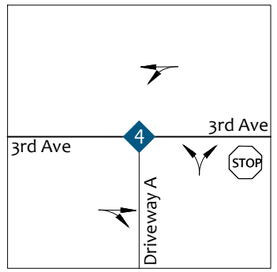
FIGURE 9 | 2024 BUILD TRAFFIC VOLUMES

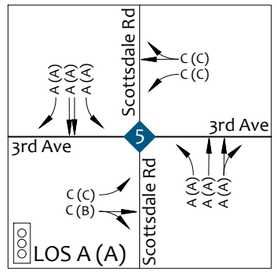
10-ZN-2020
10/22/20





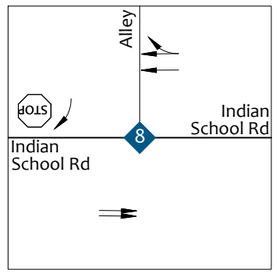


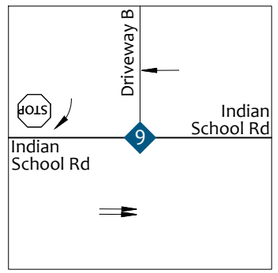


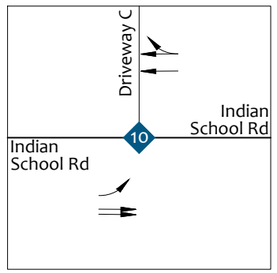


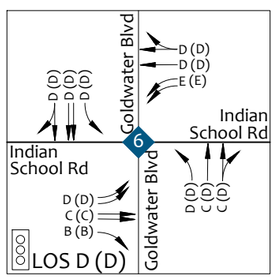
Legend

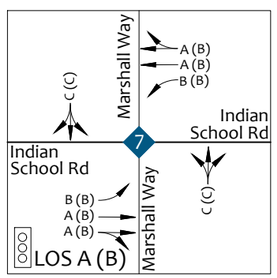
AM (PM)	Peak Hour Capacity Analysis
X	Intersection
	Proposed Development

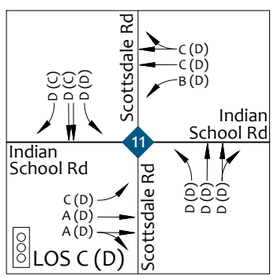


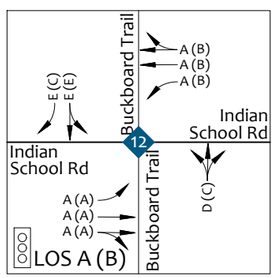












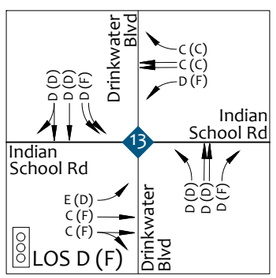
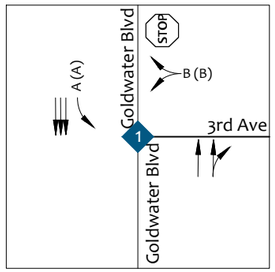
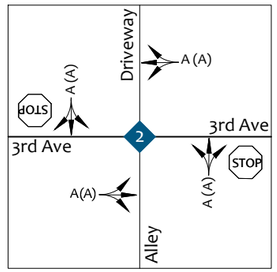
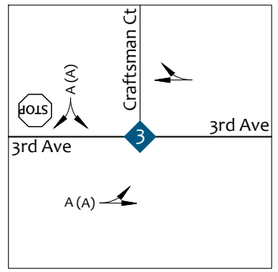


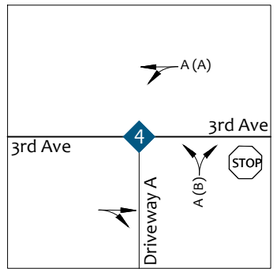
FIGURE 10 | YEAR 2024 NO BUILD CAPACITY ANALYSIS

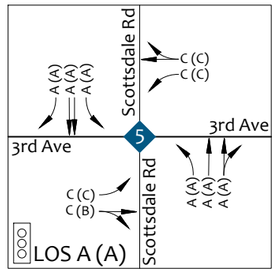
10-ZN-2020
10/22/20





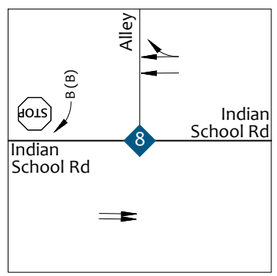


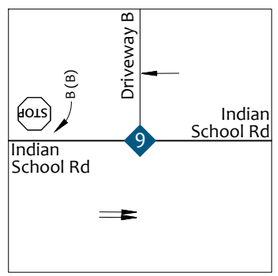


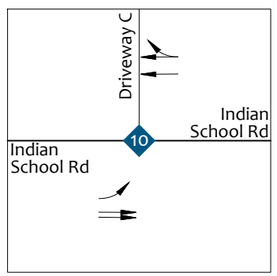


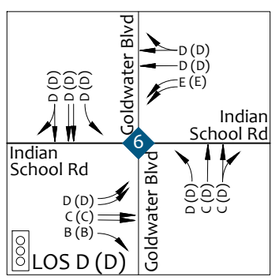
Legend

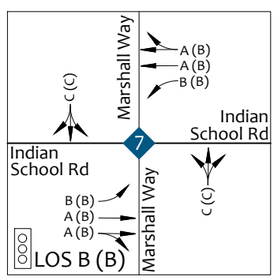
AM (PM)	Peak Hour Capacity Analysis
X	Intersection
	Proposed Development

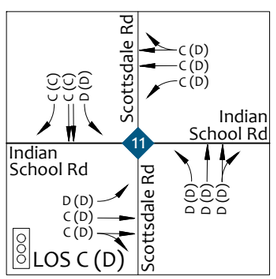


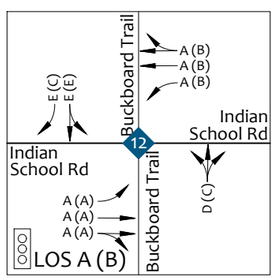












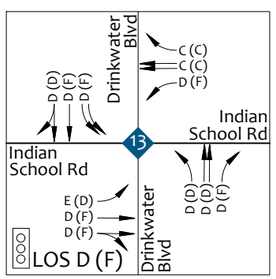


FIGURE 11 | YEAR 2024 BUILD CAPACITY ANALYSIS

10-ZN-2020
10/22/20

7. RECOMMENDATIONS & CONCLUSIONS

The Triangle development will be located approximately 300 feet west of the northwest corner (NWC) of Indian School Road and Scottsdale Road in Scottsdale, Arizona.

The proposed development will include the following land uses:

- Multi-Family Residential — 230 units
  - *41 studio units*
  - *98 one-bedroom units*
  - *79 two-bedroom units*
  - *12 three-bedroom units*
- Hotel — 168-rooms
- Restaurant — 4,000 square feet

Existing Capacity Analysis

The AM and PM peak hour existing conditions capacity analysis were completed for the existing study intersections. The results of the capacity analysis reveal the following location with an existing level of service (LOS) E or F:

Indian School Road and Goldwater Boulevard (6) – Signalized

- EB left PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E
- NB left PM peak hour operates at LOS E
- SB left PM peak hour operates at LOS E

Indian School Road and Scottsdale Road (11) – Signalized

- WB through AM peak hour operates at LOS E
- WB shared through-right AM peak hour operates at LOS E

Indian School Road and Buckboard Trail and Indian School Road (12) – Signalized

- SB shared left-through AM peak hour operates at LOS E
- SB right AM peak hour operates at LOS E

Drinkwater Boulevard and Indian School Road (13) – Signalized

- Overall PM peak hour operates at LOS E
- EB through PM peak hour operates at LOS E
- EB shared through-right PM peak hour operates at LOS E
- WB left AM and PM peak hours operate at LOS E and F, respectively
- NB left PM peak hour operates at LOS F
- NB right PM peak hour operates at LOS F

Trip Generation

The proposed development is anticipated to generate 3,106 weekday trips, with 196 trips occurring during the AM peak hour and 239 trips occurring during the PM peak hour.

Future Conditions - Year 2024

Year 2024 analyses was completed with and without the build out of the proposed development. An annual growth rate of 2.0% was applied to the existing traffic volumes.

A capacity analysis was completed for both the AM and PM peak hours for year 2024, with and without the build out of the proposed development. **All movements operate at a LOS D or better or are maintained at the year 2024 no build level of service with the build out of the proposed development. Therefore, it is anticipated that The Triangle development will result in minimal traffic related impacts to the surrounding roadway network.**

Recommendations

The recommendations with the build out of The Triangle development include:

Signal Timing

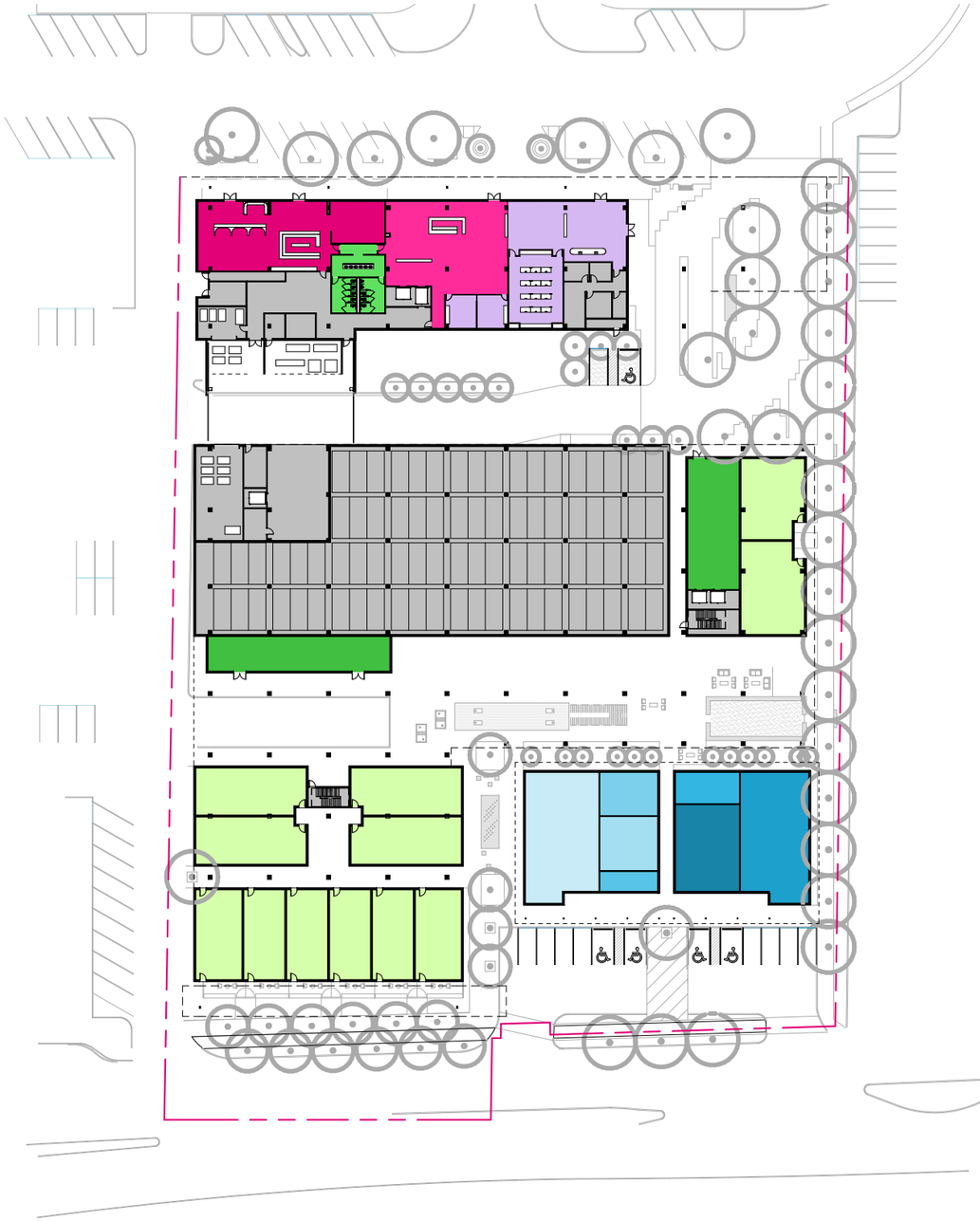
As with any new development and potential change in traffic patterns, the following is recommended:

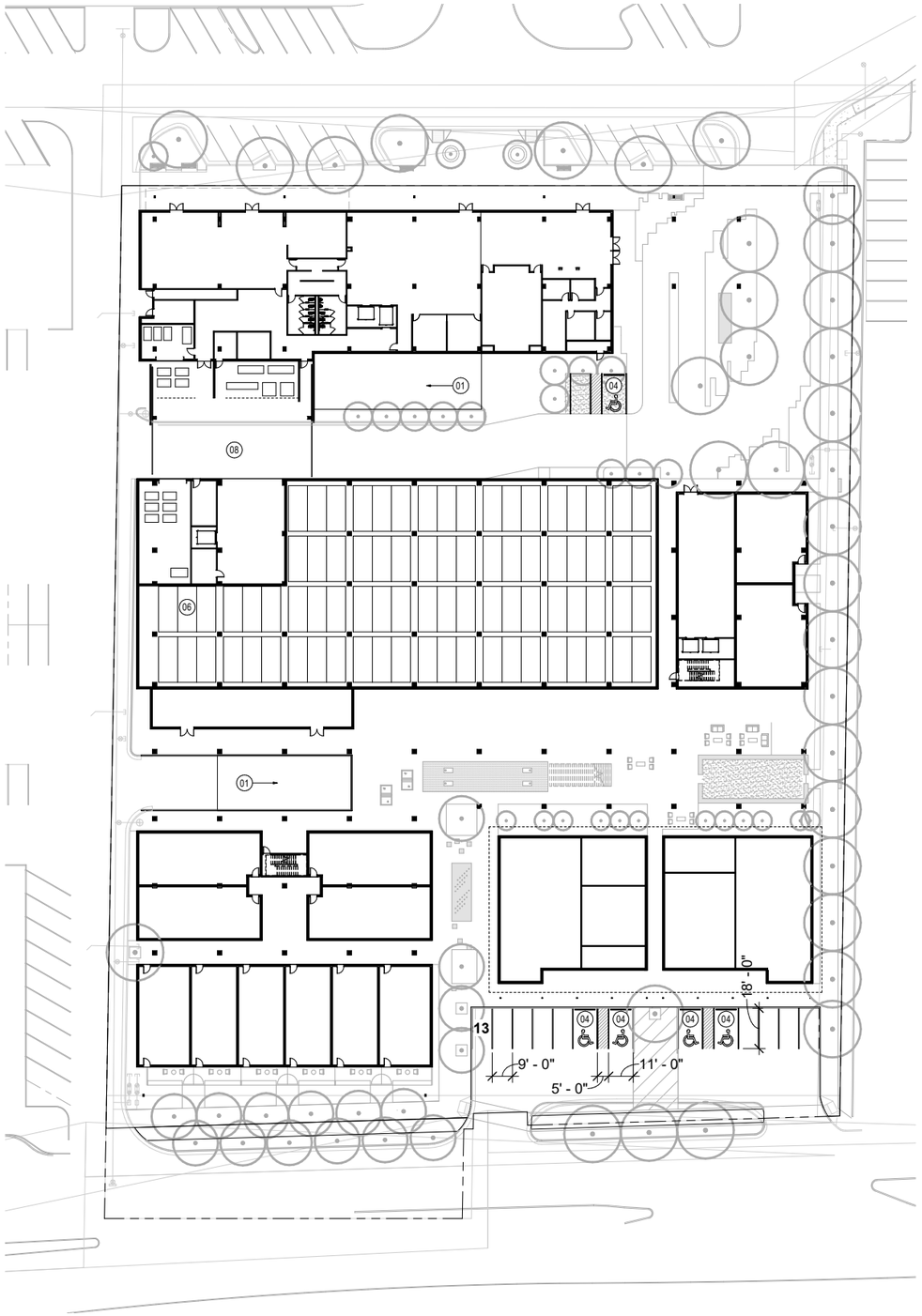
- Monitor and Adjust Signal Timing
  Monitor traffic patterns in the area and if necessary, adjust nearby signal timing

Appendix A – Proposed Site Plan

A

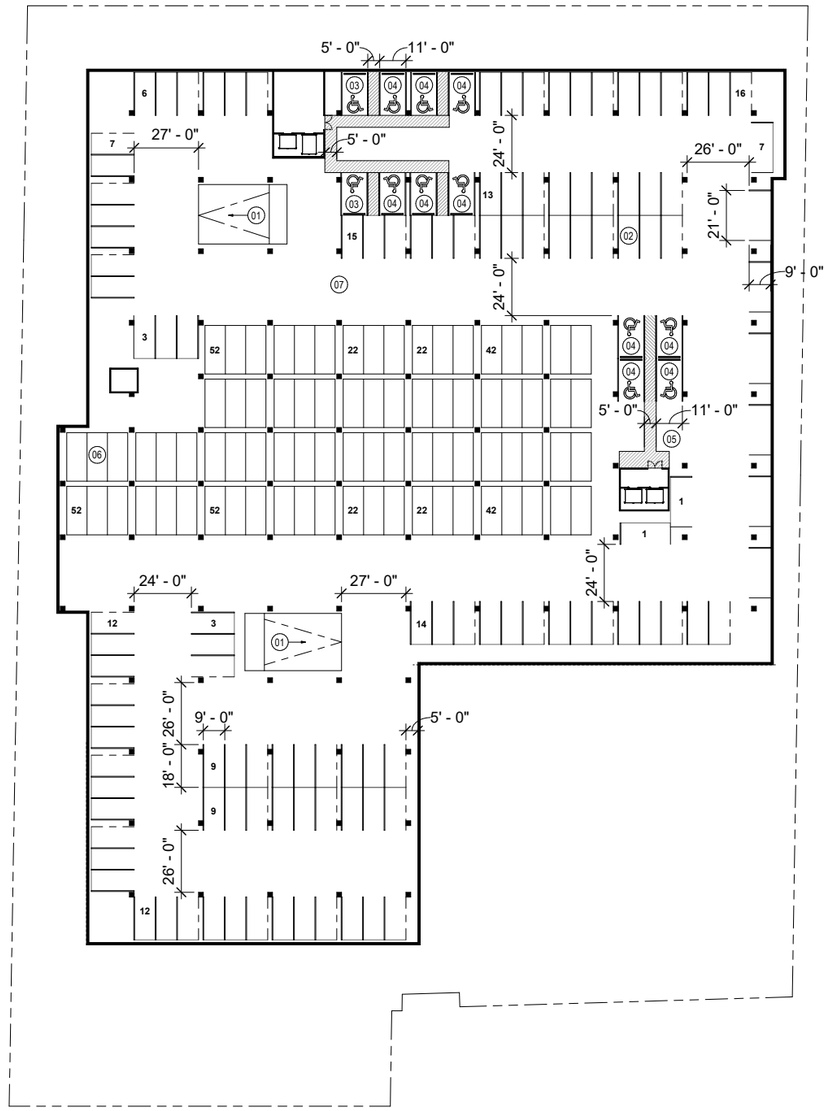
10-ZN-2020
10/22/20





02 PARKING PLAN - LEVEL 1
SCALE: 1" = 30'-0"

0 8 15 30 60



01 PARKING PLAN - LOWER LEVEL
SCALE: 1" = 30'-0"

0 8 15 30 60

SHEET NOTES

01 PARKING RAMP DOWN
02 PARKING STALL (9' x 18')
03 VAN ACCESSIBLE PARKING STALL (11' x 18')
04 ACCESSIBLE PARKING STALL (11' x 18')
05 ACCESSIBLE CROSS WALK
06 STACKING MECHANICAL PARKING SYSTEM
07 MINIMUM VERTICAL CLEARANCE TO BE 8'-2"
08 EXTERIOR SERVICE YARD

PARKING REQUIREMENTS

HOTEL	0.8 / UNIT
RESIDENTIAL	
STUDIO	1.0 / UNIT
1 BED	1.0 / UNIT
2 BED	2.0 / UNIT
3 BED	2.0 / UNIT

PARKING REQUIRED

HOTEL	134
RESIDENTIAL	321
RESTAURANT	11
TOTAL	466

SHARED PARKING STUDY
461

PARKING PROVIDED

LOWER LEVEL	
STANDARD	132
STACKING	343
LEVEL 01	
STANDARD	15
TOTAL	490

ADA REQUIREMENTS

REQUIRED 4%	
CAR SPACES	17
VAN SPACES	2
PROVIDED 4%	
CAR SPACES	17
VAN SPACES	2

COS STAMP

THE TRIANGLE

7120 E INDIAN SCHOOL RD,
SCOTTSDALE, AZ 85251

- CASE PRE-APP NUMBER -
63-PA-2020

Gensler

2575 E Camelback Road
Suite 175
Phoenix, AZ 85016
United States

Tel 602.523.4900
Fax 602.523.4949

SYDNOR

4806 N 78TH Place
Scottsdale, AZ 85251
United States

Tel 480.206.4593

△ Date	Description
6/26/20	Pre-Application

Seal / Signature

NOT FOR CONSTRUCTION

Project Name
3RD AVENUE + INDIAN SCHOOL ROAD - SCOTTSDALE, AZ

Project Number
057.6850.000

Description
PARKING PLAN

Scale
1" = 30'-0"

Ref North

21.r

10-ZN-2020
10/22/20

8/28/2020 12:56:18 PM BIM 360://057.6850.000 - PEG - Indian School + 3rd Avenue/The Triangle R20 - Architecture.rvt

Appendix B – Crash Data

B

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1905545	190312	1715	GOLDWATER	BL	3	RD	W	100	1	1	1	0	0	2	1	1	3	EB	EB	4	MULTI VEH 3

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1717619	170809	1653	CRAFTSMAN	CT	3	RD	AT		1	1	1	0	0	6	1	1	1	WB	SB	2	
1818703	180824	2044	CRAFTSMAN	CT	3	RD	AT		2	2	1	0	0	2	1	1	3	WB	WB	4	MULTI VEH 3
1821194	180927	1631	CRAFTSMAN	CT	3	RD	AT		2	1	2	0	0	6	1	4	1	NB	WB	3	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1710744	170512	1325	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	1	1	1	1	NB	NB	4	
1710777	170512	2105	SCOTTSDALE	RD	3	RD	AT		3	3	1	0	0	7	1	4	1	SB	EB	3	
1720617	170917	1609	SCOTTSDALE	RD	3	RD	W	55	99	99	1	99	0	12	1	8	3	WB	WB	4	HIT AND RUN
1721573	170929	1622	SCOTTSDALE	RD	3	RD	AT		2	1	2	0	0	2	1	1	3	WB	WB	4	MULTI VEH 3
1725599	171118	1641	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	2	1	2	3	EB	EB	4	
1801615	180122	1215	SCOTTSDALE	RD	3	AV	W	80	99	1	99	0	0	2	1	7	5	EB	EB	6	
1804082	180221	1424	SCOTTSDALE	RD	3	RD	AT		1	1		0	0	2	1	10	14	WB	99	97	
1804312	180224	1700	SCOTTSDALE	RD	3	RD	E	30	2	1	2	0	0	97	1	8	2	EB	EB	4	
1806664	180324	1700	SCOTTSDALE	RD	3	AV	AT		1	1	1	4	0	9	1	17	1	EB	NB	97	CAR/PEDESTRIAN, DUI
1807805	180407	1249	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	2	1	1	4	SB	SB	4	
1811353	180522	1108	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	20	1	4	1	NB	SB	3	
1823005	181022	0312	SCOTTSDALE	RD	3	AV	AT		2	1	2	4	0	2	1	1	3	NB	NB	4	DUI
1823996	181104	1537	SCOTTSDALE	RD	3	AV	AT		2	1	2	0	0	6	1	1	11	SB	WB	2	
1824774	181115	1529	SCOTTSDALE	RD	3	RD	E	55	3	3	1	0	0	97	1	1	3	EB	EB	4	
1901878	190125	2137	SCOTTSDALE	RD	3	RD	W	54	1	1	1	0	0	2	1	1	3	WB	WB	4	MULTI VEH 3
1908106	190414	2245	SCOTTSDALE	RD	3	RD	N	10	1	1	1	0	0	4	1	1	3	SB	SB	4	
1912710	190614	1501	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1918140	190829	1556	SCOTTSDALE	RD	3	RD	AT		1	1	1	4	0	2	1	1	1	SB	SB	4	DUI
1920547	191001	1251	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	20	1	4	1	SB	NB	2	
1921282	191011	1641	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	99	99	4	4	SB	SB	6	
1924879	191130	1211	SCOTTSDALE	RD	3	RD	AT		1	1	1	0	0	2	1	1	2	EB	EB	4	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1702337	170129	2224	GOLDWATER	BL	INDIAN SCHOOL	RD	W	30	2	1	2	0	0	2	1	1	3	EB	EB	4	MULTI VEH 3
1705942	170313	1947	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1709682	170429	0752	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	1	EB	SB	2	
1713483	170616	1554	GOLDWATER	BL	INDIAN SCHOOL	RD	E	100	99	99	1	99	0	99	1	1	8	WB	WB	6	HIT AND RUN
1717304	170805	1657	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		1	1	1	0	0	1	1	1	4	NB	WB	2	
1720360	170914	1300	GOLDWATER	BL	INDIAN SCHOOL	RD	E	15	2	1	2	0	0	2	1	1	3	EB	EB	4	
1724907	171109	0940	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		3	1	3	0	0	20	1	4	97	WB	EB	3	CAR/BICYCLE
1800115	180102	1327	GOLDWATER	BL	INDIAN SCHOOL	RD	E	50	1	1	1	0	0	12	1	8	3	WB	WB	6	
1800116	180102	1343	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	97	1	1	4	SB	SB	4	
1804336	180224	2256	GOLDWATER	BL	INDIAN SCHOOL	RD	W	100	1	1	1	0	0	2	1	1	3	EB	EB	4	
1806053	180317	1431	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		1	1	1	0	0	4	1	1	3	SB	SB	4	
1807883	180408	1342	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		2	1	2	0	0	99	99	1	1	EB	SB	2	
1808431	180415	1348	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		3	3	1	0	0	97		17	4	EB	SB	3	CAR/BICYCLE
1816288	180724	2049	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	6	1	1	4	SB	EB	3	
1816579	180728	1232	GOLDWATER	BL	INDIAN SCHOOL	RD	N	50	1	1	1	0	0	12	1	8	1	SB	SB	6	
1816926	180802	1314	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		99	99	1	99	0	2	1	2	3	EB	EB	4	HIT AND RUN
1816955	180802	1735	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	4	0	2	1	1	1	SB	NB	5	DUI
1818269	180819	0321	GOLDWATER	BL	INDIAN SCHOOL	RD	N	100	1	1	1	0	0	1	1	1	8	SB	SB	6	
1823699	181031	1327	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		1	1	1	0	0	20	1	4	2	WB	WB	3	
1826793	181212	1445	GOLDWATER	BL	INDIAN SCHOOL	RD	S	54	1	1	1	0	0	4	1	2	3	NB	NB	4	
1827014	181215	0202	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	4	1	EB	WB	2	
1828076	181230	1542	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		2	2	1	0	0	2	1	1	3	NB	NB	4	
1901155	190116	1630	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		99	99	1	99	0	2	1	1	3	EB	EB	4	HIT AND RUN
1901455	190120	0603	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		1	1	1	0	0	1	1	1	1	SB	SB	6	
1904261	190223	1954	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		4	1	4	0	0	1	1	1	3	EB	EB	4	
1904528	190227	1134	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		4	1	4	0	0	1	1	5	1	WB	WB	6	
1907697	190409	1416	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	1	1	4	1	NB	WB	5	
1907731	190410	0507	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	6	1	1	1	EB	NB	2	
1908902	190424	1822	GOLDWATER	BL	INDIAN SCHOOL	AV	AT		99	99	1	99	0	13	1	7	1	EB	NB	6	HIT AND RUN
1917770	190824	1412	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		3	3	1	0	0	4	1	1	2	NB	NB	4	
1920685	191003	1323	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		99	99	1	99	0	2	1	1	1	SB	SB	6	HIT AND RUN
1923569	191110	1927	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	NB	NB	4	MULTI VEH 3
1924338	191122	0723	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		2	2	2	0	0	20	1	4	1	SB	EB	3	
1925508	191208	2010	GOLDWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1926923	191229	1118	GOLDWATER	BL	INDIAN SCHOOL	RD	W	25	3	3	1	97	0	2	1	1	3	EB	EB	4	MULTI VEH 3

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1703375	170210	1416	MARSHALL	WY	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	4	1	SB	EB	2	
1710021	170503	1040	MARSHALL	WY	INDIAN SCHOOL	RD	AT		99	99	1	99	0	12	1	8	1	EB	EB	6	HIT AND RUN
1723529	171024	1420	MARSHALL	WY	INDIAN SCHOOL	RD	AT		4	3	4	0	0	20	1	4	1	WB	EB	3	
1728527	171226	1942	MARSHALL	WY	INDIAN SCHOOL	RD	AT		1	1	1	0	0	6	1	1	4	WB	SB	3	
1800884	180112	1632	MARSHALL	WY	INDIAN SCHOOL	RD	AT		1	1	1	0	0	6	1	1	1	SB	EB	2	
1810915	180516	1650	MARSHALL	WY	INDIAN SCHOOL	RD	AT		1	1	1	0	0	12	1	8	1	EB	EB	6	
1821342	180929	0904	MARSHALL	WY	INDIAN SCHOOL	RD	AT		2	1	2	4	0	2	1	1	1		EB	3	DUI
1826151	181204	1421	MARSHALL	WY	INDIAN SCHOOL	AV	E	50	1	1		99	0	97	1	10	14	99		97	HIT AND RUN

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1700282	170104	1724	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	4	1	SB	NB	2	
1710307	170506	1257	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	1	1	1	2	EB	EB	4	MULTI VEH 3
1714694	170702	1617	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	4	0	2	1	1	3	SB	SB	4	DUI
1807003	180329	0428	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	6	1	1	1	SB	WB	2	
1821115	180926	1357	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	97	1	8	1	EB	EB	6	
1822322	181012	1922	BUCKBOARD	TR	INDIAN SCHOOL	RD	S	50	1	1		99		2		1		SB		1	HIT AND RUN
1824865	181116	2127	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	SB	SB	4	MULTI VEH 3
1904611	190228	1459	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	SB	SB	4	
1909254	190429	1420	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	1	1	4	1	SB	NB	2	
1909975	190509	0609	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		99	99	1	99	0	2	1	2	3	SB	SB	4	HIT AND RUN
1910084	190510	1159	BUCKBOARD	TR	INDIAN SCHOOL	RD	E	50	99	99	1	99	0	99	1	8	1	WB	WB	4	HIT AND RUN
1915542	190724	1547	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		3	1	3	0	0	20	99	5	17	NB	SB	2	CAR/BICYCLE
1916661	190809	1544	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		99	99	99	0	0	2	1	1	3	EB	EB	4	
1924100	191118	1209	BUCKBOARD	TR	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	8	1	EB	EB	4	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1700607	170109	0218	SCOTTSDALE	RD	SCHOOL	RD	AT		2	1	2	0	0	2	1	1	3	EB	EB	4	
1704322	170221	1808	SCOTTSDALE	RD	SCHOOL	RD	W	30	1	1	1	0	0	2	1	1	2	EB	EB	4	MULTI VEH 3
1704637	170225	2118	SCOTTSDALE	RD	SCHOOL	RD	S	10	3	3		99	0	97	1	4	17	SB	EB	1	
1705331	170306	1704	SCOTTSDALE	RD	SCHOOL	RD	E	45	1	1		0	0	2	1	1	3	WB	WB	4	
1707885	170405	1429	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2		0	0	6	1	1	1	WB	NB	2	
1708224	170410	1154	SCOTTSDALE	RD	SCHOOL	AV	AT		3	3		0	0	20	1	4	17	WB	SB	2	
1710073	170503	2014	SCOTTSDALE	RD	SCHOOL	RD	AT		3	3		99	0	6	1	1	1	NB	WB	2	
1710534	170509	1752	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	4	1	2	3	EB	EB	4	
1710754	170512	1602	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		99	0	2	1	1	1	NB	NB	4	
1713952	170623	1140	SCOTTSDALE	RD	SCHOOL	RD	AT		99	99		0	0	12	1	8	1	EB	EB	6	
1714476	170630	0958	SCOTTSDALE	RD	SCHOOL	RD	W	100	1	1		0	0	1	1	1	3	EB	EB	4	
1717609	170809	1456	SCOTTSDALE	RD	SCHOOL	RD	E	65	1	1		99	0	20	1	4	5	EB	EB	3	
1726563	171201	1222	SCOTTSDALE	RD	SCHOOL	RD	S	51	1	1		0	0	4	1	2	3	SB	SB	4	
1727266	171209	1549	SCOTTSDALE	RD	SCHOOL	RD	W	40	1	1		0	0	4	1	1	2	WB	WB	4	
1801208	180116	1753	SCOTTSDALE	RD	SCHOOL	AV	E	50	2	2		0	0	97	1	10	1	SB	WB	97	
1802857	180205	1555	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		99	0	99	1	5	5	NB	SB	4	
1802867	180205	1600	SCOTTSDALE	RD	SCHOOL	RD	N	40	1	1		0	0	12	1	8	1	SB	SB	6	
1803781	180216	2321	SCOTTSDALE	RD	SCHOOL	RD	W	35	1	1		0	0	4	1	1	3	EB	EB	4	
1803957	180219	1710	SCOTTSDALE	RD	SCHOOL	RD	AT		3	3		0	0	6	1	1	1	SB	WB	2	
1804735	180301	2130	SCOTTSDALE	RD	SCHOOL	AV	AT		4	4		99	0	99	1	10	20	99	99	1	
1806026	180317	0356	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	1	1	3	3	NB	NB	4	
1806908	180327	1846	SCOTTSDALE	RD	SCHOOL	RD	N	62	1	1		0	0	1	1	1	3	SB	SB	4	
1807465	180403	1255	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	97	1	1	1	SB	SB	4	
1809641	180430	1309	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	6	1	1	1	EB	NB	2	
1811637	180525	1729	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	2	1	1	1	EB	EB	4	
1812282	180602	2240	SCOTTSDALE	RD	SCHOOL	RD	AT		3	3		99	0	2	1	1	3	NB	NB	4	
1812423	180604	1709	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		4	0	2	1	1	3	SB	SB	4	
1812432	180604	2003	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	2	1	1	5	WB	WB	4	
1812648	180607	1722	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	6	1	1	1	WB	SB	2	
1813264	180615	1010	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	6	1	1	1	EB	SB	2	
1814566	180701	1401	SCOTTSDALE	RD	SCHOOL	RD	W	10	2	2		0	0	1	1	1	3	EB	EB	4	
1819566	180904	1511	SCOTTSDALE	RD	SCHOOL	RD	AT		3	3		0	0	13	1	1	5	WB	NB	2	
1820126	180911	2118	SCOTTSDALE	RD	SCHOOL	AV	S	60	1	1		0	0	1	1	1	2	NB	NB	4	
1820667	180920	0808	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	6	1	1	1	WB	NB	2	
1821040	180925	1210	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	6	1	1	1	NB	EB	2	
1823481	181028	1558	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	2	1	1	3	SB	SB	4	
1826289	181206	1307	SCOTTSDALE	RD	SCHOOL	RD	S	66	3	3		99	0	20	1	5	17	NB	WB	97	
1826509	181209	0139	SCOTTSDALE	RD	SCHOOL	RD	W	69	2	2		0	0	4	1	1	1	EB	EB	4	
1826699	181211	1305	SCOTTSDALE	RD	SCHOOL	RD	S	98	1	1		0	0	15	1	7	3	NB	NB	6	
1900994	190114	0645	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	2	1	1	2	EB	EB	4	
1904194	190222	2210	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1		0	0	2	1	1	1	EB	EB	4	
1904712	190301	1658	SCOTTSDALE	RD	SCHOOL	RD	N	40	1	1		0	0	2	1	18	3	SB	SB	4	
1904857	190303	1353	SCOTTSDALE	RD	SCHOOL	RD	AT		4	4		99	0	20	1	4	1	WB	EB	3	
1905934	190317	2025	SCOTTSDALE	RD	SCHOOL	AV	AT		1	1		0	0	6	1	1	1	NB	EB	2	

1906904	190330	1254	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2	99	99	1	97	4	97	SB	SB	97
1908328	190417	1950	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	4	0	2	1	2	3	SB	SB	4
1908891	190424	1522	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	12	1	8	1	SB	SB	6
1909011	190426	0709	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	99		99	0	1		EB		4
1909711	190505	0703	SCOTTSDALE	RD	SCHOOL	AV	AT		2	2	0	0	20	1	5	17	SB	NB	5
1909755	190505	2222	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2	99	0	6	1	1	1	NB	WB	2
1909792	190506	1227	SCOTTSDALE	RD	SCHOOL	RD	W	100	1	1	0	0	2	1	1	3	EB	EB	4
1909907	190508	0902	SCOTTSDALE	RD	SCHOOL	AV	AT		3	3	0	0	20	1	4	17	SB	EB	3
1912767	190615	0948	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	2	1	1	3	SB	SB	4
1912945	190618	0532	SCOTTSDALE	RD	SCHOOL	RD	E	64	1	1	0	0	2	1	1	3	EB	EB	4
1916018	190731	1151	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	2	1	8	1	WB	WB	6
1916408	190805	1441	SCOTTSDALE	RD	SCHOOL	RD	AT		4	4	4	0	6	1	17	1	WB	SB	2
1917996	190827	1633	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	6	1	1	4	EB	WB	2
1918792	190906	1615	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	4	0	2	1	2	3	SB	SB	4
1920231	190926	2238	SCOTTSDALE	RD	SCHOOL	RD	N	100	1	1	0	0	1	1	4	1	NB	SB	3
1921027	191008	0908	SCOTTSDALE	RD	SCHOOL	RD	N	47	1	1	0	0	1	1	1	3	SB	SB	4
1921455	191014	0320	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2	0	0	6	1	1	1	WB	NB	2
1922057	191022	0723	SCOTTSDALE	RD	SCHOOL	RD	AT		14	14	0	0	2	1	1	3	SB	SB	4
1922073	191022	1307	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	97	1	4	1	EB	EB	4
1924241	191120	1506	SCOTTSDALE	RD	SCHOOL	AV	N	30	1	1	0	0	2	1	1	3	SB	SB	4
1924726	191127	1400	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	99	99	1	1	NB	NB	6
1924798	191129	1117	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	20	1	4	1	SB	EB	2
1924944	191201	1141	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	2	1	8	3	WB	WB	4
1925119	191203	2003	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	2	1	5	1	NB	EB	6
1925186	191204	1821	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	20	1	4	1	NB	WB	2
1926302	191219	1154	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	7	1	5	4	SB	NB	6
1926951	191229	1822	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	99	0	20	1	4	1	NB	SB	3
1927010	191230	1636	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2	0	0	97	1	1	1	EB	EB	4
1927043	191231	0923	SCOTTSDALE	RD	SCHOOL	RD	AT		2	2	0	0	6	1	1	1	SB	WB	2
1912766	191615	0919	SCOTTSDALE	RD	SCHOOL	RD	AT		1	1	0	0	20	1	6	1	SB	EB	3

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1700092	170102	0913	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	6	1	WB	EB	3	
1704068	170218	0853	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	4	0	2	1	1	1	WB	WB	4	DUI
1706710	170322	1354	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	12	1	8	1	EB	EB	6	
1708432	170412	1725	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	6	1	WB	EB	3	
1708702	170416	1017	DRINKWATER	BL	INDIAN SCHOOL	AV	N	25	99	99		99	0	97	1	10	14	SB	NB	4	HIT AND RUN
1708703	170416	1042	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	20	1	4	1	SB	EB	3	
1715821	170716	1638	DRINKWATER	BL	INDIAN SCHOOL	AV	AT		1	1	1	0	99	99	99	99	99	WB	EB	99	
1716992	170801	1724	DRINKWATER	BL	INDIAN SCHOOL	RD	E	50	1	1	1	0	0	2	1	1	1	WB	WB	4	MULTI VEH 3
1723896	171028	1224	DRINKWATER	BL	INDIAN SCHOOL	RD	S	57	1	1	1	0	0	12	1	8	3	NB	NB	6	
1723980	171029	1333	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	WB	WB	4	
1724709	171106	1553	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		2	1	2	0	0	2	1	1	3	EB	EB	4	
1726765	171203	1901	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		4	4	2	4	0	2	1	1	3	SB	WB	2	DUI
1800110	180102	1250	DRINKWATER	BL	INDIAN SCHOOL	RD	W	15	1	1	1	0	0	2	1	1	1	EB	EB	4	
1802311	180131	1026	DRINKWATER	BL	INDIAN SCHOOL	RD	N	10	1	1	1	0	0	2	1	1	3	SB	SB	4	
1804151	180222	1528	DRINKWATER	BL	INDIAN SCHOOL	RD	N	100	1	1	1	0	0	2	1	1	5	NB	EB	4	
1804690	180301	1621	DRINKWATER	BL	INDIAN SCHOOL	AV	N	100	1	1	1	0	0	99	99	1	13	SB	NB	99	
1807797	180407	1102	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		2	2	1	0	0	6	1	1	4	SB	NB	5	
1816389	180726	0830	DRINKWATER	BL	INDIAN SCHOOL	AV	AT		99	99	1	99	0	2	1	8	3	NB	NB	4	HIT AND RUN
1825693	181128	1707	DRINKWATER	BL	INDIAN SCHOOL	AV	AT		3	3	1	0	0	97	7	17	4	EB	SB	2	CAR/BICYCLE
1826963	181214	1615	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		3	3	1	0	0	2	1	1	1	WB	SB	2	
1903259	190211	0114	DRINKWATER	BL	INDIAN SCHOOL	RD	W	100	1	1		0		99		1		EB		1	
1903586	190215	1605	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1911233	190525	1735	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1913801	190629	0131	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	NB	NB	4	MULTI VEH 3
1914589	190710	1706	DRINKWATER	BL	INDIAN SCHOOL	AV	E	25	1	1		0	0	2	1	1	14	WB	WB	4	
1919277	190913	2117	DRINKWATER	BL	INDIAN SCHOOL	RD	W	43	1	1	1	0	0	4	1	1	3	EB	EB	4	
1920339	190928	0231	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	97	1	4	1	WB	EB	5	
1922327	191025	2335	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	0	0	2	1	1	3	EB	EB	4	
1922866	191101	1848	DRINKWATER	BL	INDIAN SCHOOL	RD	AT		1	1	1	99	99	99	99	1	1	WB	NB	2	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1705290	170306	1113	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	101	1	1	1	0	0	2	1	1	3	EB	EB	4	
1706323	170317	1722	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	300	2	2		4		2		1		WB		1	DUI
1715357	170711	0911	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	125	99	99	99	0	0	2	1	1	3	EB	EB	4	MULTI VEH 3
1727166	171208	1302	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	112	1	1	1	0	0	2	1	1	3	WB	WB	4	
1805408	180309	1915	MARSHALL	WY	INDIAN SCHOOL	RD	E	150	1	1	1	0	0	7	1	4	1	SB	WB	2	
1808037	180410	1731	GOLDWATER	BL	INDIAN SCHOOL	RD	E	200	3	1	3	0	0	4	1	1	3	WB	WB	4	
1819643	180905	1731	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	416	1	1	1	0	0	12	1	8	1	WB	WB	6	
1827382	181219	1855	GOLDWATER	BL	INDIAN SCHOOL	RD	E	500	99	99	1	99	0	7	1	5	1	EB	EB	6	HIT AND RUN
1915932	190730	0754	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	293	1	1		0	0	4	1	1	1	EB	EB	4	
1918528	190903	0950	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	129	1	1		99	0	12	1	8	1	EB	EB	4	
1921029	191008	0928	SCOTTSDALE	RD	INDIAN SCHOOL	RD	W	200	1	1		0	0	2	1	1	3	EB	EB	4	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1704542	170224	1720	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	224	2	2	1	0	0	97	1	2	3	WB	WB	4	
1718521	170821	1329	DRINKWATER	BL	INDIAN SCHOOL	RD	W	101	2	1	2	0	0	12	1	8	1	WB	WB	6	MULTI VEH 3
1723137	171019	1440	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	176	1	1	1	0	0	2	1	1	3	EB	EB	4	
1807564	180404	1653	BUCKBOARD	TR	INDIAN SCHOOL	RD	E	150	1	1	1	0	0	12	1	8	1	EB	EB	6	
1825777	181129	1551	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	150	1	1	1	0	0	2	1	2	3	WB	WB	4	
1901615	190122	1201	BUCKBOARD	TR	INDIAN SCHOOL	RD	E	500	3	3		0	0	20	1	5	17	SB	EB	2	
1906708	190328	1122	DRINKWATER	BL	INDIAN SCHOOL	RD	W	108	1	1		0	0	2	1	1	1	WB	WB	4	
1908814	190423	1540	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	113	3	3		0	0	2	1	4	3	EB	EB	4	
1918635	190904	1626	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	120	1	1		99	0	12	1	8	1	EB	EB	6	
1921285	191011	1722	BROWN	AV	INDIAN SCHOOL	RD	W	111	1	1		0	0	12	1	8	1	EB	EB	6	
1922317	191025	2054	BROWN	AV	INDIAN SCHOOL	RD	E	66	3	3		0	0	97	1	1	1	EB	EB	6	
1923314	191107	1640	SCOTTSDALE	RD	INDIAN SCHOOL	RD	E	120	1	1		0	0	12	1	8	1	WB	WB	6	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1823830	181102	0222	GOLDWATER	BL	INDIAN SCHOOL	RD	N	187	3	3		4		2		1		NB		1	DUI
1900522	190108	1806	GOLDWATER	BL	INDIAN SCHOOL	RD	N	140	99	99		0	0	1	1	2	3	SB	SB	4	

Report	Date	Time	N-S Street	Type	E-W Street	Type	Dir From	Dist From	Inj			Phys Cond		Violation		Action		Direction		Manner of Collision	Comments
									Max	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2		
1800635	180109	1810	SCOTTSDALE	RD	SCHOOL	RD	N	110	1	1	1	0	0	2	1	2	3	SB	SB	4	
1902301	190130	2245	SCOTTSDALE	RD	SCHOOL	RD	N	185	1	1		0		97	0	4		WB		1	
1904098	190221	1925	SCOTTSDALE	RD	3	AV	S	235	1	1		0	0	12	1	8	1	SB	SB	6	
1904262	190223	2100	SCOTTSDALE	RD	SCHOOL	RD	N	194	2	2		4	0	97	1	1	3	SB	SB	4	
1908560	190420	1425	SCOTTSDALE	RD	SCHOOL	RD	N	200	1	1		0	0	2	1	1	3	NB	NB	4	
1910126	190510	2016	SCOTTSDALE	RD	SCHOOL	RD	N	200	1	1		99	0	99	20	1	8	SB	SB	6	
1912219	190607	1912	SCOTTSDALE	RD	SCHOOL	RD	N	450	1	1		99	0	2	1	1	3	SB	SB	4	
1916356	190804	2126	SCOTTSDALE	RD	3	AV	S	309	3	3		0	0	12	1	8	1	SB	SB	6	

Appendix C – Parcel Information

C

173-50-117B Commercial Parcel

This is a commercial parcel located at 7110 E INDIAN SCHOOL RD SCOTTSDALE 85251. and the current owner is SCOTTSDALE INN LLC. Its current year full cash value is $4,529,200.

Property Information

7110 E INDIAN SCHOOL RD SCOTTSDALE 85251

MCR #	
Description:	PT W2 E2 SE4 SE4 DAF BEG SW COR E2 SE4 SE4 TH N ALG W LN E2 SE4 SE4 363F M/L TO NLY SW COR TR A CRAFTSMAN COURT MCR 62/23 TH E ALG A S LN OF TR A 163.86F M/L TO COR TR A TH S ALG A W LN OF TR A 98.40F TO SLY SW COR TR A TH S 80D 58M W 1.67F TH S 114.31F TH E 1.18F TH S 150.02F TO PT ON S LN SEC WH IS 491.59F W OF SE COR SEC TH W ALG SD S LN 163.87F TO POB EX S 40F RD & EX RD P/F 05-1042629 DAF COM SW COR SD E2 SE4 SE4 TH N 40.01F POB TH CONT N 2.18F TH N 87D 27M E 164.02F TH S 6.97F TH W 163.87F TPOB
Lat/Long	33.49501956 | -111.92819384
Lot Size	52,009 sq ft.
Zoning	C-2
Lot #	
High School District	SCOTTSDALE UNIFIED #48
Elementary School District	SCOTTSDALE UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	22 2N 4E
Market Area/Neighborhood	19/006
Subdivision (0 Parcels)	

Owner Information

SCOTTSDALE INN LLC

Mailing Address	PO BOX 4372, SCOTTSDALE, AZ 85261
Deed Number	110749644
Last Deed Date	09/09/2011
Sale Date	n/a
Sale Price	n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.
The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. **CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL**

Tax Year	2021	2020	2019	2018	2017
Full Cash Value	$4,529,200	$4,332,200	$4,180,100	$4,005,500	$3,823,900
Limited Property Value	$2,392,071	$2,278,163	$2,169,679	$2,066,361	$1,967,963
Legal Class	1.12	1.12	1.12	1.12	1.12
Description	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P
Assessment Ratio	18%	18%	18%	18%	18%
Assessed LPV	$430,573	$410,069	$390,542	$371,945	$354,233
Property Use Code	0510	0510	0510	0510	0510
PU Description	Motel	Motel	Motel	Motel	Motel
Tax Area Code	481400	481400	481400	481400	481400
Valuation Source	Notice	Notice	Notice	Notice	Notice

Additional Property Information

Additional commercial property data.

Description	Imp #	Occupancy	Rank	CCI	Age	Sq Ft.
Motel	000101	343	2	C	37	7,970
Motel	000201	343	2	C	37	11,730
Motel	000301	343	2	C	37	3,270
Site Improvements	000401	163	2	D	37	1

173-50-034 Commercial Parcel

This is a commercial parcel located at 7117 E 3RD AVE SCOTTSDALE 85251. and the current owner is VALLEY OF THE SUN ENTERTAINMENT LLC. It is located in the Craftsmans Court subdivision and MCR 6223. Its current year full cash value is $6,856,000.

Property Information

7117 E 3RD AVE SCOTTSDALE 85251

MCR #	6223
Description:	CRAFTSMANS COURT
Lat/Long	33.49628517 | -111.92772728
Lot Size	47,889 sq ft.
Zoning	C-2
Lot #	
High School District	SCOTTSDALE UNIFIED #48
Elementary School District	SCOTTSDALE UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	22 2N 4E
Market Area/Neighborhood	19/006
Subdivision (31 Parcels)	CRAFTSMANS COURT

Owner Information

VALLEY OF THE SUN ENTERTAINMENT LLC

Mailing Address	1345 S LEWIS ST, ANAHEIM, CA 92805
Deed Number	031007072
Last Deed Date	07/29/2003
Sale Date	n/a
Sale Price	n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.
The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. **CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL**

Tax Year	2021	2020	2019	2018	2017
Full Cash Value	$6,856,000	$6,643,200	$6,445,100	$6,228,100	$5,584,700
Limited Property Value	$5,291,954	$5,039,956	$4,799,958	$4,571,389	$4,353,704
Legal Class	1.12	1.12	1.12	1.12	1.12
Description	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P
Assessment Ratio	18%	18%	18%	18%	18%
Assessed LPV	$952,552	$907,192	$863,992	$822,850	$783,667
Property Use Code	1132	1132	1132	1132	1132
PU Description	Retail	Retail	Retail	Retail	Retail
Tax Area Code	481400	481400	481400	481400	481400
Valuation Source	Notice	Notice	Notice	Notice	Notice

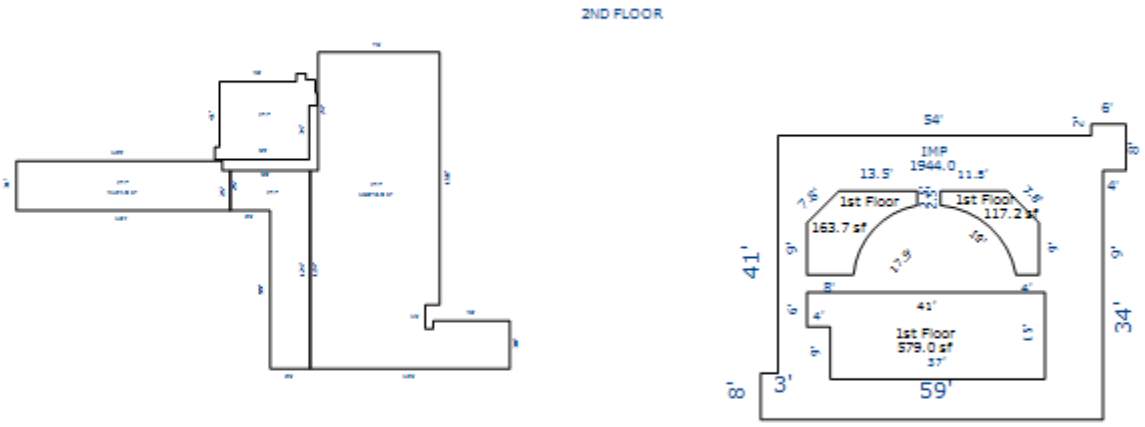
Additional Property Information

Additional commercial property data.

Description	Imp #	Occupancy	Rank	CCI	Age	Sq Ft.
Cocktail Lounge	000101	441	3	C	20	16,873
Cocktail Lounge	000102	441	3	C	20	7,450
Neighborhood Shopping Ctr	000103	412	2	C	20	4,124
Cocktail Lounge	000104	441	3	C	5	4,816
Site Improvements	000201	163	2	D	20	1

Building Sketches

Sketches that illustrate the external dimensions of a property.



173-50-108A Commercial Parcel

This is a commercial parcel located at 7120 E INDIAN SCHOOL RD SCOTTSDALE 85251. and the current owner is KIMSEY PROPERTIES LLLP. Its current year full cash value is $3,033,000.

Property Information

7120 E INDIAN SCHOOL RD SCOTTSDALE 85251

MCR #	
Description:	PT W2 E2 SE4 SE4 DAF COM SE COR SEC TH W 491.71F TO SE COR W2 W2 E2 SE4 SE4 & POB TH N ALG E LN W2 W2 E2 SE4 SE4 150.02F TH W 1.18F TH N 114.31F TH N 80D 58M E 1.67F TO SLY SW COR TR A OF CRAFTSMAN CO URT MCR 62/23 TH E ALG S LN TR A 163.85F TO E LN W2 E2 SE4 SE4 TH S ALG SD E LN 264.60F TO S LN SEC TH W ALG SD S LN TO POB EX S 40F RD & EX RD P/F 98-627812
Lat/Long	33.49505058 | -111.92744284
Lot Size	36,112 sq ft.
Zoning	C-2
Lot #	
High School District	SCOTTSDALE UNIFIED #48
Elementary School District	SCOTTSDALE UNIFIED SCHOOL DISTRICT
Local Jurisdiction	SCOTTSDALE
S/T/R	22 2N 4E
Market Area/Neighborhood	19/006
Subdivision (0 Parcels)	

Owner Information

KIMSEY PROPERTIES LLLP

Mailing Address	P O BOX 7682, CAVE CREEK, AZ 85327
In Care Of	THOMAS M KIMSEY
Deed Number	180852669
Last Deed Date	11/16/2018
Sale Date	n/a
Sale Price	n/a

Valuation Information

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.
The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. **CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL**

Tax Year	2021	2020	2019	2018	2017
Full Cash Value	$3,033,000	$2,844,600	$2,730,100	$2,600,000	$2,622,200
Limited Property Value	$1,694,066	$1,613,396	$1,536,568	$1,463,398	$1,393,712
Legal Class	1.12	1.12	1.12	1.12	1.12
Description	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P	COMMERCIAL / OTHER R/P
Assessment Ratio	18%	18%	18%	18%	18%
Assessed LPV	$304,932	$290,411	$276,582	$263,412	$250,868
Property Use Code	1122	1122	1122	1122	1122
PU Description	Retail	Retail	Retail	Retail	Retail
Tax Area Code	481400	481400	481400	481400	481400
Valuation Source	Notice	Notice	Notice	Notice	Notice

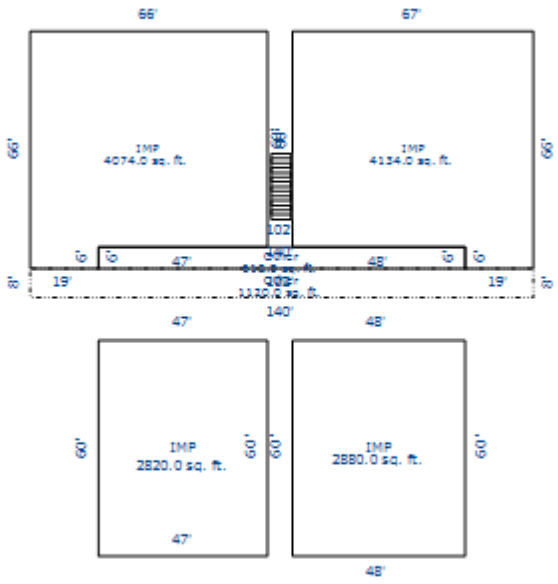
Additional Property Information

Additional commercial property data.

Description	Imp #	Occupancy	Rank	CCI	Age	Sq Ft.
Retail Store	000101	353	2	C	35	6,894
Retail Store	000201	353	2	C	35	7,014
Site Improvements	000301	163	2	D	35	1

Building Sketches

Sketches that illustrate the external dimensions of a property.



10-ZN-2020
10/22/20

Appendix D – Traffic Count Data

D

10-ZN-2020
10/22/20

Southbridge Expansion

Traffic Impact Study

North of 5th Avenue and
West of Scottsdale Road
in Scottsdale, Arizona

May 2019
Project No. 18-1110

Prepared For:
Spring Creek Development
7134 East Stetson Drive, Fourth Floor
Scottsdale, AZ 85251

For Submittal to:
City of Scottsdale

Prepared By:

CivTech

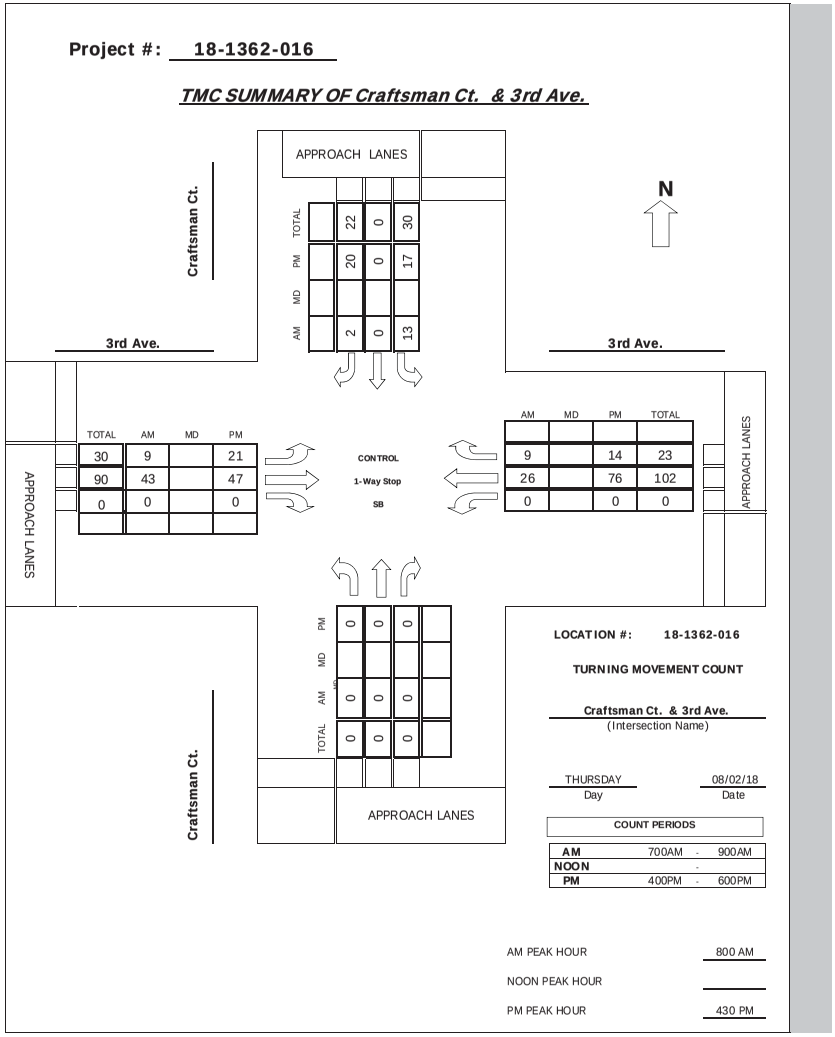
10605 North Hayden Road
Suite 140
Scottsdale, Arizona 85260
480-659-4250

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-016

TMC SUMMARY OF Craftsman Ct. & 3rd Ave.



LOCATION #: 18-1362-016

TURNING MOVEMENT COUNT

Craftsman Ct. & 3rd Ave.
(Intersection Name)

THURSDAY (Day) 08/02/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 800 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Craftsman Ct.
E-W STREET: 3rd Ave.
Date: 08/02/18
Day: THURSDAY
City: Scottsdale
Project #: 18-1362-01

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	1	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	1	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**1**	**0**	**1**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	1	0	0	0
5:45 PM	0	0	0	0
TOTAL	**1**	**0**	**0**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	**1**	**0**	**0**	**0**

North Leg
West Leg
East Leg
South Leg

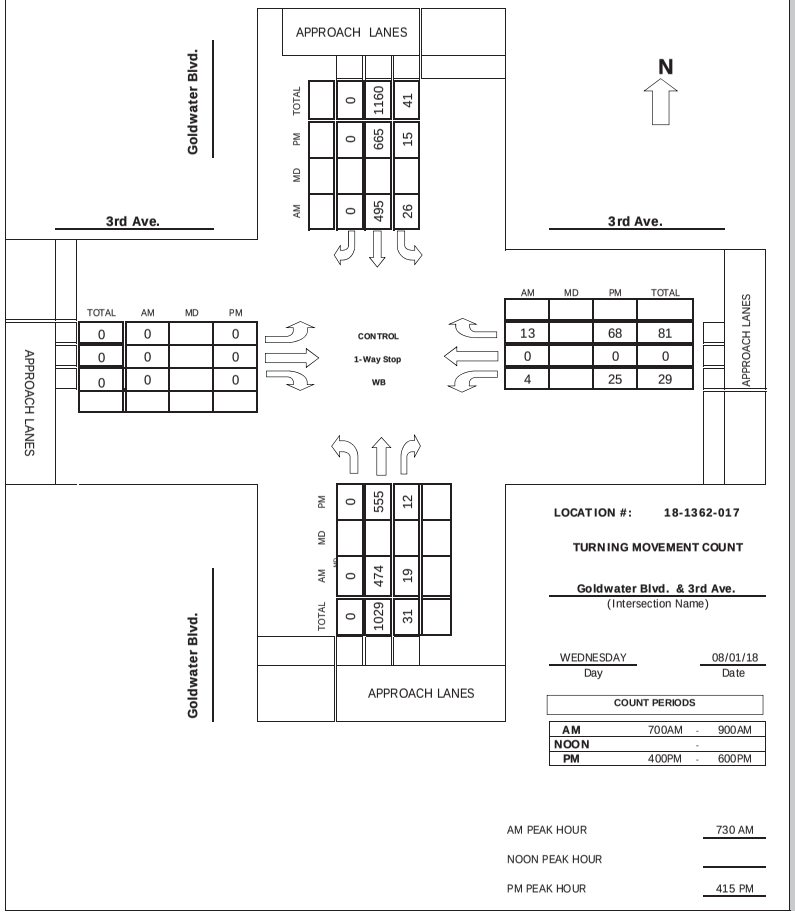
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-017

TMC SUMMARY OF Goldwater Blvd. & 3rd Ave.



LOCATION #: 18-1362-017

TURNING MOVEMENT COUNT

Goldwater Blvd. & 3rd Ave.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Goldwater Blvd.
E-W STREET: 3rd Ave.
Date: 08/01/18
Day: WEDNESDAY
City: Scottsdale
Project #: 18-1362-01

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**

North Leg
West Leg
East Leg
South Leg

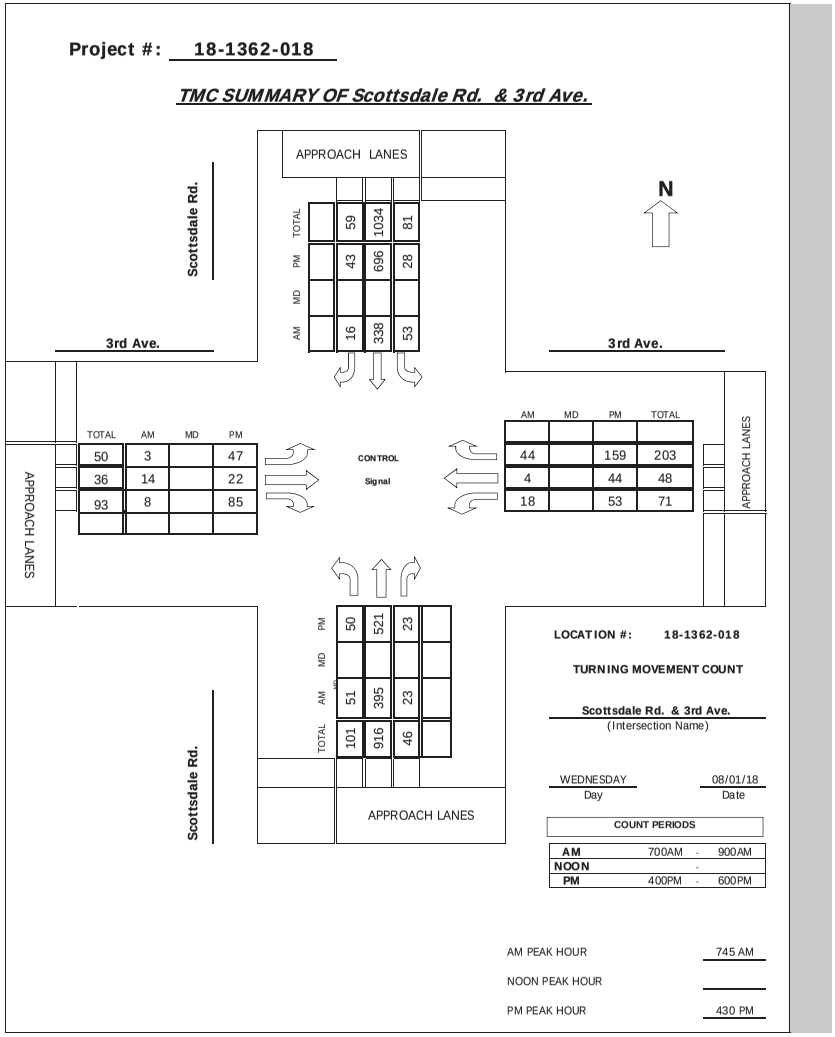
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-018

TMC SUMMARY OF Scottsdale Rd. & 3rd Ave.



LOCATION #: 18-1362-018

TURNING MOVEMENT COUNT

Scottsdale Rd. & 3rd Ave.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

FIELD DATA SERVICES OF ARIZONA, INC. 520.316.6745 veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Scottsdale Rd. **Date:** 08/01/18 **City:** Scottsdale
E-W STREET: 3rd Ave. **Day:** WEDNESDAY **Project #:** 18-1362-018

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	1	0	1	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	1	1	2	1	0	2	1	0
7:45 AM	1	2	1	2	1	1	0	0
8:00 AM	0	1	2	0	0	0	0	1
8:15 AM	1	0	1	1	0	0	1	0
8:30 AM	2	1	0	3	0	0	0	2
8:45 AM	1	3	1	0	0	0	0	0
TOTAL	**7**	**9**	**8**	**8**	**1**	**3**	**2**	**3**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	3	1	2	0	0	1	0
4:15 PM	0	2	1	1	1	0	0	1
4:30 PM	1	0	2	0	0	1	1	0
4:45 PM	2	1	3	1	1	0	0	0
5:00 PM	5	3	6	3	0	1	0	1
5:15 PM	2	2	2	2	0	0	1	0
5:30 PM	3	1	5	2	0	2	0	2
5:45 PM	2	1	1	1	0	0	0	0
TOTAL	**16**	**13**	**21**	**12**	**2**	**4**	**3**	**4**

North Leg
West Leg
East Leg
South Leg

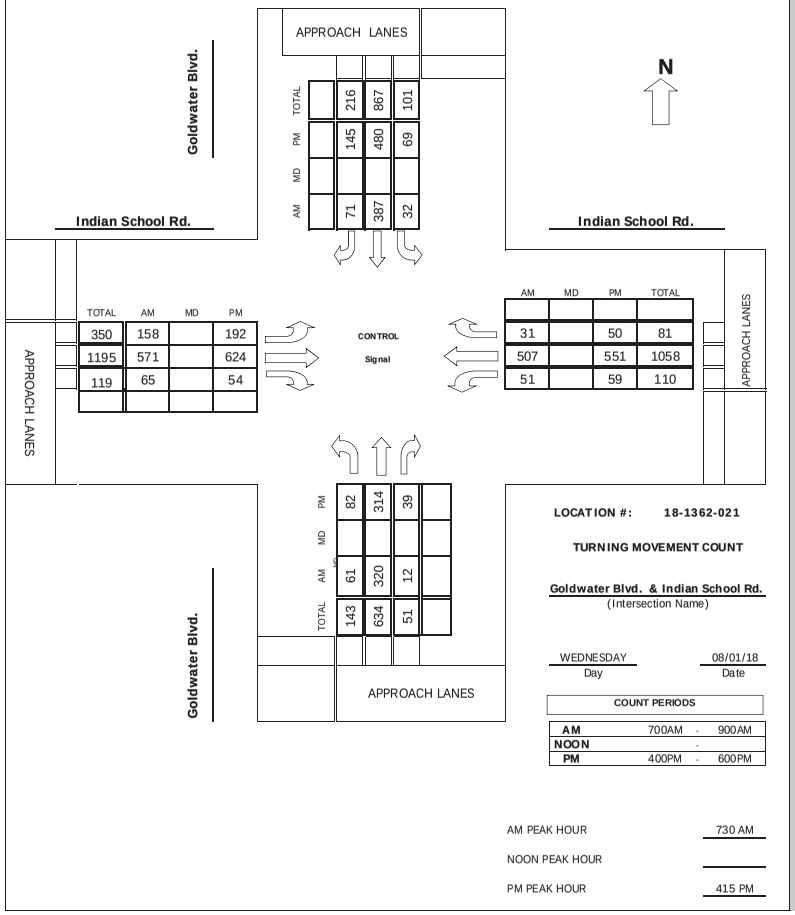
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-021

TMC SUMMARY OF Goldwater Blvd. & Indian School Rd.



LOCATION #: 18-1362-021

TURNING MOVEMENT COUNT

Goldwater Blvd. & Indian School Rd.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 415 PM

FIELD DATA SERVICES OF ARIZONA, INC. 520.316.6745 veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Goldwater Blvd. **Date:** 08/01/18 **City:** Scottsdale
E-W STREET: Indian School Rd. **Day:** WEDNESDAY **Project #:** 18-1362-021

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	1
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTAL	**2**	**2**	**0**	**1**	**0**	**0**	**0**	**2**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTAL	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**1**

North Leg
West Leg
East Leg
South Leg

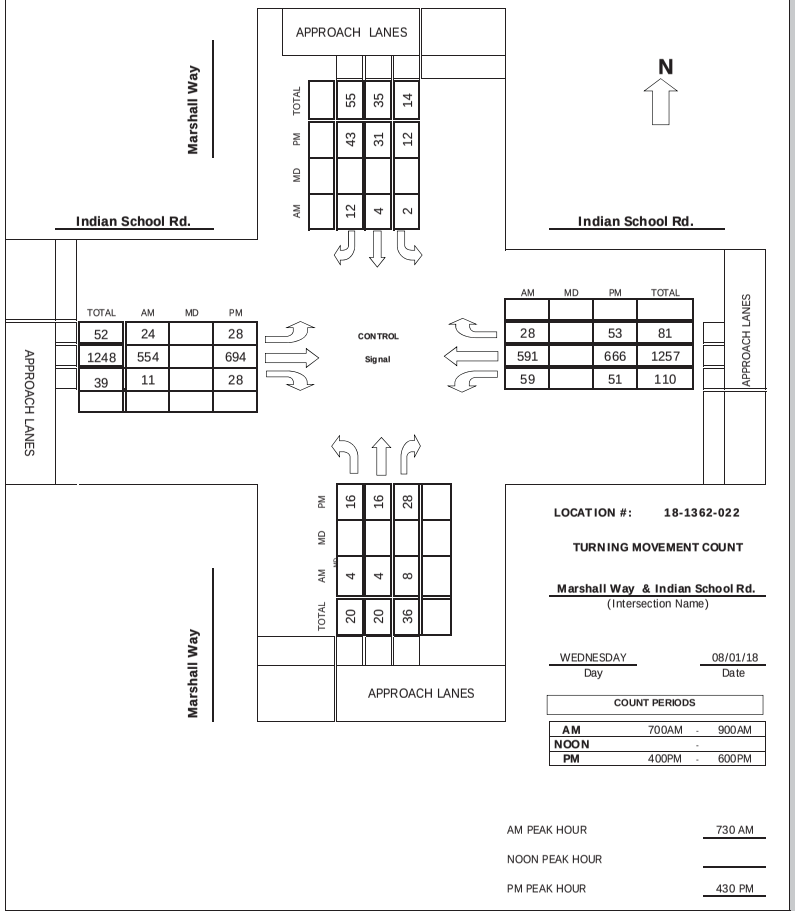
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-022

TMC SUMMARY OF Marshall Way & Indian School Rd.



LOCATION #: 18-1362-022

TURNING MOVEMENT COUNT

Marshall Way & Indian School Rd.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

FIELD DATA SERVICES OF ARIZONA, INC. 520.316.6745 veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Marshall Way **Date:** 08/01/18 **City:** Scottsdale
E-W STREET: Indian School Rd. **Day:** WEDNESDAY **Project #:** 18-1362-022

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	1	0	0	0	0	0
7:15 AM	0	1	0	2	0	0	0	0
7:30 AM	1	0	1	0	0	0	0	0
7:45 AM	1	1	2	1	0	0	0	0
8:00 AM	1	2	0	0	0	0	0	0
8:15 AM	0	1	1	1	0	0	0	0
8:30 AM	0	0	3	0	0	0	0	0
8:45 AM	1	1	2	0	0	0	0	1
TOTAL	**4**	**6**	**10**	**4**	**0**	**0**	**0**	**1**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	1	0	1	0	0	1	0	0
4:15 PM	0	1	0	2	0	0	1	0
4:30 PM	1	1	1	1	0	0	1	0
4:45 PM	2	0	2	0	1	0	0	1
5:00 PM	0	2	1	2	0	0	0	0
5:15 PM	1	1	0	1	0	0	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	1	1	1	0	0	0	0
TOTAL	**6**	**6**	**7**	**7**	**1**	**1**	**2**	**1**

North Leg
West Leg
East Leg
South Leg

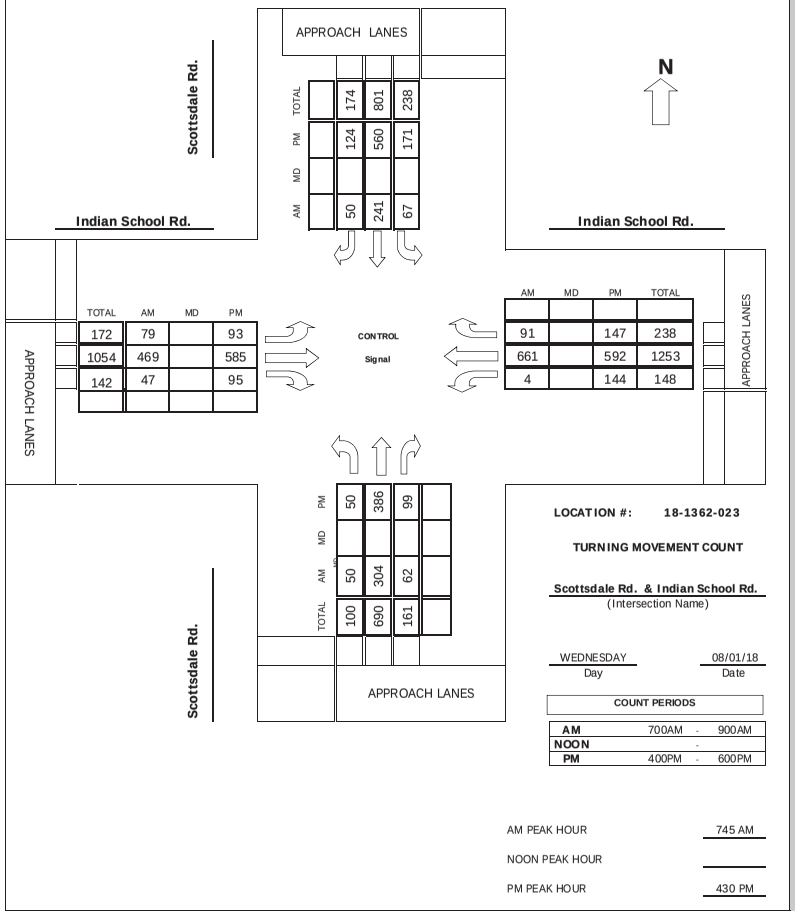
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-023

TMC SUMMARY OF Scottsdale Rd. & Indian School Rd.



LOCATION #: 18-1362-023

TURNING MOVEMENT COUNT

Scottsdale Rd. & Indian School Rd.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 745 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

FIELD DATA SERVICES OF ARIZONA, INC. 520.316.6745 veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Scottsdale Rd. **Date:** 08/01/18 **City:** Scottsdale
E-W STREET: Indian School Rd. **Day:** WEDNESDAY **Project #:** 18-1362-023

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	5	1	1	4	0	0	1	0
7:15 AM	2	0	1	1	1	0	0	0
7:30 AM	3	1	2	8	0	0	0	2
7:45 AM	6	3	1	5	0	0	1	1
8:00 AM	9	2	4	2	1	0	0	0
8:15 AM	2	1	2	1	0	1	1	1
8:30 AM	5	1	5	4	0	1	0	1
8:45 AM	2	4	2	9	0	0	0	0
TOTAL	**34**	**13**	**18**	**34**	**2**	**2**	**3**	**5**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	3	0	0	0	0	1	3
4:15 PM	2	2	1	1	0	0	0	0
4:30 PM	1	1	0	0	0	0	0	0
4:45 PM	0	4	1	1	1	1	0	2
5:00 PM	1	1	2	3	0	0	0	1
5:15 PM	2	2	1	2	0	0	0	0
5:30 PM	5	3	0	0	1	0	0	0
5:45 PM	1	5	1	1	0	0	0	0
TOTAL	**12**	**21**	**6**	**8**	**2**	**1**	**1**	**6**

North Leg
West Leg
East Leg
South Leg

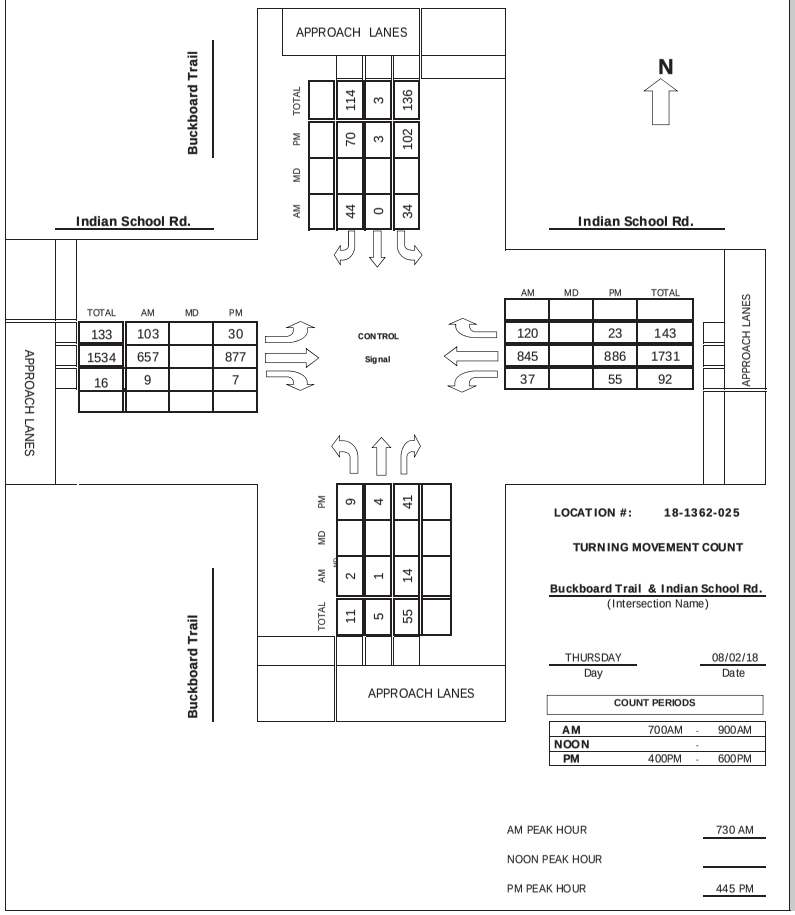
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-025

TMC SUMMARY OF Buckboard Trail & Indian School Rd.



LOCATION #: 18-1362-025

TURNING MOVEMENT COUNT

Buckboard Trail & Indian School Rd.
(Intersection Name)

THURSDAY (Day) 08/02/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745
veracitytrafficgroup

Pedestrian & Bicycle Study

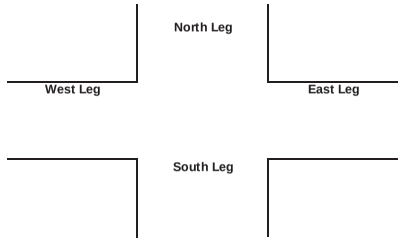
N-S STREET: Buckboard Trail **Date:** 08/02/18 **City:** Scottsdale
E-W STREET: Indian School Rd. **Day:** THURSDAY **Project #:** 18-1362-02

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	1	1	0	0
7:15 AM	0	0	0	0
7:30 AM	2	1	0	0
7:45 AM	1	0	0	0
8:00 AM	0	1	0	0
8:15 AM	1	1	0	0
8:30 AM	1	2	0	0
8:45 AM	2	2	0	0
TOTAL	**8**	**8**	**0**	**0**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	1	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	1	0	0
TOTAL	**1**	**1**	**0**	**0**

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	5	4	4	0
4:15 PM	2	0	3	0
4:30 PM	2	1	0	1
4:45 PM	1	3	2	0
5:00 PM	2	2	2	0
5:15 PM	3	3	3	0
5:30 PM	1	1	6	0
5:45 PM	1	1	1	0
TOTAL	**17**	**15**	**21**	**1**

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	1	0
4:45 PM	0	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	1	0	0	0
5:45 PM	0	0	0	0
TOTAL	**1**	**0**	**1**	**0**



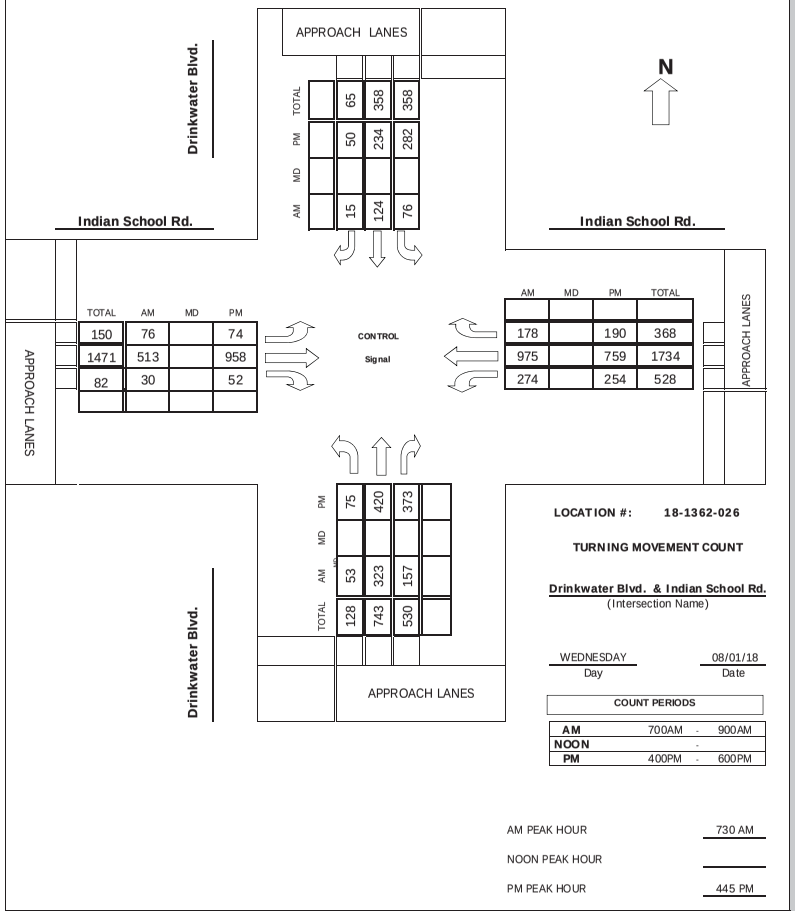
10-ZN-2020
10/22/20

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 18-1362-026

TMC SUMMARY OF Drinkwater Blvd. & Indian School Rd.



LOCATION #: 18-1362-026

TURNING MOVEMENT COUNT

Drinkwater Blvd. & Indian School Rd.
(Intersection Name)

WEDNESDAY (Day) 08/01/18 (Date)

COUNT PERIODS			
AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 445 PM

FIELD DATA SERVICES OF ARIZONA, INC. 520.316.6745 veracitytrafficgroup

Pedestrian & Bicycle Study

N-S STREET: Drinkwater Blvd. **Date:** 08/01/18 **City:** Scottsdale
E-W STREET: Indian School Rd. **Day:** WEDNESDAY **Project #:** 18-1362-026

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
7:00 AM	0	1	1	0	0	0	0	0
7:15 AM	0	0	3	1	0	0	0	1
7:30 AM	1	1	1	2	0	0	0	0
7:45 AM	0	2	0	0	0	0	2	0
8:00 AM	1	0	2	1	0	0	1	0
8:15 AM	2	1	1	3	0	0	1	0
8:30 AM	1	3	0	2	0	0	0	0
8:45 AM	0	0	1	1	1	0	0	0
TOTAL	**5**	**8**	**9**	**10**	**1**	**0**	**4**	**1**

	PEDESTRIANS				BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG	N-LEG	S-LEG	E-LEG	W-LEG
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	1	0	0	0	1
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	1	1	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	1	2	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTAL	**2**	**3**	**5**	**4**	**0**	**0**	**0**	**1**

North Leg
West Leg
East Leg
South Leg

10-ZN-2020
10/22/20

Appendix E – Signal Timing

E

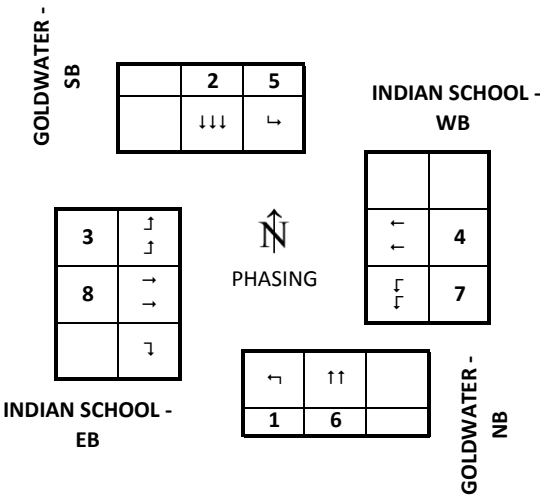
INDIAN SCHOOL & GOLDWATER

System # 44

BASIC TIMING PLAN

Section #	I.P. Address	Date Designed
	MM1-5-1	
	172.27.10.44	12/12/2016

	Phase	1	2	3	4	5	6	7	8
TIMING PLAN - MM-2-1	Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
	NOTES	PROT		PROT		PROT		PROT	
	MIN GRN	5	7	5	10	5	7	5	10
	BK MGRN								
	CS MGRN								
	DLY GRN								
	WALK		4		4		4		4
	WALK2								
	WLK MAX								
	PED CLR/FDW		24		22		28		22
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT	2	1	2	1	2	1	2	1
	VH EXT2								
	MAX 1	20	50	20	50	20	50	15	50
	MAX 2	30	60	30	60	30	60	25	60
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW	3.6	4.4	3.3	4	3.6	4.4	3.3	4
	RED CLR	2	1.3	2	1.5	2	1.1	1.9	1.4
	RED MAX								
	RED RVT	2	2	2	2	2	2	2	2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL		X		X		X		X
	PED RECALL								
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES				
TOD: MORNING				
R1	2	1	4	3
R2	6	5	7	8
		B		B
Use Timing plan:				
TOD: MIDDAY				
R1	2	1	4	3
R2	6	5	7	8
		B		B
Use Timing plan:				
TOD: EVENING				
R1	2	1	4	3
R2	6	5	7	8
		B		B
Use Timing plan:				
TOD: NIGHT				
R1	2	1	4	3
R2	6	5	8	7
		B		B
Use Timing plan:				
FREE				
R1	2	1	4	3
R2	6	5	8	7
		B		B
Use Timing plan: 254				

NOTES

Advance detection for phases 2,4,6 & 8.

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

INDIAN SCHOOL & GOLDWATER									System #	44
COORDINATOR									Section #	Date Updated
									0	12/12/2016

	PHASE	1	2	3	4	5	6	7	8	
	FDW		24		22		28		22	
	YELLOW	3.6	4.4	3.3	4	3.6	4.4	3.3	4	
	ALL RED	2	1.3	2	1.5	2	1.1	1.9	1.4	
	WALK		24		22		28		22	
PLAN 1 AM PLAN OPERATIVE TIMES 6:30	R1	1	↰	2	↓	3	↱	4	←	COORD PATTERN / OFFSET
	R2	5	↳	6	↑	8	→	7	↱	Balanced / 12
		RING 1				RING 2				
	PHASE	1	2	3	4	5	6	7	8	
	SPLIT	15	37	22	46	12	40	14	54	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN	9.4	31.3	16.7	40.5	6.4	34.5	8.8	48.6	120
PLAN 4 MIDDAY PLAN OPERATIVE TIMES 9:00	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN / OFFSET
	R2	6	↑	5	↳	7	↱	8	→	Balanced / 50
		RING 1				RING 2				
	PHASE	1	2	3	4	5	6	7	8	
	SPLIT	14	42	20	44	16	40	12	52	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN	8.4	###	###	###	###	###	6.8	###	120
PLAN 7 PM PLAN OPERATIVE TIMES 15:00	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN / OFFSET
	R2	6	↑	5	↳	7	↱	8	→	Balanced / 5
		RING 1				RING 2				
	PHASE	1	2	3	4	5	6	7	8	
	SPLIT	12	42	18	48	12	42	12	54	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN	6.4	###	###	###	6.4	###	6.8	###	120
PLAN 10 MIDNIGHT PLAN OPERATIVE TIMES	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN / OFFSET
	R2	6	↑	5	↳	8	→	7	↱	Balanced / 81
		RING 1				RING 2				
	PHASE	1	2	3	4	5	6	7	8	
	SPLIT	13	39	23	15	13	39	15	23	Target Cycle Length

10-ZN-2020
10/22/20

TIMES 20:00	COORD				X				X	90	
	RECALLS				V				V	Actual Cycle Length	
	GREEN	7.4	###	###	9.5	7.4	###	9.8	###	90	
PLAN 254 **FREE** PLAN OPERATIVE TIMES	R1	2	↓	1	↰	4	←	3	↥	COORD PATTERN	OFFSET
	R2	6	↑	5	↳	8	→	7	↧	Balanced	
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.6	-5.7	-5.3	-5.5	-5.6	-5.5	-5.2	-5.4	0	
PLAN 0 **AUTO** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.6	-5.7	-5.3	-5.5	-5.6	-5.5	-5.2	-5.4	0	
PLAN 5 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.6	-5.7	-5.3	-5.5	-5.6	-5.5	-5.2	-5.4	0	
PLAN 6 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.6	-5.7	-5.3	-5.5	-5.6	-5.5	-5.2	-5.4	0	

EMERGENCY PLANS

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH THRU	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↱		
										NB - 1 7	
		RING 1				RING 2				SB - 1 8	
	PHASE	1	2	3	4					N/S - 1 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-6	-6	-5	-6	-6	-6	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH LEFT	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↱		
										NB - 2 7	
		RING 1				RING 2				SB - 2 8	
	PHASE	1	2	3	4					N/S - 2 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-6	-6	-5	-6	-6	-6	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTHBOUND THRU & LEFT	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↱		
										NB - 3 7	
		RING 1				RING 2				SB - 3 8	
	PHASE	1	2	3	4					N/S - 3 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-6	-6	-5	-6	-6	-6	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - SOUTHBOUND THRU & LEFT	R1	2	↓	1	↰	4	←	3	↱	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↱		
										NB - 4 7	
		RING 1				RING 2				SB - 4 8	
	PHASE	1	2	3	4					N/S - 4 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-6	-6	-5	-6	-6	-6	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST THRU	R1	2	↓	1	↰	4	←	3	↥	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↥		
										EB - 5 7	
		RING 1				RING 2				WB - 5 8	
	PHASE									E/W - 5 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST LEFT	R1	2	↓	1	↰	4	←	3	↥	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↥		
										EB - 6 7	
		RING 1				RING 2				WB - 6 8	
	PHASE									E/W - 6 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EASTBOUND THRU & LEFT	R1	2	↓	1	↰	4	←	3	↥	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↥		
										EB - 7 7	
		RING 1				RING 2				WB - 7 8	
	PHASE									E/W - 7 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - WESTBOUND THRU & LEFT	R1	2	↓	1	↰	4	←	3	↥	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓	1	↰	4	←	3	↥		
										EB - 8 7	
		RING 1				RING 2				WB - 8 8	
	PHASE									E/W - 8 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

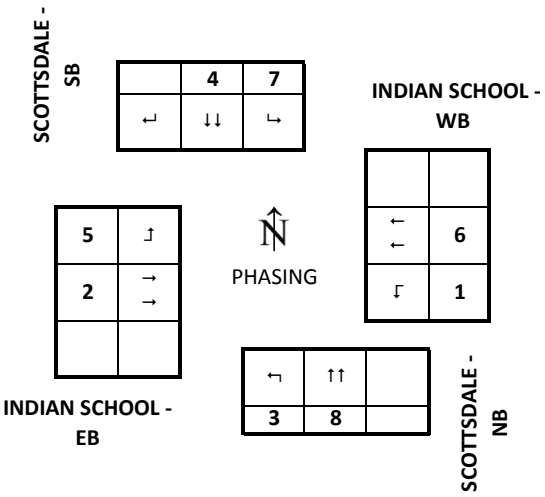
INDIAN SCHOOL & SCOTTSDALE

System # 45

BASIC TIMING PLAN

Section #	I.P. Address	Date Designed
	MM1-5-1	
	172.17.10.45	12/29/2016

	Phase	1	2	3	4	5	6	7	8
TIMING PLAN - MM-2-1	Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
	NOTES	p&P		p&P		p&P		p&P	
	MIN GRN	5	10	5	10	5	10	5	10
	BK MGRN								
	CS MGRN								
	DLY GRN								
	WALK		8		8		8		8
	WALK2								
	WLK MAX								
	PED CLR/FDW		22		20		22		20
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT	2	1	2	2	2	1	2	2
	VH EXT2								
	MAX 1	15	40	15	60	15	40	15	60
	MAX 2	35	55	45	65	35	55	45	65
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW	3	3.6	3.3	4	3	3.6	3.3	4
	RED CLR	2	1.6	1.8	1.4	2	1.6	1.8	1.4
	RED MAX								
	RED RVT	2	2	2	2	2	2	2	2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL		X		X		X		X
	PED RECALL								
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES					
TOD: MORNING					
R1	2	1	4	3	
R2	6	5	8	7	
	B	B	B	B	
Use Timing plan:					
TOD: MIDDAY					
R1	2	1	4	3	
R2	6	5	8	7	
	B	B	B	B	
Use Timing plan:					
TOD: EVENING					
R1	2	1	4	3	
R2	6	5	8	7	
	B	B	B	B	
Use Timing plan:					
TOD: WEEKEND					
R1	2	1	4	3	
R2	6	5	8	7	
	B	B	B	B	
Use Timing plan:					
FREE					
R1	2	1	4	3	
R2	6	5	8	7	
	B	B	B	B	
Use Timing plan: 254					

NOTES

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

INDIAN SCHOOL & SCOTTSDALE										System #	45
COORDINATOR										Section #	Date Updated
										0	12/29/2016
	PHASE	1	2	3	4	5	6	7	8		
	FDW		22		20		22		20		
	YELLOW	3	3.6	3.3	4	3	3.6	3.3	4		
	ALL RED	2	1.6	1.8	1.4	2	1.6	1.8	1.4		
	WALK		22		20		22		20		
PLAN 1 AM PLAN OPERATIVE TIMES	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN	OFFSET
	R2	6	←	5	↱	8	↑	7	↳	Balanced	0
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	14	38	14	54	14	38	14	54	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V		V		V		V	Actual Cycle Length	
	GREEN	9.0	32.8	8.9	48.6	9.0	32.8	8.9	48.6	120	
PLAN 4 MIDDAY PLAN OPERATIVE TIMES	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN	OFFSET
	R2	6	←	5	↱	8	↑	7	↳	Balanced	19
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	16	42	13	49	16	42	13	49	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V		V		V		V	Actual Cycle Length	
	GREEN	###	###	7.9	###	###	###	7.9	###	120	
PLAN 7 PM PLAN OPERATIVE TIMES	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN	OFFSET
	R2	6	←	5	↱	8	↑	7	↳	Balanced	
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	20	42	16	42	20	42	16	42	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V		V		V		V	Actual Cycle Length	
	GREEN	###	###	###	###	###	###	###	###	120	
PLAN 10 MIDNIGHT PLAN OPERATIVE	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN	OFFSET
	R2	6	←	5	↱	8	↑	7	↳	Balanced	0
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	12	28	12	38	12	28	12	38	Target Cycle Length	

10-ZN-2020
10/22/20

TIMES	COORD		X				X			90	
	RECALLS		V		V		V		V	Actual Cycle Length	
	GREEN	7.0	###	6.9	###	7.0	###	6.9	###	90	
PLAN 254 **FREE** PLAN OPERATIVE TIMES	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN	OFFSET
	R2	6	←	5	↱	8	↑	7	↳	Balanced	
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.0	-5.2	-5.1	-5.4	-5.0	-5.2	-5.1	-5.4	0	
PLAN 0 **AUTO** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.0	-5.2	-5.1	-5.4	-5.0	-5.2	-5.1	-5.4	0	
PLAN 5 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.0	-5.2	-5.1	-5.4	-5.0	-5.2	-5.1	-5.4	0	
PLAN 6 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5.0	-5.2	-5.1	-5.4	-5.0	-5.2	-5.1	-5.4	0	

EMERGENCY PLANS

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH THRU	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↱	4	↓	3	↰		
										NB - 1 7	
		RING 1				RING 2				SB - 1 8	
	PHASE	1	2	3	4					N/S - 1 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5	-5	-5	-5	-5	-5	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH LEFT	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↱	4	↓	3	↰		
										NB - 2 7	
		RING 1				RING 2				SB - 2 8	
	PHASE	1	2	3	4					N/S - 2 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5	-5	-5	-5	-5	-5	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTHBOUND THRU & LEFT	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↱	4	↓	3	↰		
										NB - 3 7	
		RING 1				RING 2				SB - 3 8	
	PHASE	1	2	3	4					N/S - 3 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5	-5	-5	-5	-5	-5	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - SOUTHBOUND THRU & LEFT	R1	2	→	1	↱	4	↓	3	↰	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↱	4	↓	3	↰		
										NB - 4 7	
		RING 1				RING 2				SB - 4 8	
	PHASE	1	2	3	4					N/S - 4 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	-5	-5	-5	-5	-5	-5	-5	-5	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST THRU	R1	2	→	1	↓	4	↓	3	←	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↓	4	↓	3	←		
										EB - 5 7	
		RING 1				RING 2				WB - 5 8	
	PHASE									E/W - 5 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST LEFT	R1	2	→	1	↓	4	↓	3	←	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↓	4	↓	3	←		
										EB - 6 7	
		RING 1				RING 2				WB - 6 8	
	PHASE									E/W - 6 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EASTBOUND THRU & LEFT	R1	2	→	1	↓	4	↓	3	←	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↓	4	↓	3	←		
										EB - 7 7	
		RING 1				RING 2				WB - 7 8	
	PHASE									E/W - 7 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - WESTBOUND THRU & LEFT	R1	2	→	1	↓	4	↓	3	←	COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→	1	↓	4	↓	3	←		
										EB - 8 7	
		RING 1				RING 2				WB - 8 8	
	PHASE									E/W - 8 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

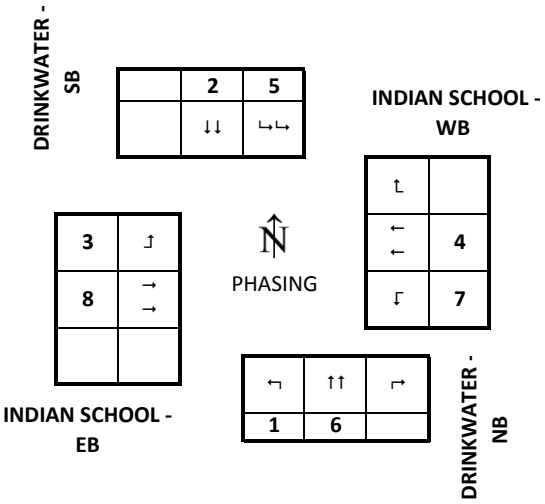
INDIAN SCHOOL & DRINKWATER

System # 47

BASIC TIMING PLAN

Section #	I.P. Address MM1-5-1	Date Designed
	172.27.10.47	12/20/2016

	Phase	1	2	3	4	5	6	7	8
TIMING PLAN - MM-2-1	Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
	NOTES	PROT		p&P		PROT		p&P	
	MIN GRN	5	7	5	10	5	7	5	10
	BK MGRN								
	CS MGRN								
	DLY GRN								
	WALK		4		4		4		4
	WALK2								
	WLK MAX								
	PED CLR/FDW		20		19		20		21
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT	2		2		2		2	
	VH EXT2								
	MAX 1	15	40	15	60	15	40	15	60
	MAX 2	25	55	25	75	25	55	25	75
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW	3.3	4.0	3.3	4	3.3	4	3.3	4
	RED CLR	2	1.1	2	1.2	2	1.1	2	1.2
	RED MAX								
	RED RVT	2	2	2	2	2	2	2	2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL				X				X
	PED RECALL								
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES					
TOD: MORNING					
R1	2	1	4	3	
R2	6	5	8	7	
		B	B	B	
Use Timing plan:					
TOD: MIDDAY					
R1	2	1	4	3	
R2	6	5	8	7	
		B	B	B	
Use Timing plan:					
TOD: EVENING					
R1	2	1	4	3	
R2	6	5	8	7	
		B	B	B	
Use Timing plan:					
TOD: NIGHT					
R1	2	1	4	3	
R2	6	5	8	7	
		B	B	B	
Use Timing plan:					
FREE					
R1	2	1	4	3	
R2	6	5	8	7	
		B	B	B	
Use Timing plan: 254					

NOTES

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

INDIAN SCHOOL & DRINKWATER

System #	47

COORDINATOR	Section #	Date Updated
	0	12/20/2016

	PHASE	1	2	3	4	5	6	7	8	
	FDW		20		19		20		21	
	YELLOW	3.3	4	3.3	4	3.3	4	3.3	4	
	ALL RED	2	1.1	2	1.2	2	1.1	2	1.2	
	WALK		20		19		20		21	

PLAN 1 AM PLAN OPERATIVE TIMES 6:30										COORD PATTERN	OFFSET
	R1	2	↓	1	↰	4	←	3	↥		
	R2	6	↑	5	↳	8	→	7	↧	Balanced	119
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	13	35	20	52	13	35	20	52	Target Cycle Length	
	COORD				X				X	120	
	RECALLS				V				V	Actual Cycle Length	
	GREEN	7.7	29.9	14.7	46.8	7.7	29.9	14.7	46.8	120	

PLAN 4 MIDDAY PLAN OPERATIVE TIMES 9:00										COORD PATTERN	OFFSET
	R1	2	↓	1	↰	4	←	3	↥		
	R2	6	↑	5	↳	8	→	7	↧	Balanced	33
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	12	34	20	54	18	28	20	54	Target Cycle Length	
	COORD				X				X	120	
	RECALLS				V				V	Actual Cycle Length	
	GREEN	6.7	28.9	14.7	48.8	12.7	22.9	14.7	48.8	120	

PLAN 7 PM PLAN OPERATIVE TIMES 15:00										COORD PATTERN	OFFSET
	R1	2	↓	1	↰	4	←	3	↥		
	R2	6	↑	5	↳	8	→	7	↧	Balanced	18
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	13	40	19	48	22	31	19	48	Target Cycle Length	
	COORD				X				X	120	
	RECALLS				V				V	Actual Cycle Length	
	GREEN	7.7	34.9	13.7	42.8	16.7	25.9	13.7	42.8	120	

PLAN 10 MIDNIGHT PLAN OPERATIVE TIMES 22:00										COORD PATTERN	OFFSET
	R1	2	↓	1	↰	4	←	3	↥		
	R2	6	↑	5	↳	8	→	7	↧	Balanced	27
		RING 1				RING 2					
	PHASE	1	2	3	4	5	6	7	8		
	SPLIT	12	27	11	40	12	27	11	40	Target Cycle Length	
	COORD				X				X	90	
	RECALLS				V				V	Actual Cycle Length	
	GREEN	6.7	21.9	5.7	34.8	6.7	21.9	5.7	34.8	90	

10-ZN-2020
10/22/20

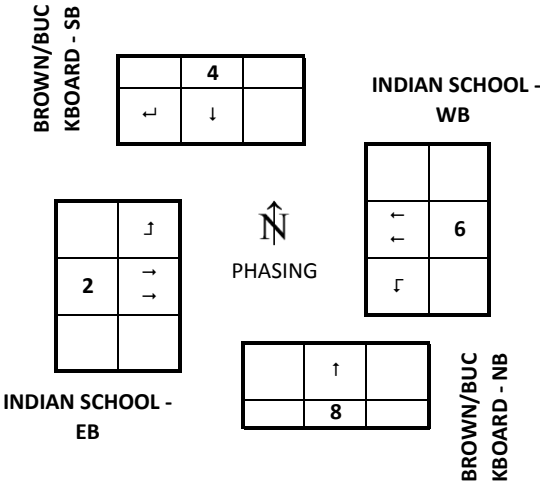
INDIAN SCHOOL & BROWN/BUCKBOARD

System # 75

BASIC TIMING PLAN

Section #	I.P. Address MM1-5-1	Date Designed
	172.17.10.75	12/29/2016

	Phase		2		4		6		8
	Movement		EBT		SBT		WBT		NBT
	NOTES								
TIMING PLAN - MM-2-1	MIN GRN		10		7		10		7
	BK MGRN		30				30		
	CS MGRN								
	DLY GRN								
	WALK		7		7		7		7
	WALK2								
	WLK MAX								
	PED CLR/FDW		15		24		15		24
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT		2		2		2		2
	VH EXT2								
	MAX 1		70		40		70		40
	MAX 2		90		50		90		50
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW		4.0		3.6		4		3.6
	RED CLR		1.4		2.0		1.4		1.4
	RED MAX								
	RED RVT		2		2		2		2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL								
	PED RECALL		X				X		
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES				
TOD: MORNING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: MIDDAY				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: EVENING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: WEEKEND				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
FREE				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan: 254				

NOTES

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

IAN SCHOOL & BROWN/BUCKBOA										System #	75
COORDINATOR									Section #	Date Updated	
									0	12/29/2016	
	PHASE	1	2	3	4	5	6	7	8		
	FDW		15		24		15		24		
	YELLOW		4		3.6		4		3.6		
	ALL RED		1.4		2		1.4		1.4		
	WALK		15		24		15		24		
PLAN 1 AM PLAN OPERATIVE TIMES	R1	2	→			4	↓			COORD PATTERN	OFFSET
	R2	6	←			8	↑			Balanced	19
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		80		40		80		40	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V				V			Actual Cycle Length	
	GREEN		74.6		34.4		74.6		35.0	120	
PLAN 4 MIDDAY PLAN OPERATIVE TIMES	R1	2	→			4	↓			COORD PATTERN	OFFSET
	R2	6	←			8	↑			Balanced	118
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		75		45		75		45	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V				V			Actual Cycle Length	
	GREEN		###		###		###		###	120	
PLAN 7 PM PLAN OPERATIVE TIMES	R1	2	→			4	↓			COORD PATTERN	OFFSET
	R2	6	←			8	↑			Balanced	11
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		75		45		75		45	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		V				V			Actual Cycle Length	
	GREEN		###		###		###		###	120	
PLAN 10 MIDNIGHT PLAN OPERATIVE	R1	2	→			4	↓			COORD PATTERN	OFFSET
	R2	6	←			8	↑			Balanced	44
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		70		20		70		20	Target Cycle Length	

10-ZN-2020
10/22/20

TIMES	COORD		X				X			90	
	RECALLS		V				V			Actual Cycle Length	
	GREEN		###		###		###		###	90	
PLAN 254 **FREE** PLAN OPERATIVE TIMES	R1	2	→			4	↓			COORD PATTERN	OFFSET
	R2	6	←			8	↑			Balanced	
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.4		-5.6		-5.4		-5.0	0	
PLAN 0 **AUTO** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.4		-5.6		-5.4		-5.0	0	
PLAN 5 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.4		-5.6		-5.4		-5.0	0	
PLAN 6 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.4		-5.6		-5.4		-5.0	0	

EMERGENCY PLANS

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH THRU										COORD PATTERN - PLAN NUMBER	OFFSET
	R1	2	→			4	↓				
	R2	2	→			4	↓				
										NB - 1 7	
		RING 1				RING 2				SB - 1 8	
	PHASE		2		4					N/S - 1 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-6		-5		-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH LEFT										COORD PATTERN - PLAN NUMBER	OFFSET
	R1	2	→			4	↓				
	R2	2	→			4	↓				
										NB - 2 7	
		RING 1				RING 2				SB - 2 8	
	PHASE		2		4					N/S - 2 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-6		-5		-5	0	

EXTREME PLAN - SPLIT PATTERN - NORTHBOUND THRU & LEFT										COORD PATTERN - PLAN NUMBER	OFFSET
	R1	2	→			4	↓				
	R2	2	→			4	↓				
										NB - 3 7	
		RING 1				RING 2				SB - 3 8	
	PHASE		2		4					N/S - 3 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-6		-5		-5	0	

EXTREME PLAN - SPLIT PATTERN - SOUTHBOUND THRU & LEFT										COORD PATTERN - PLAN NUMBER	OFFSET
	R1	2	→			4	↓				
	R2	2	→			4	↓				
										NB - 4 7	
		RING 1				RING 2				SB - 4 8	
	PHASE		2		4					N/S - 4 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-6		-5		-5	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST THRU	R1	2	→			4	↓			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→			4	↓				
										EB - 5 7	
		RING 1				RING 2				WB - 5 8	
	PHASE									E/W - 5 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST LEFT	R1	2	→			4	↓			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→			4	↓				
										EB - 6 7	
		RING 1				RING 2				WB - 6 8	
	PHASE									E/W - 6 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EASTBOUND THRU & LEFT	R1	2	→			4	↓			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→			4	↓				
										EB - 7 7	
		RING 1				RING 2				WB - 7 8	
	PHASE									E/W - 7 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - WESTBOUND THRU & LEFT	R1	2	→			4	↓			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	→			4	↓				
										EB - 8 7	
		RING 1				RING 2				WB - 8 8	
	PHASE									E/W - 8 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

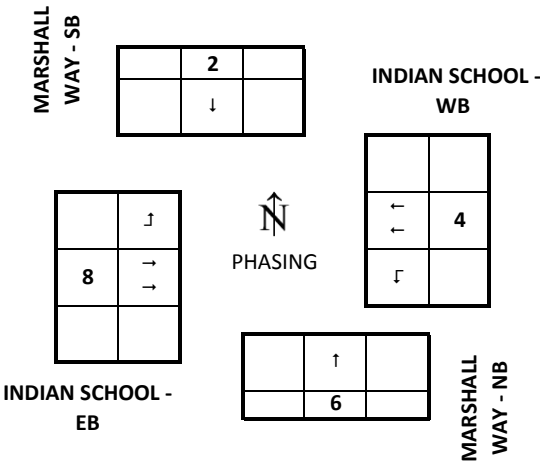
INDIAN SCHOOL & MARSHALL WAY

System # 225

BASIC TIMING PLAN

Section #	I.P. Address MM1-5-1	Date Designed
	172.27.12.25	12/28/2016

	Phase		2		4		6		8
	Movement		SBT		WBT		NBT		EBT
	NOTES								
TIMING PLAN - MM-2-1	MIN GRN		7		10		7		10
	BK MGRN								
	CS MGRN								
	DLY GRN								
	WALK		7		7		8		7
	WALK2								
	WLK MAX								
	PED CLR/FDW		17		7		17		8
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT		2		2		2		2
	VH EXT2								
	MAX 1		35		70		35		70
	MAX 2		45		85		45		85
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW		3.6		4		3.6		4
	RED CLR		1.5		1.2		1.5		1.2
	RED MAX								
	RED RVT		2		2		2		2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL								
	PED RECALL				X				X
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES				
TOD: MORNING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: MIDDAY				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: EVENING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: WEEKEND				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
FREE				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan: 254				

NOTES

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

NDIAN SCHOOL & MARSHALL WA									System #	225
COORDINATOR									Section #	Date Updated
									0	12/28/2016

	PHASE	1	2	3	4	5	6	7	8	
	FDW		17		7		17		8	
	YELLOW		3.6		4		3.6		4	
	ALL RED		1.5		1.2		1.5		1.2	
	WALK		17		7		17		8	
PLAN 1 AM PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN / OFFSET
	R2	6	↑			8	→			Balanced / 6
		RING 1				RING 2				
	PHASE		2		4		6		8	
	SPLIT		30		90		30		90	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN		24.9		84.8		24.9		84.8	120
PLAN 4 MIDDAY PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN / OFFSET
	R2	6	↑			8	→			Balanced / 8
		RING 1				RING 2				
	PHASE		2		4		6		8	
	SPLIT		33		87		33		87	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN		###		###		###		###	120
PLAN 7 PM PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN / OFFSET
	R2	6	↑			8	→			Balanced / 112
		RING 1				RING 2				
	PHASE		2		4		6		8	
	SPLIT		25		95		25		95	Target Cycle Length
	COORD				X				X	120
	RECALLS				V				V	Actual Cycle Length
	GREEN		###		###		###		###	120
PLAN 10 MIDNIGHT PLAN OPERATIVE	R1	2	↓			4	←			COORD PATTERN / OFFSET
	R2	6	↑			8	→			Balanced / 78
		RING 1				RING 2				
	PHASE		2		4		6		8	
	SPLIT		20		70		20		70	Target Cycle Length

10-ZN-2020
10/22/20

TIMES	COORD				X				X	90	
	RECALLS				V				V	Actual Cycle Length	
	GREEN		###		###		###		###	90	
PLAN 254 **FREE** PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.1		-5.2		-5.1		-5.2	0	
PLAN 0 **AUTO** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.1		-5.2		-5.1		-5.2	0	
PLAN 5 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.1		-5.2		-5.1		-5.2	0	
PLAN 6 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5.1		-5.2		-5.1		-5.2	0	

EMERGENCY PLANS

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH THRU	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 1 7	
		RING 1				RING 2				SB - 1 8	
	PHASE		2		4					N/S - 1 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-5		-5		-5	0	
EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 2 7	
		RING 1				RING 2				SB - 2 8	
	PHASE		2		4					N/S - 2 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-5		-5		-5	0	
EXTREME PLAN - SPLIT PATTERN - NORTHBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 3 7	
		RING 1				RING 2				SB - 3 8	
	PHASE		2		4					N/S - 3 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-5		-5		-5	0	
EXTREME PLAN - SPLIT PATTERN - SOUTHBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 4 7	
		RING 1				RING 2				SB - 4 8	
	PHASE		2		4					N/S - 4 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-5		-5		-5		-5	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST THRU	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 5 7	
		RING 1				RING 2				WB - 5 8	
	PHASE									E/W - 5 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 6 7	
		RING 1				RING 2				WB - 6 8	
	PHASE									E/W - 6 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EASTBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 7 7	
		RING 1				RING 2				WB - 7 8	
	PHASE									E/W - 7 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - WESTBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 8 7	
		RING 1				RING 2				WB - 8 8	
	PHASE									E/W - 8 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

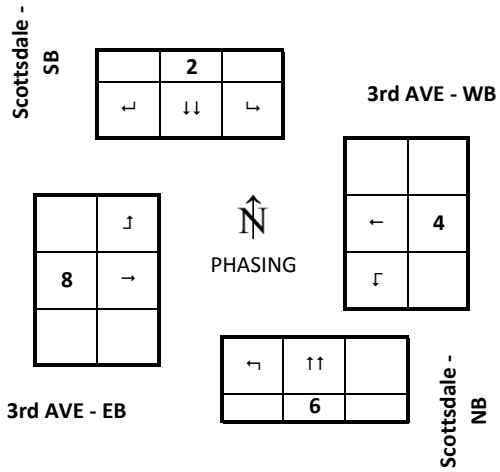
Scottsdale & 3rd AVE

System # 76

BASIC TIMING PLAN

Section #	I.P. Address	Date Designed
	MM1-5-1	1/0/1900

	Phase		2		4		6		8
	Movement		SBT		WBT		NBT		EBT
	NOTES								
TIMING PLAN - MM-2-1	MIN GRN		10		10		10		10
	BK MGRN								
	CS MGRN								
	DLY GRN								
	WALK		7		7		7		7
	WALK2								
	WLK MAX								
	PED CLR/FDW		10		19		10		19
	PD CLR2								
	PC MAX								
	PED CO								
	VEH EXT		1		2		1		2
	VH EXT2								
	MAX 1		85		30		85		30
	MAX 2		105		50		105		50
	MAX 3								
	DYM MAX								
	DYM STP								
	YELLOW		3.8		3		3.8		3
	RED CLR		2.2		3.0		2.2		3.0
	RED MAX								
	RED RVT		2		2		2		2
	ACT B4								
	SEC/ACT								
	MAX INT								
	TIME B4								
	CARS WT								
	STPTDUC								
	TTREDUC								
	MIN GAP								
RECALLS - MM-2-8	LOCK DET								
	VEH RECALL								
	PED RECALL		X				X		
	MAX RECALL								
	SOFT RECALL								
	NO REST								
	ADD INIT CAL								



PHASING SEQUENCES				
TOD: MORNING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: MIDDAY				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: EVENING				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
TOD: WEEKEND				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan:				
FREE				
R1	2		4	
R2	6		8	
		B		B
Use Timing plan: 254				

NOTES

EXPIRES XX/XX/XXXX

10-ZN-2020
10/22/20

Scottsdale & 3rd AVE										System #	76
COORDINATOR								Section #		Date Updated	
								0		1/0/1900	
	PHASE	1	2	3	4	5	6	7	8		
	FDW		10		19		10		19		
	YELLOW		3.8		3		3.8		3		
	ALL RED		2.2		3		2.2		3		
	WALK		10		19		10		19		
PLAN 1 AM PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	35
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		28		32		28		32	Target Cycle Length	
	COORD		X				X			60	
	RECALLS		P				P			Actual Cycle Length	
	GREEN		22.0		26.0		22.0		26.0	60	
PLAN 4 MIDDAY PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	102
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		76		44		76		44	Target Cycle Length	
	COORD		X				X			120	
	RECALLS		P				P			Actual Cycle Length	
	GREEN		###		###		###		###	120	
PLAN 7 PM PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	27
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		28		32		28		32	Target Cycle Length	
	COORD		X				X			60	
	RECALLS		P				P			Actual Cycle Length	
	GREEN		###		###		###		###	60	
PLAN 1 MIDNIGHT PLAN OPERATIVE	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	35
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT		28		32		28		32	Target Cycle Length	

10-ZN-2020
10/22/20

TIMES	COORD		X				X			60	
	RECALLS		P				P			Actual Cycle Length	
	GREEN		###		###		###		###	60	
PLAN 254 **FREE** PLAN OPERATIVE TIMES	R1	2	↓			4	←			COORD PATTERN	OFFSET
	R2	6	↑			8	→			Balanced	
		RING 1				RING 2					
	PHASE		2		4		6		8		
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6.0		-6.0		-6.0		-6.0	0	
PLAN 0 **AUTO** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6.0		-6.0		-6.0		-6.0	0	
PLAN 5 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6.0		-6.0		-6.0		-6.0	0	
PLAN 6 **SPECIAL** PLAN OPERATIVE TIMES	R1									COORD PATTERN	OFFSET
	R2									Balanced	
		RING 1				RING 2					
	PHASE										
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6.0		-6.0		-6.0		-6.0	0	

EMERGENCY PLANS

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH THRU	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 1 7	
		RING 1				RING 2				SB - 1 8	
	PHASE		2		4					N/S - 1 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6		-6		-6		-6	0	

EXTREME PLAN - SPLIT PATTERN - NORTH SOUTH LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 2 7	
		RING 1				RING 2				SB - 2 8	
	PHASE		2		4					N/S - 2 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6		-6		-6		-6	0	

EXTREME PLAN - SPLIT PATTERN - NORTHBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 3 7	
		RING 1				RING 2				SB - 3 8	
	PHASE		2		4					N/S - 3 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6		-6		-6		-6	0	

EXTREME PLAN - SPLIT PATTERN - SOUTHBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										NB - 4 7	
		RING 1				RING 2				SB - 4 8	
	PHASE		2		4					N/S - 4 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN		-6		-6		-6		-6	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST THRU	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 5 7	
		RING 1				RING 2				WB - 5 8	
	PHASE									E/W - 5 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EAST WEST LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 6 7	
		RING 1				RING 2				WB - 6 8	
	PHASE									E/W - 6 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - EASTBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 7 7	
		RING 1				RING 2				WB - 7 8	
	PHASE									E/W - 7 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

EXTREME PLAN - SPLIT PATTERN - WESTBOUND THRU & LEFT	R1	2	↓			4	←			COORD PATTERN - PLAN NUMBER	OFFSET
	R2	2	↓			4	←				
										EB - 8 7	
		RING 1				RING 2				WB - 8 8	
	PHASE									E/W - 8 9	
	SPLIT									Target Cycle Length	
	COORD									XXX	
	RECALLS									Actual Cycle Length	
	GREEN	0	0	0	0	0	0	0	0	0	

Appendix F – Existing Capacity Analysis

F

10-ZN-2020
10/22/20

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	14	518	21	28	541
Future Vol, veh/h	4	14	518	21	28	541
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	15	563	23	30	588

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	870	293	0	0	586	0
Stage 1	575	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*789	*871	-	-	*1304	-
Stage 1	*789	-	-	-	-	-
Stage 2	*692	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*770	*871	-	-	*1304	-
Mov Cap-2 Maneuver	*725	-	-	-	-	-
Stage 1	*789	-	-	-	-	-
Stage 2	*676	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	834	* 1304	-
HCM Lane V/C Ratio	-	-	0.023	0.023	-
HCM Control Delay (s)	-	-	9.4	7.8	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

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

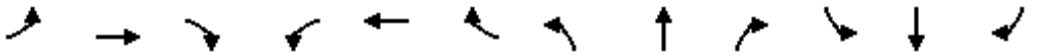
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	47	28	10	14	2
Future Vol, veh/h	10	47	28	10	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	51	30	11	15	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	41	0	-	0	109	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	73	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1568	-	-	-	888	1037
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1568	-	-	-	882	1037
Mov Cap-2 Maneuver	-	-	-	-	882	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1568	-	-	-	899
HCM Lane V/C Ratio	0.007	-	-	-	0.019
HCM Control Delay (s)	7.3	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

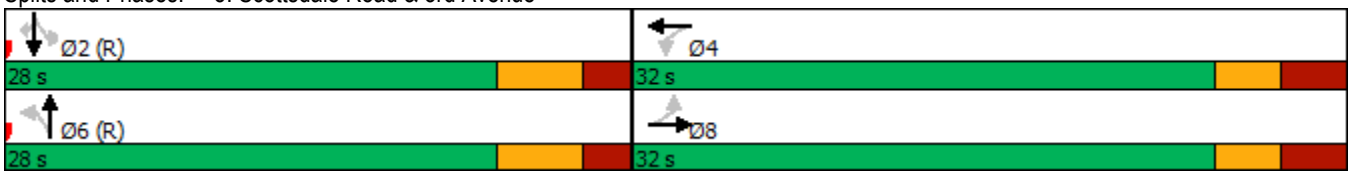


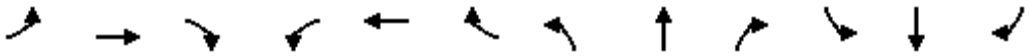
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	15	9	20	4	48	56	432	25	58	369	17
Future Volume (veh/h)	3	15	9	20	4	48	56	432	25	58	369	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	16	10	22	4	52	61	470	27	63	401	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	149	93	294	16	206	718	2259	129	716	2350	1048
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	1.00	1.00	1.00	0.66	0.66	0.66
Sat Flow, veh/h	1348	1076	673	1385	114	1488	968	3416	196	901	3554	1585
Grp Volume(v), veh/h	3	0	26	22	0	56	61	244	253	63	401	18
Grp Sat Flow(s),veh/h/ln	1348	0	1749	1385	0	1603	968	1777	1835	901	1777	1585
Q Serve(g_s), s	0.1	0.0	0.8	0.8	0.0	1.9	0.3	0.0	0.0	1.5	2.6	0.2
Cycle Q Clear(g_c), s	2.0	0.0	0.8	1.6	0.0	1.9	2.9	0.0	0.0	1.5	2.6	0.2
Prop In Lane	1.00		0.38	1.00		0.93	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	265	0	243	294	0	222	718	1175	1214	716	2350	1048
V/C Ratio(X)	0.01	0.00	0.11	0.07	0.00	0.25	0.08	0.21	0.21	0.09	0.17	0.02
Avail Cap(c_a), veh/h	662	0	758	702	0	694	718	1175	1214	716	2350	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	22.6	23.3	0.0	23.1	0.1	0.0	0.0	3.7	3.9	3.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.4	0.4	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.3	0.0	0.7	0.0	0.1	0.1	0.2	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	0.0	22.7	23.3	0.0	23.3	0.3	0.4	0.4	3.9	4.0	3.5
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		29			78			558			482	
Approach Delay, s/veh		22.8			23.3			0.4			4.0	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.7		14.3		45.7		14.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		4.6		3.9		4.9		4.0				
Green Ext Time (p_c), s		1.1		0.2		1.1		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			4.0									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	35	3	35	3
End Time (s)	3	35	3	35
Yield/Force Off (s)	57	29	57	29
Yield/Force Off 170(s)	47	10	47	10
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 35 (58%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	624	71	56	554	34	67	350	13	35	423	78
Future Volume (veh/h)	173	624	71	56	554	34	67	350	13	35	423	78
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	188	678	77	61	602	37	73	380	14	38	460	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	1439	642	125	1148	70	206	1005	37	161	1134	205
Arrive On Green	0.10	0.41	0.41	0.02	0.23	0.23	0.12	0.29	0.29	0.09	0.26	0.26
Sat Flow, veh/h	3456	3554	1585	3456	3401	209	1781	3496	128	1781	4348	785
Grp Volume(v), veh/h	188	678	77	61	314	325	73	193	201	38	358	187
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1833	1781	1777	1847	1781	1702	1729
Q Serve(g_s), s	6.2	16.8	2.4	2.1	18.6	18.7	4.5	10.4	10.5	2.4	10.4	10.8
Cycle Q Clear(g_c), s	6.2	16.8	2.4	2.1	18.6	18.7	4.5	10.4	10.5	2.4	10.4	10.8
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.07	1.00		0.45
Lane Grp Cap(c), veh/h	350	1439	642	125	600	619	206	511	531	161	888	451
V/C Ratio(X)	0.54	0.47	0.12	0.49	0.52	0.53	0.35	0.38	0.38	0.24	0.40	0.42
Avail Cap(c_a), veh/h	481	1439	642	253	600	619	206	511	531	161	888	451
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	26.2	9.5	57.4	38.0	38.0	49.0	34.2	34.2	50.7	36.6	36.8
Incr Delay (d2), s/veh	0.5	1.1	0.4	1.1	3.2	3.1	0.4	2.1	2.1	0.3	1.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.2	1.4	0.9	9.0	9.3	2.0	4.8	5.0	1.1	4.5	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.7	27.4	9.9	58.5	41.1	41.1	49.3	36.3	36.2	51.0	38.0	39.6
LnGrp LOS	D	C	A	E	D	D	D	D	D	D	D	D
Approach Vol, veh/h		943			700			467			583	
Approach Delay, s/veh		30.8			42.6			38.3			39.3	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	37.0	17.5	46.0	16.5	40.0	9.5	54.0
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 9.4	31.3	16.7	* 41	* 6.4	34.5	* 8.8	* 49
Max Q Clear Time (g_c+I1), s	6.5	12.8	8.2	20.7	4.4	12.5	4.1	18.8
Green Ext Time (p_c), s	0.0	1.2	0.2	1.2	0.0	0.7	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

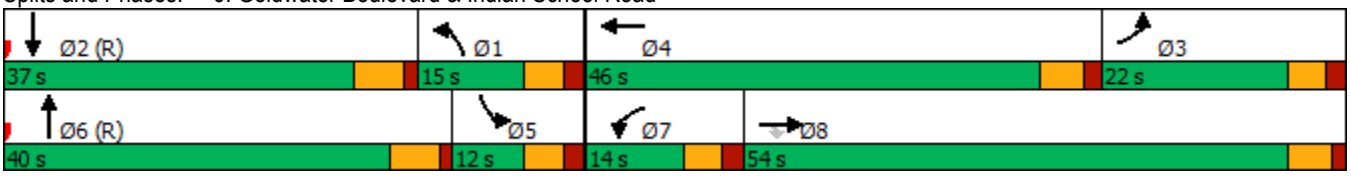
Notes

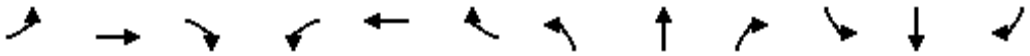
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	15	37	22	46	12	40	14	54
Maximum Split (%)	12.5%	30.8%	18.3%	38.3%	10.0%	33.3%	11.7%	45.0%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	49	12	110	64	52	12	64	78
End Time (s)	64	49	12	110	64	52	78	12
Yield/Force Off (s)	58.4	43.3	6.7	104.5	58.4	46.5	72.8	6.6
Yield/Force Off 170(s)	58.4	19.3	6.7	82.5	58.4	18.5	72.8	104.6
Local Start Time (s)	37	0	98	52	40	0	52	66
Local Yield (s)	46.4	31.3	114.7	92.5	46.4	34.5	60.8	114.6
Local Yield 170(s)	46.4	7.3	114.7	70.5	46.4	6.5	60.8	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 12 (10%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	605	12	64	646	31	4	4	9	2	4	13
Future Volume (veh/h)	26	605	12	64	646	31	4	4	9	2	4	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	28	658	13	70	702	34	4	4	10	2	4	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	2519	50	551	2438	118	90	96	187	49	86	238
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	722	3564	70	767	3450	167	258	462	900	76	415	1147
Grp Volume(v), veh/h	28	328	343	70	361	375	18	0	0	20	0	0
Grp Sat Flow(s),veh/h/ln	722	1777	1858	767	1777	1840	1620	0	0	1638	0	0
Q Serve(g_s), s	1.8	8.0	8.0	4.3	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.8	8.0	8.0	12.3	9.0	9.0	1.0	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.09	0.22		0.56	0.10		0.70
Lane Grp Cap(c), veh/h	516	1256	1313	551	1256	1300	373	0	0	373	0	0
V/C Ratio(X)	0.05	0.26	0.26	0.13	0.29	0.29	0.05	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	516	1256	1313	551	1256	1300	373	0	0	373	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)	0.91	0.91	0.91	0.64	0.64	0.64	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.5	6.3	6.3	8.5	6.5	6.5	38.1	0.0	0.0	38.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.4	0.3	0.4	0.4	0.2	0.0	0.0	0.3	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(50%),veh/ln	0.3	2.8	3.0	0.7	3.2	3.3	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	6.8	6.8	8.9	6.9	6.8	38.3	0.0	0.0	38.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	A
Approach Vol, veh/h		699			806			18			20	
Approach Delay, s/veh		6.9			7.0			38.3			38.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.0		90.0		30.0		90.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		24.9		* 85		24.9		* 85				
Max Q Clear Time (g_c+I1), s		3.2		14.3		3.0		12.8				
Green Ext Time (p_c), s		0.0		3.4		0.0		2.8				

Intersection Summary												
HCM 6th Ctrl Delay			7.7									
HCM 6th LOS			A									

Notes

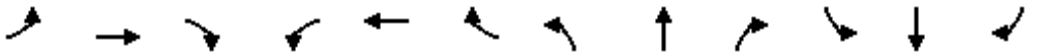
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	30	90	30	90
Maximum Split (%)	25.0%	75.0%	25.0%	75.0%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	6	36	6	36
End Time (s)	36	6	36	6
Yield/Force Off (s)	30.9	0.8	30.9	0.8
Yield/Force Off 170(s)	13.9	113.8	13.9	112.8
Local Start Time (s)	0	30	0	30
Local Yield (s)	24.9	114.8	24.9	114.8
Local Yield 170(s)	7.9	107.8	7.9	106.8

Intersection Summary		
Cycle Length	120	
Control Type	Actuated-Coordinated	
Natural Cycle	55	
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green		

Splits and Phases: 7: Marshall Way & Indian School Road



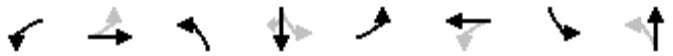
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	512	51	4	722	99	55	332	68	73	263	55
Future Volume (veh/h)	86	512	51	4	722	99	55	332	68	73	263	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	93	557	55	4	785	108	60	361	74	79	286	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	893	88	345	858	118	529	1192	242	435	1439	642
Arrive On Green	0.04	0.09	0.09	0.11	0.27	0.27	0.04	0.41	0.41	0.08	0.81	0.81
Sat Flow, veh/h	1781	3267	322	1781	3138	432	1781	2943	597	1781	3554	1585
Grp Volume(v), veh/h	93	302	310	4	444	449	60	216	219	79	286	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1812	1781	1777	1793	1781	1777	1763	1781	1777	1585
Q Serve(g_s), s	0.7	19.7	19.8	0.0	29.1	29.1	0.0	9.9	10.1	0.0	2.2	0.9
Cycle Q Clear(g_c), s	0.7	19.7	19.8	0.0	29.1	29.1	0.0	9.9	10.1	0.0	2.2	0.9
Prop In Lane	1.00		0.18	1.00		0.24	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	276	486	495	345	486	490	529	720	714	435	1439	642
V/C Ratio(X)	0.34	0.62	0.63	0.01	0.92	0.92	0.11	0.30	0.31	0.18	0.20	0.09
Avail Cap(c_a), veh/h	276	486	495	345	486	490	592	720	714	498	1439	642
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.97	0.97	0.97	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	48.6	48.7	36.8	42.3	42.3	21.0	24.2	24.2	25.7	7.0	6.9
Incr Delay (d2), s/veh	0.3	5.7	5.7	0.0	23.1	23.0	0.0	1.1	1.1	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	10.2	10.4	0.1	15.6	15.8	1.1	4.4	4.5	1.5	0.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	54.4	54.3	36.8	65.4	65.3	21.1	25.3	25.4	25.7	7.3	7.2
LnGrp LOS	D	D	D	D	E	E	C	C	C	C	A	A
Approach Vol, veh/h		705			897			495			425	
Approach Delay, s/veh		54.0			65.2			24.8			10.7	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	38.0	9.7	54.0	18.3	38.0	9.7	54.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 9	32.8	* 8.9	48.6	* 9	32.8	* 8.9	48.6
Max Q Clear Time (g_c+I1), s	2.0	21.8	2.0	4.2	2.7	31.1	2.0	12.1
Green Ext Time (p_c), s	0.0	1.0	0.0	1.4	0.0	0.5	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

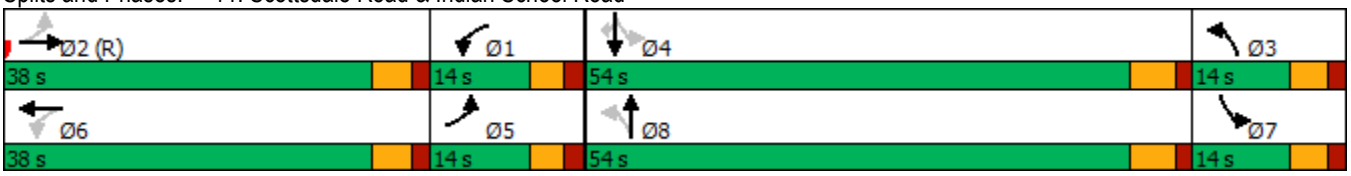
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

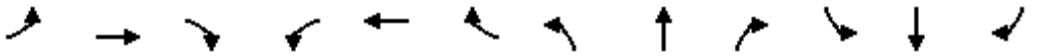


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	14	38	14	54	14	38	14	54
Maximum Split (%)	11.7%	31.7%	11.7%	45.0%	11.7%	31.7%	11.7%	45.0%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	38	0	106	52	38	0	106	52
End Time (s)	52	38	0	106	52	38	0	106
Yield/Force Off (s)	47	32.8	114.9	100.6	47	32.8	114.9	100.6
Yield/Force Off 170(s)	47	10.8	114.9	80.6	47	10.8	114.9	80.6
Local Start Time (s)	38	0	106	52	38	0	106	52
Local Yield (s)	47	32.8	114.9	100.6	47	32.8	114.9	100.6
Local Yield 170(s)	47	10.8	114.9	80.6	47	10.8	114.9	80.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	718	10	40	923	131	2	1	15	37	0	48
Future Volume (veh/h)	113	718	10	40	923	131	2	1	15	37	0	48
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	123	780	11	43	1003	142	2	1	16	40	0	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	3055	43	644	2661	376	37	10	77	144	0	90
Arrive On Green	1.00	1.00	1.00	0.85	0.85	0.85	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	491	3588	51	685	3125	442	72	180	1347	1472	0	1585
Grp Volume(v), veh/h	123	386	405	43	570	575	19	0	0	40	0	52
Grp Sat Flow(s),veh/h/ln	491	1777	1861	685	1777	1791	1600	0	0	1472	0	1585
Q Serve(g_s), s	3.5	0.0	0.0	1.2	8.4	8.4	0.0	0.0	0.0	1.6	0.0	3.8
Cycle Q Clear(g_c), s	11.9	0.0	0.0	1.2	8.4	8.4	1.3	0.0	0.0	3.0	0.0	3.8
Prop In Lane	1.00		0.03	1.00		0.25	0.11		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	444	1513	1585	644	1513	1525	124	0	0	144	0	90
V/C Ratio(X)	0.28	0.26	0.26	0.07	0.38	0.38	0.15	0.00	0.00	0.28	0.00	0.58
Avail Cap(c_a), veh/h	444	1513	1585	644	1513	1525	493	0	0	464	0	454
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.47	0.47	0.47	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.5	0.0	0.0	1.4	1.9	2.0	54.0	0.0	0.0	54.7	0.0	55.2
Incr Delay (d2), s/veh	1.4	0.4	0.4	0.1	0.3	0.3	0.2	0.0	0.0	0.4	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.2	0.1	1.7	1.7	0.6	0.0	0.0	1.2	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1.9	0.4	0.4	1.5	2.3	2.3	54.2	0.0	0.0	55.1	0.0	57.3
LnGrp LOS	A	A	A	A	A	A	D	A	A	E	A	E
Approach Vol, veh/h		914			1188			19			92	
Approach Delay, s/veh		0.6			2.3			54.2			56.3	
Approach LOS		A			A			D			E	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		107.6		12.4		107.6		12.4				
Change Period (Y+Rc), s		* 5.4		5.6		* 5.4		* 5.6				
Max Green Setting (Gmax), s		* 75		34.4		* 75		* 35				
Max Q Clear Time (g_c+I1), s		13.9		5.8		10.4		3.3				
Green Ext Time (p_c), s		4.9		0.2		5.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.3									
HCM 6th LOS			A									

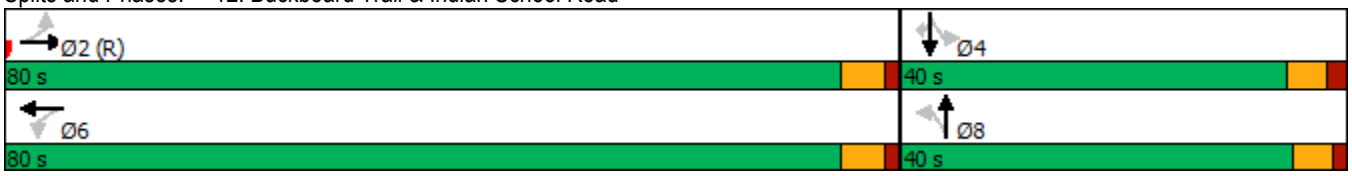
Notes

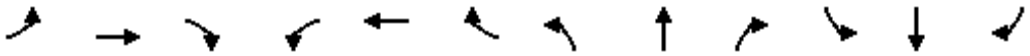
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	80	40	80	40
Maximum Split (%)	66.7%	33.3%	66.7%	33.3%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	19	99	19	99
End Time (s)	99	19	99	19
Yield/Force Off (s)	93.6	13.4	93.6	14
Yield/Force Off 170(s)	78.6	109.4	78.6	110
Local Start Time (s)	0	80	0	80
Local Yield (s)	74.6	114.4	74.6	115
Local Yield 170(s)	59.6	90.4	59.6	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 19 (16%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	560	33	299	1065	194	58	353	172	83	135	16
Future Volume (veh/h)	83	560	33	299	1065	194	58	353	172	83	135	16
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	90	609	36	325	1158	211	63	384	187	90	147	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1330	79	353	1386	618	241	885	395	468	801	91
Arrive On Green	0.05	0.39	0.39	0.05	0.39	0.39	0.14	0.25	0.25	0.14	0.25	0.25
Sat Flow, veh/h	1781	3410	201	1781	3554	1585	1781	3554	1585	3456	3214	367
Grp Volume(v), veh/h	90	317	328	325	1158	211	63	384	187	90	80	84
Grp Sat Flow(s),veh/h/ln	1781	1777	1834	1781	1777	1585	1781	1777	1585	1728	1777	1804
Q Serve(g_s), s	0.0	15.9	15.9	3.8	35.4	11.2	3.8	10.9	12.1	2.8	4.3	4.4
Cycle Q Clear(g_c), s	0.0	15.9	15.9	3.8	35.4	11.2	3.8	10.9	12.1	2.8	4.3	4.4
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	189	693	715	353	1386	618	241	885	395	468	443	450
V/C Ratio(X)	0.48	0.46	0.46	0.92	0.84	0.34	0.26	0.43	0.47	0.19	0.18	0.19
Avail Cap(c_a), veh/h	316	693	715	480	1386	618	241	885	395	468	443	450
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)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	27.2	27.2	44.7	33.1	25.8	46.5	37.9	38.3	46.1	35.4	35.5
Incr Delay (d2), s/veh	0.7	2.1	2.1	16.3	6.1	1.5	0.2	1.5	4.0	0.1	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.0	7.3	11.0	16.0	4.4	1.7	4.9	5.1	1.2	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	29.3	29.3	61.0	39.2	27.3	46.7	39.5	42.4	46.1	36.3	36.4
LnGrp LOS	D	C	C	E	D	C	D	D	D	D	D	D
Approach Vol, veh/h		735			1694			634			254	
Approach Delay, s/veh		32.1			41.9			41.0			39.8	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	35.0	11.5	52.0	21.5	35.0	11.5	52.0
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 7.7	* 30	* 15	* 47	* 7.7	* 30	* 15	* 47
Max Q Clear Time (g_c+I1), s	5.8	6.4	2.0	37.4	4.8	14.1	5.8	17.9
Green Ext Time (p_c), s	0.0	0.1	0.1	1.4	0.0	0.4	0.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

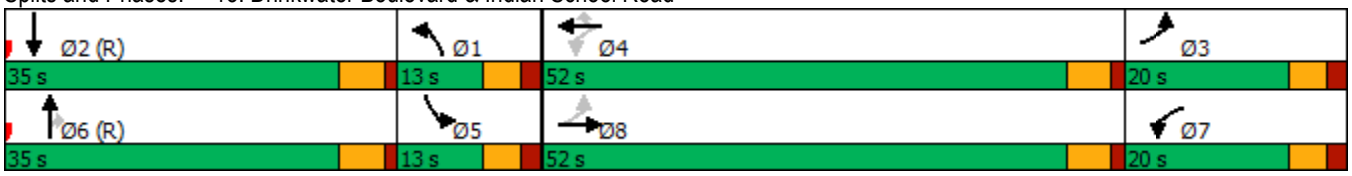
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	13	35	20	52	13	35	20	52
Maximum Split (%)	10.8%	29.2%	16.7%	43.3%	10.8%	29.2%	16.7%	43.3%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	34	119	99	47	34	119	99	47
End Time (s)	47	34	119	99	47	34	119	99
Yield/Force Off (s)	41.7	28.9	113.7	93.8	41.7	28.9	113.7	93.8
Yield/Force Off 170(s)	41.7	8.9	113.7	74.8	41.7	8.9	113.7	72.8
Local Start Time (s)	35	0	100	48	35	0	100	48
Local Yield (s)	42.7	29.9	114.7	94.8	42.7	29.9	114.7	94.8
Local Yield 170(s)	42.7	9.9	114.7	75.8	42.7	9.9	114.7	73.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 119 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	74	606	13	16	726
Future Vol, veh/h	27	74	606	13	16	726
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	80	659	14	17	789

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1016	337	0	0	673	0
Stage 1	666	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*730	*846	-	-	*1265	-
Stage 1	*765	-	-	-	-	-
Stage 2	*648	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*721	*846	-	-	*1265	-
Mov Cap-2 Maneuver	*746	-	-	-	-	-
Stage 1	*765	-	-	-	-	-
Stage 2	*640	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	817	* 1265	-
HCM Lane V/C Ratio	-	-	0.134	0.014	-
HCM Control Delay (s)	-	-	10.1	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

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

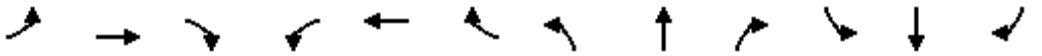
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	51	83	15	19	22
Future Vol, veh/h	23	51	83	15	19	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	55	90	16	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	106	0	-	0	203	98
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	105	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1490	-	-	-	795	971
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	919	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1490	-	-	-	781	971
Mov Cap-2 Maneuver	-	-	-	-	781	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	919	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1490	-	-	-	873
HCM Lane V/C Ratio	0.017	-	-	-	0.051
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	24	93	58	48	174	55	569	25	31	760	47
Future Volume (veh/h)	51	24	93	58	48	174	55	569	25	31	760	47
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	55	26	101	63	52	189	60	618	27	34	826	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	74	289	318	78	285	405	2005	88	574	2055	916
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	1.00	1.00	1.00	0.58	0.58	0.58
Sat Flow, veh/h	1139	335	1301	1264	354	1285	632	3469	151	785	3554	1585
Grp Volume(v), veh/h	55	0	127	63	0	241	60	316	329	34	826	51
Grp Sat Flow(s),veh/h/ln	1139	0	1636	1264	0	1639	632	1777	1843	785	1777	1585
Q Serve(g_s), s	2.8	0.0	3.9	2.7	0.0	8.0	1.5	0.0	0.0	1.1	7.7	0.8
Cycle Q Clear(g_c), s	10.8	0.0	3.9	6.6	0.0	8.0	9.2	0.0	0.0	1.1	7.7	0.8
Prop In Lane	1.00		0.80	1.00		0.78	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	363	318	0	364	405	1027	1066	574	2055	916
V/C Ratio(X)	0.25	0.00	0.35	0.20	0.00	0.66	0.15	0.31	0.31	0.06	0.40	0.06
Avail Cap(c_a), veh/h	461	0	709	585	0	710	405	1027	1066	574	2055	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	19.7	22.5	0.0	21.3	1.0	0.0	0.0	5.6	7.0	5.5
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	0.8	0.7	0.7	0.7	0.2	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.4	0.8	0.0	3.0	0.1	0.2	0.2	0.2	2.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	19.9	22.6	0.0	22.1	1.7	0.7	0.7	5.8	7.5	5.6
LnGrp LOS	C	A	B	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		182			304			705			911	
Approach Delay, s/veh		21.9			22.2			0.8			7.4	
Approach LOS		C			C			A			A	

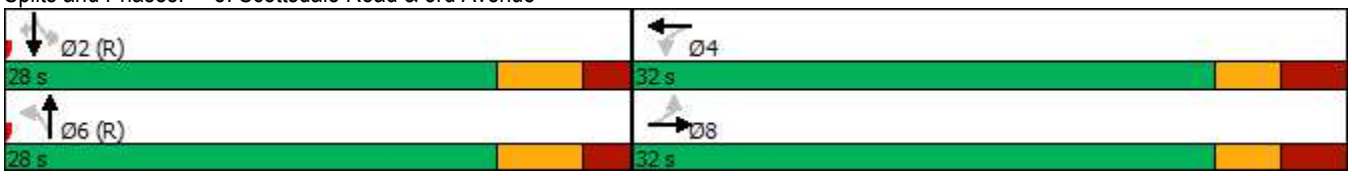
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		40.7		19.3		40.7		19.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		9.7		10.0		11.2		12.8				
Green Ext Time (p_c), s		2.2		1.0		1.4		0.5				

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

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	27	55	27	55
End Time (s)	55	27	55	27
Yield/Force Off (s)	49	21	49	21
Yield/Force Off 170(s)	39	2	39	2
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 27 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue



6: Goldwater Boulevard & Indian School Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	682	59	64	602	55	90	343	43	75	524	158
Future Volume (veh/h)	210	682	59	64	602	55	90	343	43	75	524	158
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	228	741	64	70	654	60	98	373	47	82	570	172
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1439	642	130	1166	107	129	967	121	129	1184	349
Arrive On Green	0.09	0.41	0.41	0.01	0.12	0.12	0.07	0.30	0.30	0.07	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	3456	3291	302	1781	3178	398	1781	3913	1153
Grp Volume(v), veh/h	228	741	64	70	353	361	98	207	213	82	494	248
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1816	1781	1777	1799	1781	1702	1663
Q Serve(g_s), s	7.7	18.8	2.2	2.4	22.5	22.6	6.5	11.0	11.2	5.4	14.2	14.7
Cycle Q Clear(g_c), s	7.7	18.8	2.2	2.4	22.5	22.6	6.5	11.0	11.2	5.4	14.2	14.7
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.22	1.00		0.69
Lane Grp Cap(c), veh/h	297	1439	642	130	629	643	129	540	547	129	1030	503
V/C Ratio(X)	0.77	0.51	0.10	0.54	0.56	0.56	0.76	0.38	0.39	0.64	0.48	0.49
Avail Cap(c_a), veh/h	366	1439	642	196	629	643	129	540	547	129	1030	503
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	26.8	11.6	58.2	44.2	44.2	54.6	32.9	32.9	54.1	34.1	34.3
Incr Delay (d2), s/veh	5.8	1.3	0.3	1.2	3.4	3.4	20.7	2.1	2.1	7.7	1.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	8.1	1.2	1.1	11.3	11.6	3.6	5.0	5.2	2.7	6.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	28.2	11.9	59.5	47.6	47.6	75.4	34.9	35.0	61.8	35.7	37.7
LnGrp LOS	E	C	B	E	D	D	E	C	D	E	D	D
Approach Vol, veh/h		1033			784			518			824	
Approach Delay, s/veh		34.1			48.6			42.6			38.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	42.0	15.7	48.0	14.3	42.0	9.7	54.0
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 6.4	36.3	12.7	* 43	* 6.4	36.5	* 6.8	* 49
Max Q Clear Time (g_c+I1), s	8.5	16.7	9.7	24.6	7.4	13.2	4.4	20.8
Green Ext Time (p_c), s	0.0	1.7	0.1	1.4	0.0	0.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

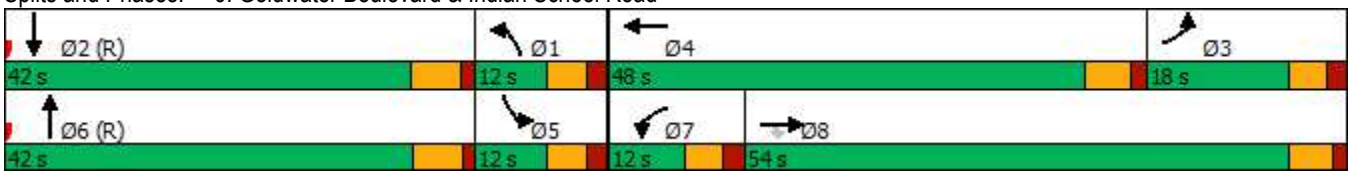
Notes

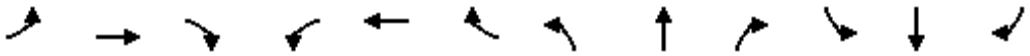
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	12	42	18	48	12	42	12	54
Maximum Split (%)	10.0%	35.0%	15.0%	40.0%	10.0%	35.0%	10.0%	45.0%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	47	5	107	59	47	5	59	71
End Time (s)	59	47	5	107	59	47	71	5
Yield/Force Off (s)	53.4	41.3	119.7	101.5	53.4	41.5	65.8	119.6
Yield/Force Off 170(s)	53.4	17.3	119.7	79.5	53.4	13.5	65.8	97.6
Local Start Time (s)	42	0	102	54	42	0	54	66
Local Yield (s)	48.4	36.3	114.7	96.5	48.4	36.5	60.8	114.6
Local Yield 170(s)	48.4	12.3	114.7	74.5	48.4	8.5	60.8	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 5 (4%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	758	31	56	728	58	17	17	31	13	34	47
Future Volume (veh/h)	31	758	31	56	728	58	17	17	31	13	34	47
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	34	824	34	61	791	63	18	18	34	14	37	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	2603	107	491	2495	199	86	89	130	53	120	139
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	646	3478	143	644	3334	265	294	538	786	115	722	838
Grp Volume(v), veh/h	34	421	437	61	421	433	70	0	0	102	0	0
Grp Sat Flow(s),veh/h/ln	646	1777	1845	644	1777	1823	1617	0	0	1675	0	0
Q Serve(g_s), s	2.2	9.4	9.4	4.1	9.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.6	9.4	9.4	13.5	9.4	9.4	4.2	0.0	0.0	6.3	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.15	0.26		0.49	0.14		0.50
Lane Grp Cap(c), veh/h	493	1330	1380	491	1330	1364	306	0	0	312	0	0
V/C Ratio(X)	0.07	0.32	0.32	0.12	0.32	0.32	0.23	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	493	1330	1380	491	1330	1364	306	0	0	312	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)	0.83	0.83	0.83	0.72	0.72	0.72	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.9	5.0	5.0	7.2	5.0	5.0	43.5	0.0	0.0	44.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.4	0.5	0.4	1.7	0.0	0.0	2.8	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(50%),veh/ln	0.3	3.1	3.2	0.6	3.1	3.2	2.0	0.0	0.0	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.1	5.5	5.5	7.6	5.4	5.4	45.3	0.0	0.0	47.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	A	A	D	A	A
Approach Vol, veh/h		892			915			70			102	
Approach Delay, s/veh		5.6			5.6			45.3			47.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.0		95.0		25.0		95.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		19.9		* 90		19.9		* 90				
Max Q Clear Time (g_c+I1), s		8.3		15.5		6.2		13.6				
Green Ext Time (p_c), s		0.2		4.1		0.2		3.9				

Intersection Summary												
HCM 6th Ctrl Delay			9.1									
HCM 6th LOS			A									

Notes

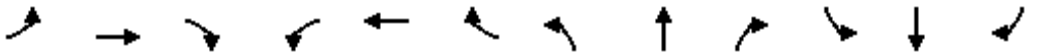
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	25	95	25	95
Maximum Split (%)	20.8%	79.2%	20.8%	79.2%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	112	17	112	17
End Time (s)	17	112	17	112
Yield/Force Off (s)	11.9	106.8	11.9	106.8
Yield/Force Off 170(s)	114.9	99.8	114.9	98.8
Local Start Time (s)	0	25	0	25
Local Yield (s)	19.9	114.8	19.9	114.8
Local Yield 170(s)	2.9	107.8	2.9	106.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 7: Marshall Way & Indian School Road



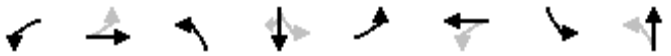
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	639	104	157	647	161	55	422	108	187	612	135
Future Volume (veh/h)	102	639	104	157	647	161	55	422	108	187	612	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	111	695	113	171	703	175	60	459	117	203	665	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	418	939	152	447	865	215	261	857	217	275	1084	483
Arrive On Green	0.23	0.41	0.41	0.17	0.31	0.31	0.04	0.31	0.31	0.08	0.61	0.61
Sat Flow, veh/h	1781	3060	497	1781	2819	702	1781	2809	711	1781	3554	1585
Grp Volume(v), veh/h	111	403	405	171	443	435	60	289	287	203	665	147
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1744	1781	1777	1742	1781	1777	1585
Q Serve(g_s), s	0.0	23.1	23.1	0.3	27.6	27.7	0.0	16.2	16.4	0.0	14.0	5.3
Cycle Q Clear(g_c), s	0.0	23.1	23.1	0.3	27.6	27.7	0.0	16.2	16.4	0.0	14.0	5.3
Prop In Lane	1.00		0.28	1.00		0.40	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	418	545	546	447	545	535	261	542	531	275	1084	483
V/C Ratio(X)	0.27	0.74	0.74	0.38	0.81	0.81	0.23	0.53	0.54	0.74	0.61	0.30
Avail Cap(c_a), veh/h	418	545	546	447	545	535	348	542	531	362	1084	483
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	0.93	0.93	0.93	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	36.1	31.5	31.5	37.9	38.4	38.4	39.1	34.6	34.7	45.7	19.0	17.3
Incr Delay (d2), s/veh	0.1	8.4	8.4	0.2	11.7	11.9	0.2	3.7	3.9	3.2	2.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	10.3	10.3	4.2	13.6	13.4	1.5	7.6	7.6	5.9	4.6	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	39.9	39.9	38.0	50.1	50.4	39.2	38.3	38.6	48.9	21.4	18.8
LnGrp LOS	D	D	D	D	D	D	D	D	D	D	C	B
Approach Vol, veh/h		919			1049			636			1015	
Approach Delay, s/veh		39.5			48.3			38.5			26.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.9	42.0	10.1	42.0	25.9	42.0	10.1	42.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 15	36.8	* 11	36.6	* 15	36.8	* 11	36.6
Max Q Clear Time (g_c+I1), s	2.3	25.1	2.0	16.0	2.0	29.7	2.0	18.4
Green Ext Time (p_c), s	0.2	1.5	0.0	3.3	0.1	1.4	0.2	2.4

Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Notes

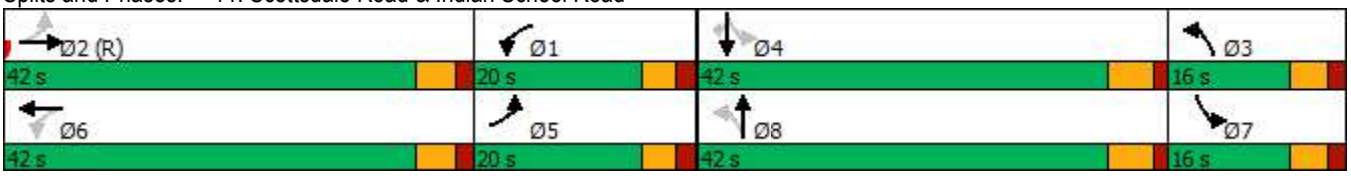
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	20	42	16	42	20	42	16	42
Maximum Split (%)	16.7%	35.0%	13.3%	35.0%	16.7%	35.0%	13.3%	35.0%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	42	0	104	62	42	0	104	62
End Time (s)	62	42	0	104	62	42	0	104
Yield/Force Off (s)	57	36.8	114.9	98.6	57	36.8	114.9	98.6
Yield/Force Off 170(s)	57	14.8	114.9	78.6	57	14.8	114.9	78.6
Local Start Time (s)	42	0	104	62	42	0	104	62
Local Yield (s)	57	36.8	114.9	98.6	57	36.8	114.9	98.6
Local Yield 170(s)	57	14.8	114.9	78.6	57	14.8	114.9	78.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	958	8	60	968	25	10	4	45	111	3	76
Future Volume (veh/h)	33	958	8	60	968	25	10	4	45	111	3	76
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	36	1041	9	65	1052	27	11	4	49	121	3	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	2174	19	382	2132	55	37	31	107	182	4	528
Arrive On Green	1.00	1.00	1.00	0.60	0.60	0.60	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	523	3610	31	537	3540	91	5	93	320	369	11	1585
Grp Volume(v), veh/h	36	512	538	65	528	551	64	0	0	124	0	83
Grp Sat Flow(s),veh/h/ln	523	1777	1865	537	1777	1854	418	0	0	380	0	1585
Q Serve(g_s), s	2.7	0.0	0.0	6.6	20.2	20.2	0.8	0.0	0.0	0.0	0.0	4.4
Cycle Q Clear(g_c), s	23.7	0.0	0.0	7.1	20.2	20.2	40.0	0.0	0.0	39.3	0.0	4.4
Prop In Lane	1.00		0.02	1.00		0.05	0.17		0.77	0.98		1.00
Lane Grp Cap(c), veh/h	283	1070	1123	382	1070	1116	174	0	0	186	0	528
V/C Ratio(X)	0.13	0.48	0.48	0.17	0.49	0.49	0.37	0.00	0.00	0.67	0.00	0.16
Avail Cap(c_a), veh/h	283	1070	1123	382	1070	1116	175	0	0	186	0	528
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.62	0.62	0.62	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	11.0	13.5	13.5	31.6	0.0	0.0	39.7	0.0	28.2
Incr Delay (d2), s/veh	0.6	1.1	1.0	0.6	1.0	1.0	0.5	0.0	0.0	7.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.3	0.8	7.9	8.3	1.3	0.0	0.0	4.0	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	1.1	1.0	11.6	14.5	14.5	32.1	0.0	0.0	46.9	0.0	28.2
LnGrp LOS	A	A	A	B	B	B	C	A	A	D	A	C
Approach Vol, veh/h		1086			1144			64			207	
Approach Delay, s/veh		1.1			14.3			32.1			39.4	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		78.2		45.6		78.2		45.6				
Change Period (Y+Rc), s		* 5.4		5.6		* 5.4		* 5.6				
Max Green Setting (Gmax), s		* 70		39.4		* 70		* 40				
Max Q Clear Time (g_c+I1), s		25.7		41.3		22.2		42.0				
Green Ext Time (p_c), s		5.2		0.0		5.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									

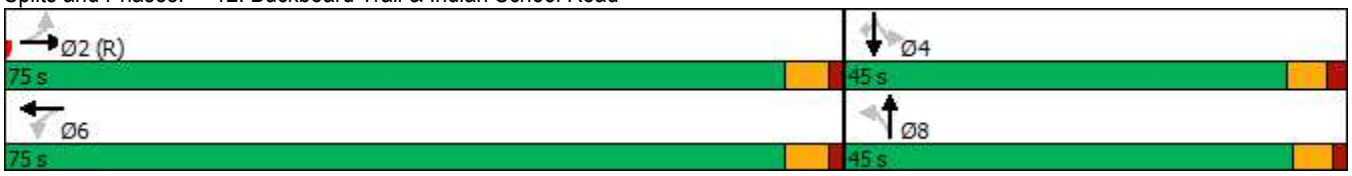
Notes

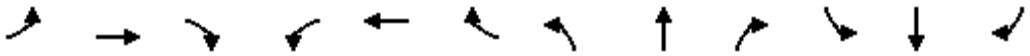
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	75	45	75	45
Maximum Split (%)	62.5%	37.5%	62.5%	37.5%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	11	86	11	86
End Time (s)	86	11	86	11
Yield/Force Off (s)	80.6	5.4	80.6	6
Yield/Force Off 170(s)	65.6	101.4	65.6	102
Local Start Time (s)	0	75	0	75
Local Yield (s)	69.6	114.4	69.6	115
Local Yield 170(s)	54.6	90.4	54.6	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 11 (9%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	1047	57	277	829	208	82	459	407	308	256	55
Future Volume (veh/h)	81	1047	57	277	829	208	82	459	407	308	256	55
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	88	1138	62	301	901	226	89	499	442	335	278	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	1222	67	276	1267	565	114	767	342	481	848	180
Arrive On Green	0.04	0.12	0.12	0.11	0.36	0.36	0.06	0.22	0.22	0.14	0.29	0.29
Sat Flow, veh/h	1781	3427	187	1781	3554	1585	1781	3554	1585	3456	2916	620
Grp Volume(v), veh/h	88	590	610	301	901	226	89	499	442	335	168	170
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1585	1781	1777	1585	1728	1777	1759
Q Serve(g_s), s	0.0	39.5	39.5	13.7	26.2	12.8	5.9	15.4	25.9	11.1	8.9	9.1
Cycle Q Clear(g_c), s	0.0	39.5	39.5	13.7	26.2	12.8	5.9	15.4	25.9	11.1	8.9	9.1
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	332	634	655	276	1267	565	114	767	342	481	517	512
V/C Ratio(X)	0.26	0.93	0.93	1.09	0.71	0.40	0.78	0.65	1.29	0.70	0.32	0.33
Avail Cap(c_a), veh/h	332	634	655	276	1267	565	114	767	342	481	517	512
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	51.5	51.5	51.3	33.3	29.0	55.3	42.9	47.0	49.2	33.3	33.4
Incr Delay (d2), s/veh	0.1	21.1	20.8	80.3	3.4	2.1	26.0	4.3	151.6	3.7	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	22.5	23.2	14.3	11.7	5.2	3.5	7.1	24.4	5.0	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.8	72.6	72.2	131.6	36.7	31.1	81.3	47.2	198.6	52.9	35.0	35.2
LnGrp LOS	D	E	E	F	D	C	F	D	F	D	C	D
Approach Vol, veh/h		1288			1428			1030			673	
Approach Delay, s/veh		70.5			55.8			115.1			44.0	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	40.0	19.0	48.0	22.0	31.0	19.0	48.0
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 7.7	* 35	* 14	* 43	* 17	* 26	* 14	* 43
Max Q Clear Time (g_c+I1), s	7.9	11.1	2.0	28.2	13.1	27.9	15.7	41.5
Green Ext Time (p_c), s	0.0	0.3	0.1	1.1	0.3	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	72.1
HCM 6th LOS	E

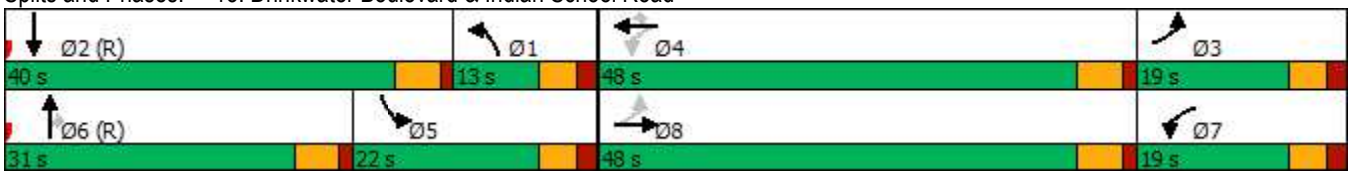
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	13	40	19	48	22	31	19	48
Maximum Split (%)	10.8%	33.3%	15.8%	40.0%	18.3%	25.8%	15.8%	40.0%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	58	18	119	71	49	18	119	71
End Time (s)	71	58	18	119	71	49	18	119
Yield/Force Off (s)	65.7	52.9	12.7	113.8	65.7	43.9	12.7	113.8
Yield/Force Off 170(s)	65.7	32.9	12.7	94.8	65.7	23.9	12.7	92.8
Local Start Time (s)	40	0	101	53	31	0	101	53
Local Yield (s)	47.7	34.9	114.7	95.8	47.7	25.9	114.7	95.8
Local Yield 170(s)	47.7	14.9	114.7	76.8	47.7	5.9	114.7	74.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	110
Offset: 18 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road



Appendix G – Trip Generation

G

10-ZN-2020
10/22/20

The Triangle
Existing Use

Completed: KAS 5/18/2020
Checked: SS 6/24/2020

Trip Generation Calculations - 10th Edition

Howard Johnson by Wyndham Scottsdale Old Town

320 Motel

Land Use	ITE Code	Qty	Unit	Weekday Rate	Weekday % In	Weekday % Out	AM Peak Hour Rate	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Rate	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Motel	**320**	**65**	**Rooms**	**3.35**	**50%**	**50%**	**0.38**	**37%**	**63%**	**0.38**	**54%**	**46%**	**218**	**109**	**109**	**25**	**9**	**16**	**25**	**14**	**11**	**Average**
Motel	320	65	Rooms	1.65	50%	50%	0.08	37%	63%	0.06	54%	46%	107	54	53	5	2	3	4	2	2	Minimum
Motel	320	65	Rooms	4.38	50%	50%	0.97	37%	63%	0.83	54%	46%	285	143	142	63	23	40	54	29	25	Maximum
Land Use	ITE Code	Qty	Unit	Weekday Equation	Weekday % In	Weekday % Out	AM Peak Hour Equation	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Equation	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Motel	320	65	Rooms	T=3.62(X)-29.43	50%	50%	T=0.36(X)+2.56	37%	63%	T=0.35(X)+3.53	54%	46%	206	103	103	26	10	16	26	14	12	Equation

Motel	Standard Deviation	0.87		0.17		0.19	
	Number of Studies	6		16		19	
	Average Size	109		119		115	
	R^2	0.96		0.73		0.60	

Haver Building Buisness Complex/Celebrations in Paper

826 Specialty Retail Center

Land Use	ITE Code	Qty	Unit	Weekday Rate	Weekday % In	Weekday % Out	AM Peak Hour Rate	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Rate	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Specialty Retail Center	**826**	**18.03**	**1000 SF GFA**	**44.32**	**50%**	**50%**	**N/A**	**N/A**	**N/A**	**2.71**	**44%**	**56%**	**800**	**400**	**400**	**N/A**	**N/A**	**N/A**	**49**	**22**	**27**	**Average**
Specialty Retail Center	826	18.03	1000 SF GFA	21.3	50%	50%	N/A	N/A	N/A	2.03	44%	56%	385	193	192	N/A	N/A	N/A	37	17	20	Minimum
Specialty Retail Center	826	18.03	1000 SF GFA	64.21	50%	50%	N/A	N/A	N/A	5.16	44%	56%	1,158	579	579	N/A	N/A	N/A	94	42	52	Maximum
Land Use	ITE Code	Qty	Unit	Weekday Equation	Weekday % In	Weekday % Out	AM Peak Hour Equation	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Equation	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Specialty Retail Center	826	18.032	1000 SF GFA	T=42.78(X)+37.66	50%	50%	N/A	N/A	N/A	T=2.40(X)+21.48	44%	56%	810	405	405	N/A	N/A	N/A	65	29	36	Equation

Specialty Retail Center	Standard Deviation	15.52		-		1.83	
	Number of Studies	4		-		5	
	Average Size	25		-		69	
	R^2	0.69		-		0.96	

The Venue (Billiards Room, Ballroom, Rooftop Deck, Observation Deck)/Virtue Vice (1st Floor, 2nd Floor)/Scottsdale Comedy Spot

925 Drinking Place

Land Use	ITE Code	Qty	Unit	Weekday Rate	Weekday % In	Weekday % Out	AM Peak Hour Rate	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Rate	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Drinking Place	**925**	**16.84**	**1000 SF GFA**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**11.36**	**66%**	**34%**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**192**	**127**	**65**	**Average**
Drinking Place	925	16.836	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	3.74	66%	34%	N/A	N/A	N/A	N/A	N/A	N/A	63	42	21	Minimum
Drinking Place	925	16.836	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	30.09	66%	34%	N/A	N/A	N/A	N/A	N/A	N/A	507	335	172	Maximum
Land Use	ITE Code	Qty	Unit	Weekday Equation	Weekday % In	Weekday % Out	AM Peak Hour Equation	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Equation	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
Drinking Place	925	16.84	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Equation

Drinking Place	Standard Deviation	N/A		N/A		7.81	
	Number of Studies	N/A		N/A		12	
	Average Size	N/A		N/A		4	
	R^2	N/A		N/A		N/A	

The Venue (Main Courtyard, Courtyard Bar, VIP Lounge)

932 High-Turnover (Sit-Down) Restaurant

Land Use	ITE Code	Qty	Unit	Weekday Rate	Weekday % In	Weekday % Out	AM Peak Hour Rate	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Rate	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
High-Turnover (Sit-Down) Restaurant	**932**	**5.02**	**1000 SF GFA**	**112.18**	**50%**	**50%**	**9.94**	**55%**	**45%**	**9.77**	**62%**	**38%**	**563**	**282**	**281**	**50**	**28**	**22**	**49**	**30**	**19**	**Average**
High-Turnover (Sit-Down) Restaurant	932	5.02	1000 SF GFA	13.04	50%	50%	0.76	55%	45%	0.92	62%	38%	65	33	32	4	2	2	5	3	2	Minimum
High-Turnover (Sit-Down) Restaurant	932	5.02	1000 SF GFA	742.41	50%	50%	102.39	55%	45%	62.00	62%	38%	3,725	1,863	1,862	514	283	231	311	193	118	Maximum
Land Use	ITE Code	Qty	Unit	Weekday Equation	Weekday % In	Weekday % Out	AM Peak Hour Equation	AM Peak Hour % In	AM Peak Hour % Out	PM Peak Hour Equation	PM Peak Hour % In	PM Peak Hour % Out	Weekday Total	Weekday In	Weekday Out	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	
High-Turnover (Sit-Down) Restaurant	932	5.02	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Equation

High-Turnover (Sit-Down) Restaurant	Standard Deviation	72.51		11.33		7.37	
	Number of Studies	50		39		107	
	Average Size	5		5		6	
	R^2	N/A		N/A		N/A	

10-ZN-2020
10/22/20

The Triangle
Existing Zoning

Completed: KAS 5/15/2020
Checked: GT 5/15/2020

Trip Generation Calculations - 10th Edition

Existing Zoning - 0.8 FAR Shopping Center

820-Shopping Center

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Shopping Center	820	108.81	1000 SF GLA	37.75	50%	50%	0.94	62%	38%	3.81	48%	52%	4,108	2,054	2,054	102	64	38	415	199	216	Average
Shopping Center	820	108.81	1000 SF GLA	7.42	50%	50%	0.18	62%	38%	0.74	48%	52%	807	404	403	20	13	7	81	39	42	Minimum
Shopping Center	820	108.81	1000 SF GLA	207.98	50%	50%	23.74	62%	38%	18.69	48%	52%	22,630	11,316	11,314	2,583	1,602	981	2,034	977	1,057	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Shopping Center	**820**	**108.81**	**1000 SF GLA**	**Ln(T)=0.68Ln(X)+5.57**	**50%**	**50%**	**T=0.50(X)+151.78**	**62%**	**38%**	**Ln(T)=0.74Ln(X)+2.89**	**48%**	**52%**	**6,368**	**3,184**	**3,184**	**207**	**129**	**78**	**579**	**278**	**301**	**Equation**

Shopping Center	Standard Deviation	16.41	0.87	2.04
	Number of Studies	147	84	261
	Average Size	453	351	327
	R^2	0.76	0.50	0.82

Existing Zoning - 0.4 FAR Shopping + Restaurants

820-Shopping Center

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Shopping Center	820	54.40	1000 SF GLA	37.75	50%	50%	0.94	62%	38%	3.81	48%	52%	2,054	1,027	1,027	51	32	19	207	100	107	Average
Shopping Center	820	54.40	1000 SF GLA	7.42	50%	50%	0.18	62%	38%	0.74	48%	52%	404	202	202	10	7	3	40	20	20	Minimum
Shopping Center	820	54.40	1000 SF GLA	207.98	50%	50%	23.74	62%	38%	18.69	48%	52%	11,314	5,658	5,656	1,291	801	490	1,017	489	528	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Shopping Center	**820**	**54.40**	**1000 SF GLA**	**Ln(T)=0.68Ln(X)+5.57**	**50%**	**50%**	**T=0.50(X)+151.78**	**62%**	**38%**	**Ln(T)=0.74Ln(X)+2.89**	**48%**	**52%**	**3,974**	**1,987**	**1,987**	**179**	**111**	**68**	**347**	**167**	**180**	**Equation**

Shopping Center	Standard Deviation	16.41	0.87	2.04
	Number of Studies	147	84	261
	Average Size	453	351	327
	R^2	0.76	0.50	0.82

932 High-Turnover (Sit-Down) Restaurant

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	112.18	50%	50%	9.94	55%	45%	9.77	62%	38%	1,346	673	673	119	65	54	117	73	44	Average
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	13.04	50%	50%	0.76	55%	45%	0.92	62%	38%	156	78	78	9	5	4	11	7	4	Minimum
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	742.41	50%	50%	102.39	55%	45%	62.00	62%	38%	8,909	4,455	4,454	1,229	676	553	744	461	283	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
High-Turnover (Sit-Down) Restaurant	932	12	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Equation

High-Turnover (Sit-Down) Restaurant	Standard Deviation	72.51	11.33	7.37
	Number of Studies	50	39	107
	Average Size	5	5	6
	R^2	N/A	N/A	N/A

The Triangle
Proposed Development

Completed: KAS 5/5/2020
Checked: GT 5/5/2020

Trip Generation Calculations - 10th Edition

932 High-Turnover (Sit-Down) Restaurant

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
High-Turnover (Sit-Down) Restaurant	**932**	**4**	**1000 SF GFA**	**112.18**	**50%**	**50%**	**9.94**	**55%**	**45%**	**9.77**	**62%**	**38%**	**449**	**225**	**224**	**40**	**22**	**18**	**39**	**24**	**15**	**Average**
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	13.04	50%	50%	0.76	55%	45%	0.92	62%	38%	52	26	26	3	2	1	4	2	2	Minimum
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	742.41	50%	50%	102.39	55%	45%	62	62%	38%	2,970	1485	1485	410	226	184	248	154	94	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
High-Turnover (Sit-Down) Restaurant	932	4	1000 SF GFA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**Equation**

High-Turnover (Sit-Down) Restaurant	Standard Deviation	72.51		11.33		7.37	
	Number of Studies	50		39		107	
	Average Size	5		5		6	
	R^2	N/A		N/A		N/A	

221 - Multifamily Housing (Mid-Rise) (Three to Ten Levels)

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	5.44	50%	50%	0.36	26%	74%	0.44	61%	39%	1,251	626	625	83	22	61	101	62	39	Average
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	1.27	50%	50%	0.06	26%	74%	0.15	61%	39%	292	146	146	14	4	10	35	21	14	Minimum
Multifamily Housing (Mid-Rise)	221	230	Dwelling Units	12.50	50%	50%	1.61	26%	74%	1.11	61%	39%	2,875	1438	1437	370	96	274	255	156	99	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Multifamily Housing (Mid-Rise)	**221**	**230**	**Dwelling Units**	**T=5.45(X)-1.75**	**50%**	**50%**	**Ln(T)=0.98Ln(X)-0.98**	**26%**	**74%**	**Ln(T)=0.96Ln(X)-0.63**	**61%**	**39%**	**1,252**	**626**	**626**	**77**	**20**	**57**	**99**	**60**	**39**	**Equation**

Multifamily Housing (Mid-Rise)	Standard Deviation	2.03		0.19		0.19	
	Number of Studies	27		53		60	
	Average Size	205		207		208	
	R^2	0.77		0.67		0.72	

310 - Hotel

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Hotel	**310**	**168**	**Rooms**	**8.36**	**50%**	**50%**	**0.47**	**59%**	**41%**	**0.6**	**51%**	**49%**	**1,405**	**703**	**702**	**79**	**47**	**32**	**101**	**52**	**49**	**Average**
Hotel	310	168	Rooms	5.31	50%	50%	0.2	59%	41%	0.26	51%	49%	893	447	446	34	21	13	44	23	21	Minimum
Hotel	310	168	Rooms	9.53	50%	50%	0.84	59%	41%	1.06	51%	49%	1,602	801	801	142	84	58	179	92	87	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Hotel	310	168	Rooms	T=11.29(X)-426.97	50%	50%	T=0.50(X)-5.34	59%	41%	T=0.75(X)-26.02	51%	49%	1,470	735	735	79	47	32	100	51	49	Equation

Hotel	Standard Deviation	1.86		0.14		0.22	
	Number of Studies	6		25		28	
	Average Size	146		178		183	
	R^2	0.92		0.85		0.80	

10-ZN-2020
10/22/20

YOUR VISION YOUR VENUE

Old Town Scottsdale
CORPORATE & PRIVATE EVENT DESTINATION



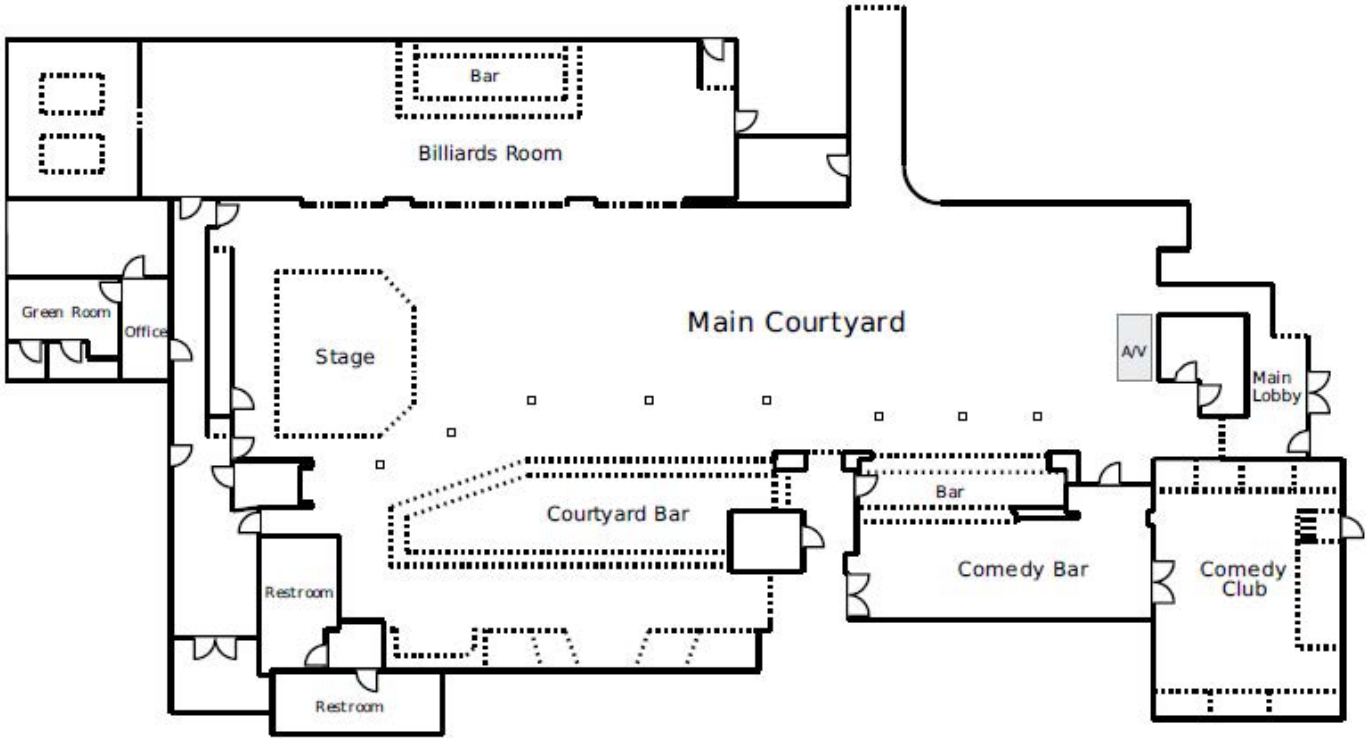

- 38,000 square foot, 4 story premier event Venue located in the heart of Downtown “Old Town” Scottsdale
- 9 unique and flexible event spaces providing the ideal setting for all sized groups up to a 2,000 guest buyout
- Beautiful rooftop lounge and bar overlooking Scottsdale and surrounding mountains
- Dedicated Event Coordinator to support flawless event delivery
- Full service kitchen, award winning Chef and culinary team
- In-house tables, chairs, linens, and service staff
- State-of-the-art audio/visual capabilities including premium audio, video production, and lighting
- In-house Wifi available with secure network access
- 14 customizable flat screen TVs
- Large built-in stage with plug-and-play technology
- The area’s only retractable roof, offering an event setting unlike any other!

THE VENUE
SCOTTSDALE

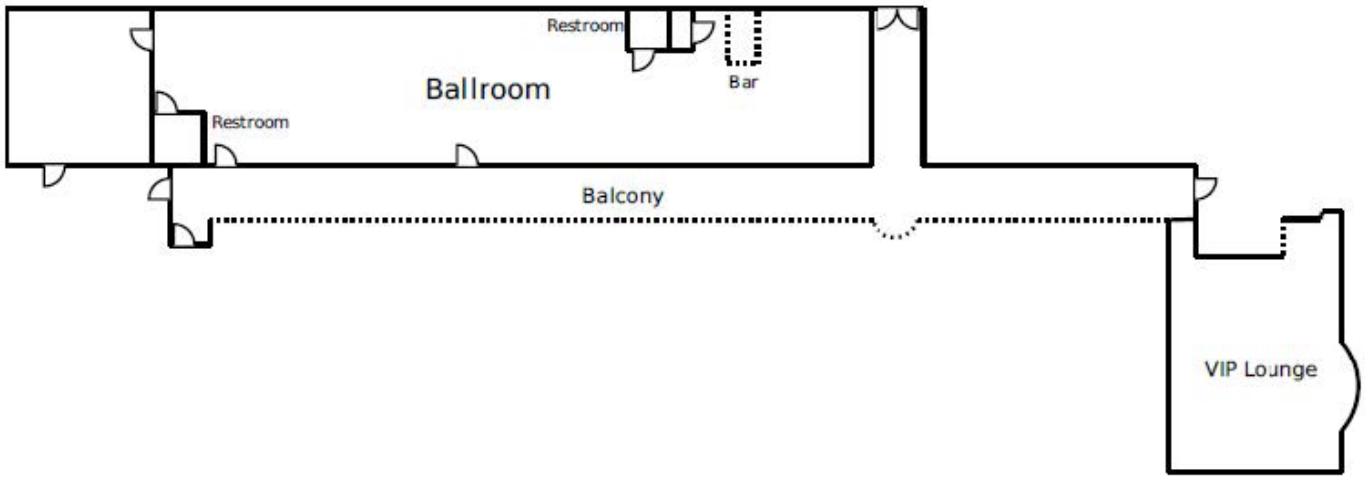
(480) 945-5551
7117 E. 3rd Avenue, Scottsdale, AZ 85251
info@thevenuescottsdale.com
www.thevenuescottsdale.com

Floorplans

First Floor



Second Floor



10-ZN-2020
10/22/20

Dimensions & Capacities

Room Name	Dimensions (ft)	Total Sq Ft	Theater	Schoolroom	Reception	Banquet	Existing
Level 1							
Main Courtyard	108 x 36	3,888	430	260	555	300	⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃
Courtyard Bar	53 x 9.5	504	⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃		75	⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃	40
Billiards Room	105 x 22	2,310	225	135	330	120	⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃
Level 2							
Ballroom	105 x 23	2,415	270	160	345	200	⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃⁃
VIP Lounge	25 x 25	625	70	45	90	40	28

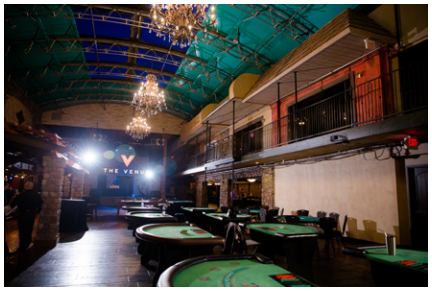
First Floor

Main Courtyard

3,888 sq ft

Elegant, versatile, and functional –the Main Courtyard offers the ideal setting for any event. Complete with a built-in stage, dynamic lighting and premium audio and visual, the Main Courtyard is built for a purpose – to provide an event space that is as visually stunning as it is practical.

Intricate stone, wood, and wrought iron combine to form a truly incredible setting to create an experience worth remembering!



Main Lobby

325 sq ft

An inviting yet functional space, the Main Lobby not only provides a warm welcome to guests entering The Venue, but also features a built-in office with counter space, perfect for staging collateral, ticketing, or event supplies. It is also versatile for an office, providing a centrally located area for operations staff. A few quick steps through the lobby leads into the Main Courtyard, or guests can take the stairs, arriving into The Venue's second level.

Billiards Room

2,310 sq ft

Adjacent to the Main Courtyard is the Billiards Rooms, with its signature built-in bar, billiards tables, and flat screen TVs. This room can be used exclusively to provide a great setting for a reception, or can be used in tandem with the Main Courtyard to extend the capacity and provide additional space for entertainment. Complete with an electric fireplace for added ambience, the Billiards Room is truly an inviting option.

Courtyard Bar

504 sq ft

Arguably one of the most characteristic spaces within The Venue, the Courtyard Bar is designed to inspire the imagination and create conversation amongst guests. With its signature "leafy" canopy and direct line of sight to The Venue's main stage, the Courtyard Bar provides a flexible space that can be used to stage Food and Beverage for events in the Main Courtyard. Or, with built in barstools, booths, and cocktail tables, the bar can stand on its own to provide the perfect space for a reception.

Second Floor

Ballroom

2,415 sq ft

The Ballroom is located on The Venue's second floor, and overlooks the Main Courtyard. The space features elegant chandeliers, rich wood and stone, private restrooms and a dedicated bar. A great choice for a private event of any nature, or open the accordion doors and step onto the balcony for a birdseye view of the main stage and all the action.

VIP Lounge

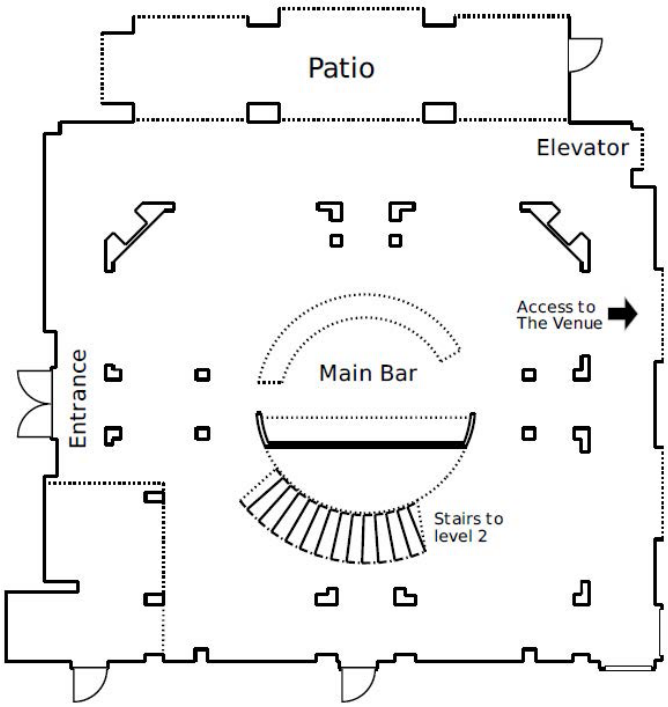
625 sq ft

Natural lighting, upgraded lounge furniture, and a Birdseye view of the Main Courtyard and stage, the "VIP" Lounge is a fitting name for a space that offers this "elevated" event experience. A unique space for small meetings or receptions, or a perfect pairing for an event or entertainment occurring on The Venue's main stage, the VIP Lounge is a versatile option for any event.

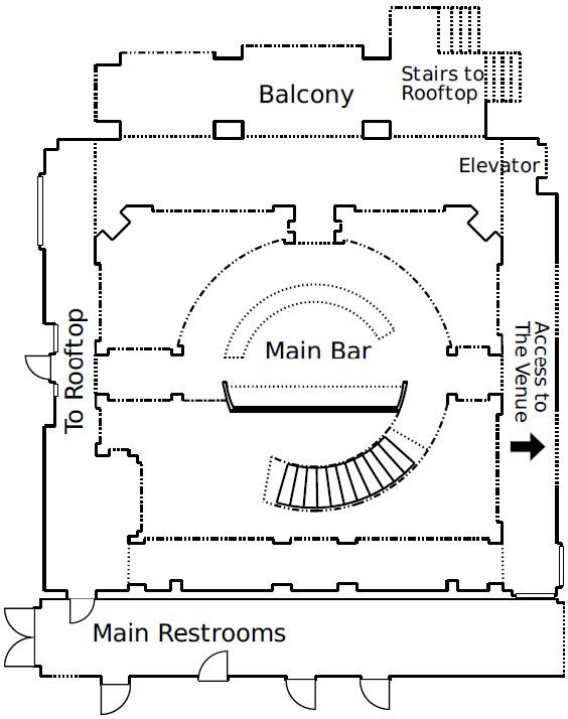
VIRTUEVICE
SCOTTSDALE

VirtueVice Bar & Lounge

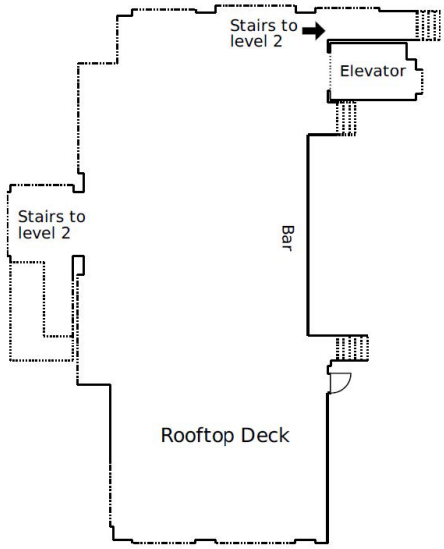
VIRTUEVICE - LEVEL ONE



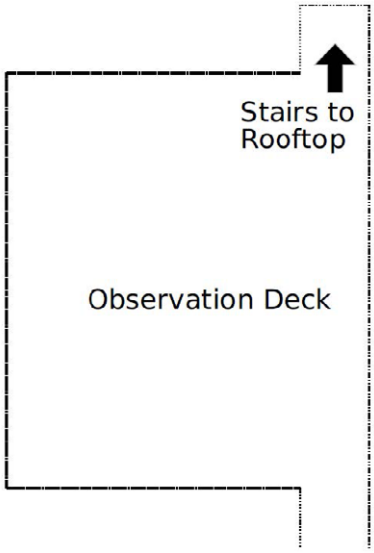
VIRTUEVICE - LEVEL TWO



ROOFTOP DECK



OBSERVATION DECK



10-ZN-2020
~~10/22/20~~

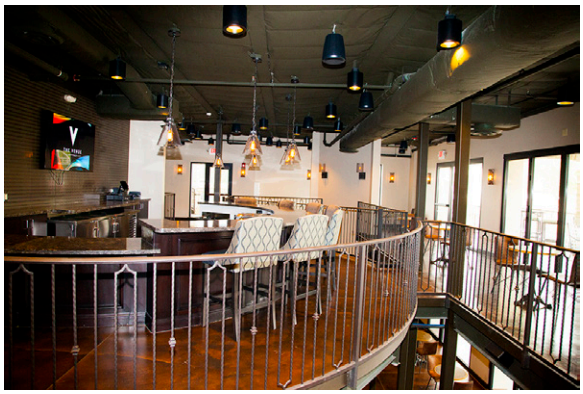
Dimensions & Capacities

Room Name	Dimensions (ft)	Total Sq Ft	Theater	Schoolroom	Reception	Banquet
Level 1						
First Level	108 x 36	1,540	⋯⋯		170	100
First Level - Patio	53 x 9.5	570	⋯⋯		65	⋯⋯
Second Level	105 x 22	1,400	⋯⋯		155	⋯⋯
Second Level Balcony	105 x 23	288	⋯⋯		30	⋯⋯
Rooftop Deck	25 x 25	2,997	330	200	330	210
Observation Deck	25 x 25	609	65	40	70	60

VirtueVice - First Floor

2,000 sq ft

A chic yet elegant feel, the VirtueVice first floor welcomes guests with ample lounge seating, a large circular bar, and natural lighting that leads out to a patio to enjoy the views and vibe of Old Town Scottsdale.



VirtueVice - Second Floor

1,689 sq ft

A lofted bar, access to the Rooftop Deck, and a large balcony overlooking Old Town Scottsdale, the second floor of VirtueVice Bar & Lounge offers it all. Complete with an open-air feel that includes natural lighting and views of the lounge's main floor, VirtueVice's second floor is a great space to take your event to the next level.

Rooftop Deck

2,997 sq ft

The crowning jewel of The Venue, the Rooftop Deck offers a truly elevated event experience. With sweeping views of the surrounding mountains, a large outdoor bar, and custom lounge furniture, the Rooftop Deck offers the perfect setting for an unforgettable event.

Observation Deck

609 sq ft

Providing a birds-eye view of the surrounding valley, the Observation Deck not only provides unparalleled views of the city but also overlooks the Rooftop Deck. Whether a separate event or used in tandem with the Rooftop, this is the perfect place for a more intimate, VIP experience while enjoying all the desert has to offer!

YOUR VISION. YOUR VENUE.

THE VENUE
SCOTTSDALE

VIRTUEVICE
SCOTTSDALE

Appendix H – MAG Socioeconomic Projections

H

10-ZN-2020
10/22/20

Socioeconomic Projections

Population and Employment

by Municipal Planning Area, Jurisdiction, and Regional Analysis Zone

June 2019

MARICOPA ASSOCIATION of GOVERNMENTS

302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003
(602) 254-6300

Maricopa Association of Governments
Table 1: Total Population by Municipal Planning Area
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

Municipal Planning Area	Total Population					
	2018	2020	2030	2040	2050	2055
Apache Junction	59,000	60,800	70,000	92,000	117,100	132,600
Avondale	84,200	86,700	101,800	111,900	119,000	122,100
Buckeye	89,000	97,700	186,600	305,400	409,900	459,300
Carefree	3,700	3,800	4,100	4,200	4,200	4,300
Cave Creek	5,900	6,000	6,500	7,000	7,200	7,300
Chandler	270,300	279,500	309,100	321,100	329,000	332,400
El Mirage	34,300	35,100	36,500	36,900	37,200	37,200
Florence	79,400	85,500	120,300	160,500	209,900	231,400
Fort McDowell Yavapai Native Nation	1,000	1,100	1,100	1,100	1,100	1,100
Fountain Hills	24,000	24,700	26,200	26,600	26,900	27,000
Gila Bend	2,500	2,700	3,700	3,700	3,900	4,200
Gila River Indian Native Nation	12,000	12,200	12,300	12,300	12,300	12,300
Gilbert	256,500	265,900	293,500	308,800	318,100	321,400
Glendale	272,200	279,100	306,400	323,400	333,200	338,800
Goodyear	87,300	92,100	140,300	192,200	228,600	247,900
Guadalupe	6,300	6,400	6,700	6,800	6,800	6,800
Litchfield Park	13,300	14,000	15,400	15,700	16,100	16,400
Maricopa	59,800	67,000	90,800	106,400	121,600	128,900
Mesa	533,400	552,800	607,500	649,400	680,000	690,300
Paradise Valley	14,000	14,100	14,700	15,100	15,200	15,300
Peoria	188,500	196,600	232,400	273,700	312,600	329,900
Phoenix	1,653,500	1,697,700	1,881,900	2,019,300	2,117,400	2,155,300
Queen Creek	58,700	65,000	90,900	109,000	120,900	128,500
Salt River Pima-Maricopa Native Nation	6,800	6,100	5,700	5,800	5,800	5,800
Scottsdale	245,500	253,800	281,900	299,400	311,400	316,700
Surprise	144,000	150,300	216,700	307,500	383,300	417,200
Tempe	185,300	190,000	217,100	247,000	272,400	282,200
Tolleson	7,000	7,100	8,600	10,300	11,400	11,800
Unicorporated Pinal County	66,800	68,600	79,100	93,700	110,800	122,700
Unincorporated Maricopa County	97,900	101,200	110,500	116,800	137,000	152,600
Wickenburg	8,200	8,500	9,400	9,500	9,800	10,000
Youngtown	6,600	6,800	7,300	7,700	7,800	7,800

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Maricopa Association of Governments
Table 2: Total Employment by Municipal Planning Area
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

	Total Employment					
Municipal Planning Area	2018	2020	2030	2040	2050	2055
Apache Junction	7,800	8,800	13,100	17,800	26,400	30,500
Avondale	22,400	23,200	30,400	36,200	42,800	45,400
Buckeye	21,600	26,900	42,900	64,500	98,000	128,900
Carefree	1,600	1,600	2,100	2,400	2,500	2,600
Cave Creek	2,200	2,400	2,700	2,900	3,000	3,200
Chandler	145,500	154,700	182,300	202,100	215,200	222,000
El Mirage	5,000	5,100	6,500	7,200	8,000	8,900
Florence	11,000	12,100	17,000	26,400	40,900	51,100
Fort McDowell Yavapai Native Nation	2,200	2,400	2,400	2,500	2,600	2,600
Fountain Hills	7,100	7,700	9,100	9,800	10,200	10,300
Gila Bend	900	900	1,200	1,300	1,500	1,700
Gila River Indian Native Nation	10,500	10,700	11,500	13,100	14,800	15,500
Gilbert	92,800	98,600	120,200	135,900	146,600	152,200
Glendale	103,800	111,400	134,000	153,100	168,900	175,900
Goodyear	35,900	37,200	50,600	69,000	92,600	102,500
Guadalupe	1,300	1,300	1,500	1,600	1,600	1,600
Litchfield Park	3,800	4,400	5,200	5,900	6,400	6,700
Maricopa	6,200	7,100	11,400	18,200	28,200	33,500
Mesa	197,200	205,900	249,000	296,000	333,700	351,000
Paradise Valley	6,300	6,300	6,800	7,100	7,500	7,700
Peoria	58,200	62,400	73,100	84,800	91,900	96,300
Phoenix	897,700	937,600	1,084,000	1,189,200	1,264,900	1,298,900
Queen Creek	15,500	16,400	19,900	24,000	28,900	31,100
Salt River Pima-Maricopa Native Nation	21,200	22,900	28,200	33,900	35,900	36,400
Scottsdale	197,200	207,400	235,500	252,000	261,700	267,000
Surprise	33,600	36,400	59,500	86,400	113,400	130,500
Tempe	190,000	200,500	231,200	257,700	280,000	290,900
Tolleson	17,700	18,300	21,200	23,900	26,000	26,700
Unicorporated Pinal County	3,500	3,900	6,000	8,900	13,500	17,800
Unincorporated Maricopa County	28,600	31,500	35,500	41,100	51,200	58,400
Wickenburg	4,400	4,600	5,200	5,600	6,000	6,200
Youngtown	1,500	1,800	2,200	2,700	2,800	3,100

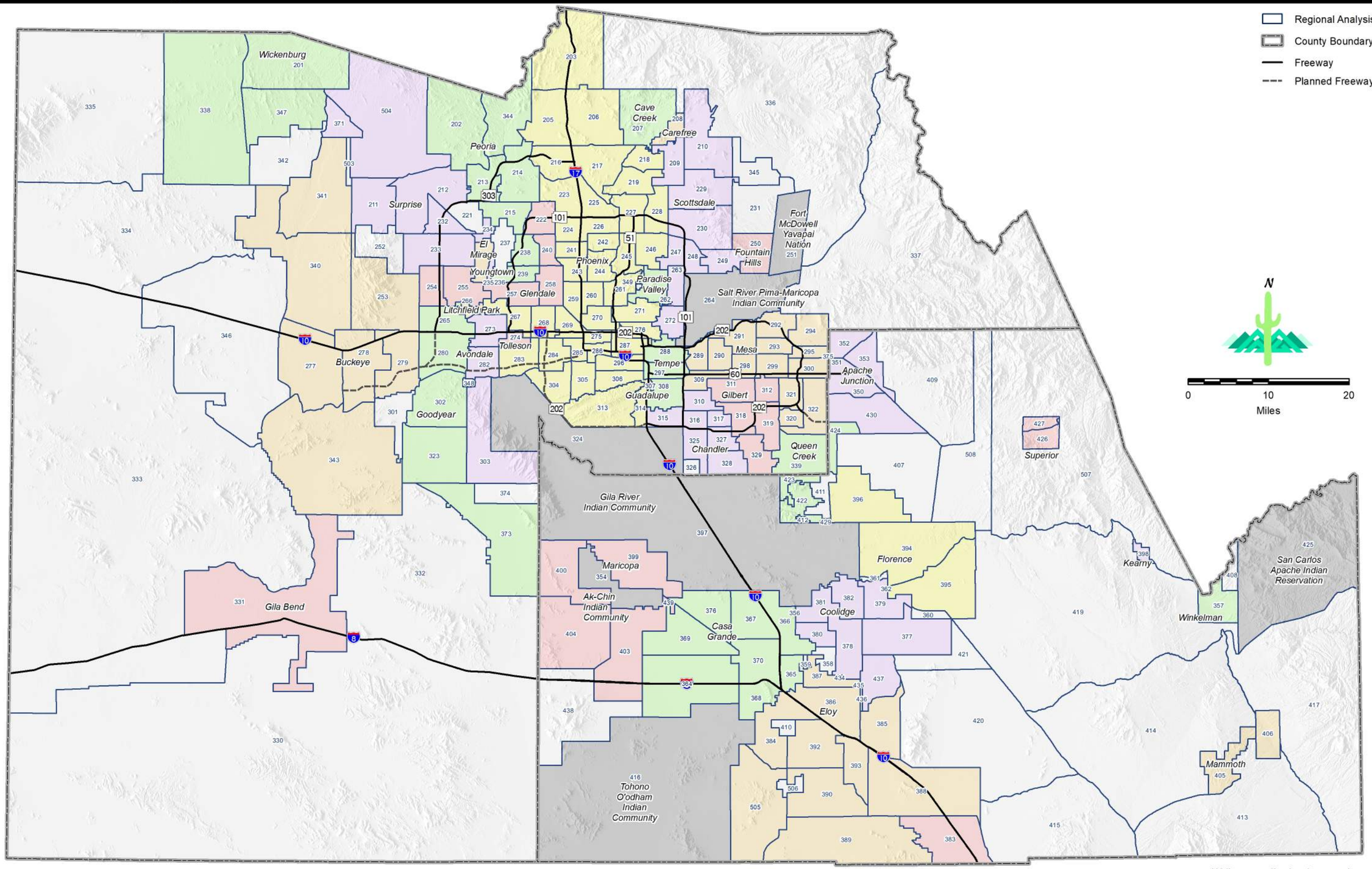
Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Regional Analysis Zones (RAZ), 2019
Maricopa and Pinal Counties, Arizona

MARICOPA ASSOCIATION of GOVERNMENTS



Source: MAG and the MAG member agencies, CAG and the CAG member agencies

Date: May 2019

10-ZN-2020

10/22/20

Maricopa Association of Governments
Table 4: Population by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

RAZ	County	Total Population					
		2018	2020	2030	2040	2050	2055
	Total	1,653,469	1,697,722	1,881,876	2,019,269	2,117,427	2,155,333
Queen Creek MPA							
339	Maricopa County	49,781	53,579	72,670	82,172	87,155	89,586
422	Pinal County	13	13	300	437	564	638
423	Pinal County	1,286	1,410	3,714	6,136	7,457	8,686
424	Pinal County	7,642	10,003	14,200	20,287	25,759	29,586
	Total	58,722	65,005	90,884	109,032	120,935	128,496
Salt River Pima-Maricopa Native Nation MPA							
264	Maricopa County	6,798	6,073	5,708	5,820	5,820	5,820
	Total	6,798	6,073	5,708	5,820	5,820	5,820
Scottsdale MPA							
209	Maricopa County	12,188	12,605	13,961	14,512	14,984	15,255
210	Maricopa County	6,013	6,591	10,463	12,339	13,491	13,961
229	Maricopa County	20,542	21,269	25,221	27,864	29,698	30,229
230	Maricopa County	32,232	33,028	38,882	43,580	46,789	48,510
247	Maricopa County	13,549	13,858	15,420	16,342	16,871	17,019
248	Maricopa County	36,178	37,227	38,468	38,807	39,048	39,143
249	Maricopa County	20,903	21,410	22,543	22,768	22,839	22,848
263	Maricopa County	34,908	35,814	37,002	37,252	37,584	37,773
272	Maricopa County	68,987	71,970	79,910	85,942	90,054	91,927
	Total	245,500	253,772	281,870	299,406	311,358	316,665
Surprise MPA							
211	Maricopa County	863	884	4,471	23,112	36,704	40,737
212	Maricopa County	10,265	11,365	37,615	69,296	85,862	93,806
232	Maricopa County	29,296	30,200	34,506	37,144	37,927	38,313
233	Maricopa County	87,834	91,276	111,822	119,384	123,777	126,523
234	Maricopa County	8,969	9,467	10,460	10,878	11,335	11,488
371	Maricopa County	342	344	434	734	2,584	4,316
504	Maricopa County	6,460	6,718	17,425	46,912	85,127	102,004
	Total	144,029	150,254	216,733	307,460	383,316	417,187
Tempe MPA							
288	Maricopa County	73,442	76,444	100,651	129,202	150,094	157,410
297	Maricopa County	53,146	54,092	56,336	57,432	61,780	64,273
308	Maricopa County	58,756	59,473	60,120	60,348	60,476	60,559
	Total	185,344	190,009	217,107	246,982	272,350	282,242

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Maricopa Association of Governments
Table 5: Employment by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

RAZ	County	Total Employment					
		2018	2020	2030	2040	2050	2055
	Total	897,713	937,622	1,083,980	1,189,209	1,264,941	1,298,903
Queen Creek MPA							
339	Maricopa County	13,933	14,696	16,482	18,825	20,733	21,151
422	Pinal County	9	8	18	22	31	39
423	Pinal County	89	109	351	620	1,068	1,639
424	Pinal County	1,435	1,576	3,073	4,571	7,020	8,309
	Total	15,466	16,389	19,924	24,038	28,852	31,138
Salt River Pima-Maricopa Native Nation MPA							
264	Maricopa County	21,160	22,869	28,215	33,871	35,903	36,442
	Total	21,160	22,869	28,215	33,871	35,903	36,442
Scottsdale MPA							
209	Maricopa County	4,488	4,659	4,851	5,174	5,161	5,344
210	Maricopa County	2,386	3,018	2,759	3,091	3,139	3,191
229	Maricopa County	9,604	10,005	11,231	11,962	12,193	12,896
230	Maricopa County	23,272	24,919	32,112	36,968	40,834	42,136
247	Maricopa County	44,254	47,089	52,652	54,822	55,679	56,105
248	Maricopa County	29,603	30,901	33,285	34,001	34,234	34,548
249	Maricopa County	7,409	7,692	8,179	8,684	8,906	9,045
263	Maricopa County	26,351	26,961	28,903	30,245	30,919	31,381
272	Maricopa County	49,833	52,185	61,540	67,039	70,676	72,330
	Total	197,200	207,429	235,512	251,986	261,741	266,976
Surprise MPA							
211	Maricopa County	60	53	1,560	3,172	4,766	7,017
212	Maricopa County	2,008	2,338	5,821	9,965	13,362	15,709
232	Maricopa County	8,349	9,228	11,297	12,187	12,875	13,116
233	Maricopa County	19,943	21,079	32,661	44,032	52,007	57,402
234	Maricopa County	2,588	2,711	3,354	3,922	4,239	4,386
371	Maricopa County	18	20	327	423	2,381	2,937
504	Maricopa County	677	1,020	4,460	12,695	23,763	29,886
	Total	33,643	36,449	59,480	86,396	113,393	130,453
Tempe MPA							
288	Maricopa County	88,927	94,229	111,010	128,894	144,714	152,703
297	Maricopa County	44,730	47,069	53,149	57,125	60,725	62,552
308	Maricopa County	56,380	59,208	67,052	71,701	74,542	75,596
	Total	190,037	200,506	231,211	257,720	279,981	290,851

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Appendix I – Year 2024 No Build Capacity Analysis

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	16	561	23	31	586
Future Vol, veh/h	5	16	561	23	31	586
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	17	610	25	34	637

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	946	318	0	0	635	0
Stage 1	623	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*712	*871	-	-	*1304	-
Stage 1	*789	-	-	-	-	-
Stage 2	*670	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*694	*871	-	-	*1304	-
Mov Cap-2 Maneuver	*568	-	-	-	-	-
Stage 1	*789	-	-	-	-	-
Stage 2	*653	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	773	* 1304	-
HCM Lane V/C Ratio	-	-	0.03	0.026	-
HCM Control Delay (s)	-	-	9.8	7.8	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

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

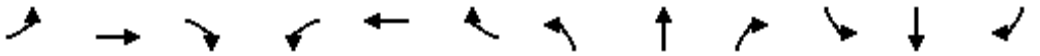
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	51	31	11	16	3
Future Vol, veh/h	11	51	31	11	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	55	34	12	17	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	119	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1567	-	-	-	889	1046
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1567	-	-	-	882	1046
Mov Cap-2 Maneuver	-	-	-	-	882	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	904
HCM Lane V/C Ratio	0.008	-	-	-	0.023
HCM Control Delay (s)	7.3	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	17	10	22	5	52	61	468	28	63	400	19
Future Volume (veh/h)	4	17	10	22	5	52	61	468	28	63	400	19
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	18	11	24	5	57	66	509	30	68	435	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	156	95	299	19	212	689	2238	132	689	2332	1040
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	1.00	1.00	1.00	0.66	0.66	0.66
Sat Flow, veh/h	1340	1087	664	1381	129	1475	935	3410	201	866	3554	1585
Grp Volume(v), veh/h	4	0	29	24	0	62	66	265	274	68	435	21
Grp Sat Flow(s),veh/h/ln	1340	0	1751	1381	0	1605	935	1777	1834	866	1777	1585
Q Serve(g_s), s	0.2	0.0	0.9	0.9	0.0	2.1	0.3	0.0	0.0	1.8	2.9	0.3
Cycle Q Clear(g_c), s	2.2	0.0	0.9	1.8	0.0	2.1	3.2	0.0	0.0	1.8	2.9	0.3
Prop In Lane	1.00		0.38	1.00		0.92	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	267	0	252	299	0	231	689	1166	1204	689	2332	1040
V/C Ratio(X)	0.02	0.00	0.12	0.08	0.00	0.27	0.10	0.23	0.23	0.10	0.19	0.02
Avail Cap(c_a), veh/h	655	0	759	698	0	695	689	1166	1204	689	2332	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	22.4	23.1	0.0	22.9	0.1	0.0	0.0	3.8	4.0	3.6
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.4	0.4	0.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.3	0.0	0.8	0.0	0.1	0.1	0.3	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	22.4	23.2	0.0	23.1	0.4	0.4	0.4	4.1	4.2	3.6
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		33			86			605			524	
Approach Delay, s/veh		22.6			23.1			0.4			4.2	
Approach LOS		C			C			A			A	

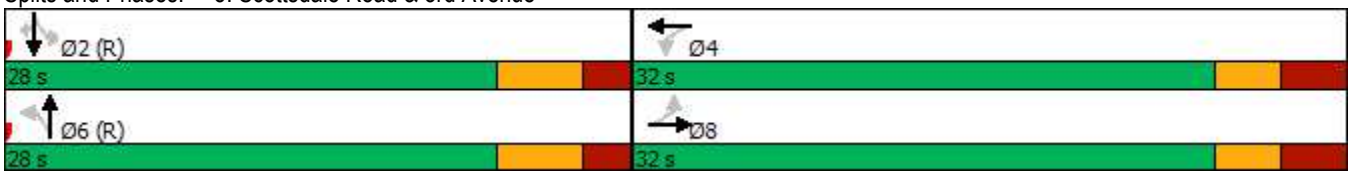
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.4		14.6		45.4		14.6				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		4.9		4.1		5.2		4.2				
Green Ext Time (p_c), s		1.2		0.2		1.2		0.1				

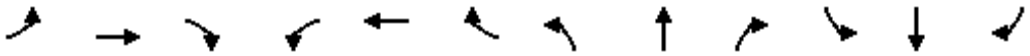
Intersection Summary												
HCM 6th Ctrl Delay			4.1									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	35	3	35	3
End Time (s)	3	35	3	35
Yield/Force Off (s)	57	29	57	29
Yield/Force Off 170(s)	47	10	47	10
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 35 (58%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	676	77	61	600	37	73	379	15	38	458	85
Future Volume (veh/h)	188	676	77	61	600	37	73	379	15	38	458	85
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	204	735	84	66	652	40	79	412	16	41	498	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	1321	589	128	1035	63	234	1119	43	160	1206	218
Arrive On Green	0.10	0.37	0.37	0.02	0.20	0.20	0.13	0.32	0.32	0.09	0.28	0.28
Sat Flow, veh/h	3456	3554	1585	3456	3401	208	1781	3488	135	1781	4347	786
Grp Volume(v), veh/h	204	735	84	66	340	352	79	209	219	41	388	202
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1833	1781	1777	1846	1781	1702	1729
Q Serve(g_s), s	6.8	19.7	2.7	2.3	21.0	21.0	4.8	10.9	10.9	2.6	11.1	11.5
Cycle Q Clear(g_c), s	6.8	19.7	2.7	2.3	21.0	21.0	4.8	10.9	10.9	2.6	11.1	11.5
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.07	1.00		0.45
Lane Grp Cap(c), veh/h	353	1321	589	128	540	557	234	570	592	160	945	480
V/C Ratio(X)	0.58	0.56	0.14	0.52	0.63	0.63	0.34	0.37	0.37	0.26	0.41	0.42
Avail Cap(c_a), veh/h	423	1321	589	196	540	557	234	570	592	160	945	480
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	29.9	10.4	57.4	41.6	41.6	47.4	31.4	31.4	50.9	35.3	35.5
Incr Delay (d2), s/veh	0.6	1.7	0.5	1.1	5.2	5.1	0.3	1.8	1.8	0.3	1.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.6	1.6	1.0	10.3	10.7	2.2	4.9	5.1	1.2	4.8	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	31.6	10.9	58.6	46.8	46.7	47.7	33.2	33.2	51.2	36.7	38.2
LnGrp LOS	D	C	B	E	D	D	D	C	C	D	D	D
Approach Vol, veh/h		1023			758			507			631	
Approach Delay, s/veh		33.9			47.8			35.4			38.1	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	39.0	17.6	42.0	16.4	44.0	9.6	50.0
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 13	33.3	14.7	* 37	* 8.4	38.5	* 6.8	* 45
Max Q Clear Time (g_c+I1), s	6.8	13.5	8.8	23.0	4.6	12.9	4.3	21.7
Green Ext Time (p_c), s	0.0	1.3	0.2	1.3	0.0	0.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

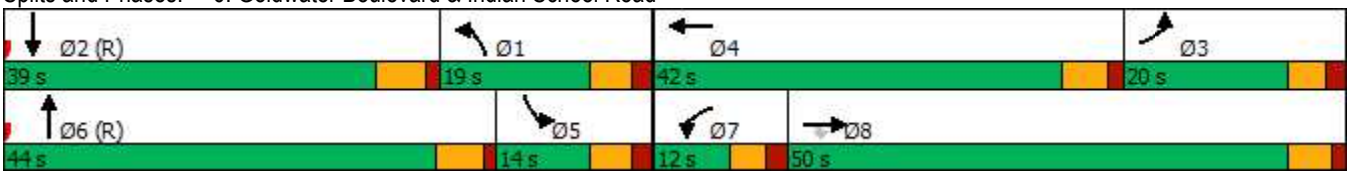
Notes

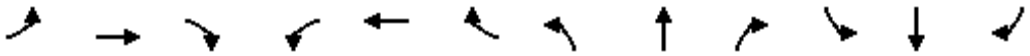
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	19	39	20	42	14	44	12	50
Maximum Split (%)	15.8%	32.5%	16.7%	35.0%	11.7%	36.7%	10.0%	41.7%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	12	112	70	56	12	70	82
End Time (s)	70	51	12	112	70	56	82	12
Yield/Force Off (s)	64.4	45.3	6.7	106.5	64.4	50.5	76.8	6.6
Yield/Force Off 170(s)	64.4	21.3	6.7	84.5	64.4	22.5	76.8	104.6
Local Start Time (s)	39	0	100	58	44	0	58	70
Local Yield (s)	52.4	33.3	114.7	94.5	52.4	38.5	64.8	114.6
Local Yield 170(s)	52.4	9.3	114.7	72.5	52.4	10.5	64.8	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 12 (10%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	655	13	70	700	34	5	5	10	3	5	15
Future Volume (veh/h)	29	655	13	70	700	34	5	5	10	3	5	15
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	32	712	14	76	761	37	5	5	11	3	5	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	448	2370	47	483	2294	111	112	117	211	64	106	271
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	681	3565	70	728	3449	168	299	470	846	120	425	1089
Grp Volume(v), veh/h	32	355	371	76	392	406	21	0	0	24	0	0
Grp Sat Flow(s),veh/h/ln	681	1777	1858	728	1777	1840	1615	0	0	1634	0	0
Q Serve(g_s), s	2.5	10.0	10.0	5.9	11.4	11.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	13.9	10.0	10.0	15.9	11.4	11.4	1.1	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.09	0.24		0.52	0.12		0.67
Lane Grp Cap(c), veh/h	448	1182	1235	483	1182	1224	440	0	0	441	0	0
V/C Ratio(X)	0.07	0.30	0.30	0.16	0.33	0.33	0.05	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	448	1182	1235	483	1182	1224	440	0	0	441	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)	0.87	0.87	0.87	0.82	0.82	0.82	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.6	8.4	8.4	11.7	8.6	8.6	34.2	0.0	0.0	34.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.5	0.6	0.6	0.6	0.2	0.0	0.0	0.2	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(50%),veh/ln	0.4	3.8	3.9	1.0	4.3	4.4	0.5	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	9.0	9.0	12.3	9.3	9.2	34.5	0.0	0.0	34.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		758			874			21			24	
Approach Delay, s/veh		9.1			9.5			34.5			34.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.0		85.0		35.0		85.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		29.9		* 80		29.9		* 80				
Max Q Clear Time (g_c+I1), s		3.3		17.9		3.1		15.9				
Green Ext Time (p_c), s		0.1		3.8		0.0		3.2				

Intersection Summary		
HCM 6th Ctrl Delay		10.0
HCM 6th LOS		A

Notes

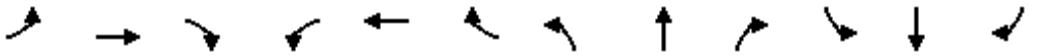
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	35	85	35	85
Maximum Split (%)	29.2%	70.8%	29.2%	70.8%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	6	41	6	41
End Time (s)	41	6	41	6
Yield/Force Off (s)	35.9	0.8	35.9	0.8
Yield/Force Off 170(s)	18.9	113.8	18.9	112.8
Local Start Time (s)	0	35	0	35
Local Yield (s)	29.9	114.8	29.9	114.8
Local Yield 170(s)	12.9	107.8	12.9	106.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 7: Marshall Way & Indian School Road



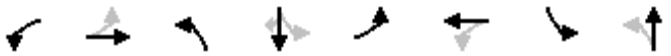
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	555	56	5	782	108	60	360	74	80	285	60
Future Volume (veh/h)	94	555	56	5	782	108	60	360	74	80	285	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	102	603	61	5	850	117	65	391	80	87	310	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	1515	153	494	1381	190	306	751	152	269	936	417
Arrive On Green	0.17	0.93	0.93	0.06	0.44	0.44	0.04	0.25	0.25	0.03	0.18	0.18
Sat Flow, veh/h	1781	3259	329	1781	3138	432	1781	2943	597	1781	3554	1585
Grp Volume(v), veh/h	102	328	336	5	481	486	65	235	236	87	310	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1793	1781	1777	1763	1781	1777	1585
Q Serve(g_s), s	0.0	2.5	2.5	0.0	25.0	25.0	0.0	13.6	13.8	0.0	9.2	4.2
Cycle Q Clear(g_c), s	0.0	2.5	2.5	0.0	25.0	25.0	0.0	13.6	13.8	0.0	9.2	4.2
Prop In Lane	1.00		0.18	1.00		0.24	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	350	826	842	494	782	789	306	453	450	269	936	417
V/C Ratio(X)	0.29	0.40	0.40	0.01	0.62	0.62	0.21	0.52	0.53	0.32	0.33	0.16
Avail Cap(c_a), veh/h	350	826	842	494	782	789	342	453	450	306	936	417
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	0.96	0.96	0.96	0.92	0.92	0.92	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	29.9	2.3	2.3	16.2	25.8	25.8	39.5	38.4	38.5	44.8	40.2	38.1
Incr Delay (d2), s/veh	0.2	1.4	1.4	0.0	3.3	3.3	0.1	4.2	4.4	0.3	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	1.0	1.0	0.1	11.0	11.1	1.6	6.5	6.6	2.4	4.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	3.7	3.7	16.2	29.1	29.1	39.6	42.6	42.8	45.0	41.1	38.9
LnGrp LOS	C	A	A	B	C	C	D	D	D	D	D	D
Approach Vol, veh/h		766			972			536			462	
Approach Delay, s/veh		7.2			29.1			42.3			41.5	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	61.0	9.5	37.0	15.5	58.0	10.5	36.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 5	55.8	* 6.9	31.6	* 8	52.8	* 7.9	30.6
Max Q Clear Time (g_c+I1), s	2.0	4.5	2.0	11.2	2.0	27.0	2.0	15.8
Green Ext Time (p_c), s	0.0	1.3	0.0	1.4	0.1	2.1	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

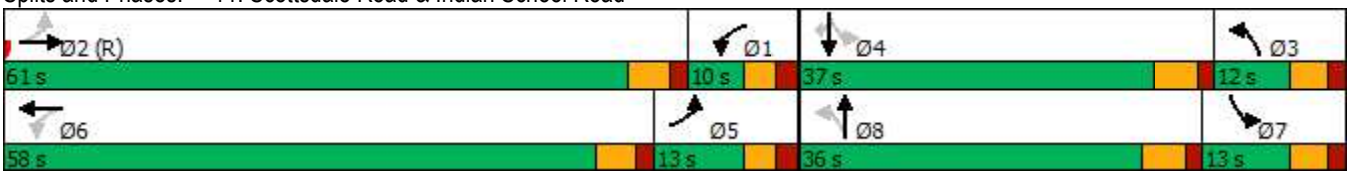
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

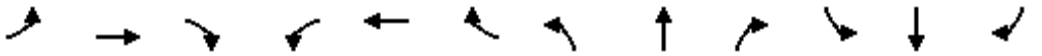


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	10	61	12	37	13	58	13	36
Maximum Split (%)	8.3%	50.8%	10.0%	30.8%	10.8%	48.3%	10.8%	30.0%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	61	0	108	71	58	0	107	71
End Time (s)	71	61	0	108	71	58	0	107
Yield/Force Off (s)	66	55.8	114.9	102.6	66	52.8	114.9	101.6
Yield/Force Off 170(s)	66	33.8	114.9	82.6	66	30.8	114.9	81.6
Local Start Time (s)	61	0	108	71	58	0	107	71
Local Yield (s)	66	55.8	114.9	102.6	66	52.8	114.9	101.6
Local Yield 170(s)	66	33.8	114.9	82.6	66	30.8	114.9	81.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	778	11	44	1000	142	3	2	17	41	0	52
Future Volume (veh/h)	123	778	11	44	1000	142	3	2	17	41	0	52
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	134	846	12	48	1087	154	3	2	18	45	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	406	3052	43	608	2660	376	39	14	72	145	0	91
Arrive On Green	1.00	1.00	1.00	0.85	0.85	0.85	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	448	3587	51	644	3126	442	97	252	1257	1483	0	1585
Grp Volume(v), veh/h	134	419	439	48	617	624	23	0	0	45	0	57
Grp Sat Flow(s),veh/h/ln	448	1777	1861	644	1777	1791	1606	0	0	1483	0	1585
Q Serve(g_s), s	5.2	0.0	0.0	1.4	9.5	9.6	0.0	0.0	0.0	1.7	0.0	4.2
Cycle Q Clear(g_c), s	14.7	0.0	0.0	1.4	9.5	9.6	1.6	0.0	0.0	3.3	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.25	0.13		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	406	1512	1584	608	1512	1524	126	0	0	145	0	91
V/C Ratio(X)	0.33	0.28	0.28	0.08	0.41	0.41	0.18	0.00	0.00	0.31	0.00	0.63
Avail Cap(c_a), veh/h	406	1512	1584	608	1512	1524	449	0	0	425	0	409
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.56	0.56	0.56	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	1.4	2.0	2.0	54.1	0.0	0.0	54.8	0.0	55.3
Incr Delay (d2), s/veh	2.0	0.4	0.4	0.1	0.5	0.5	0.3	0.0	0.0	0.4	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.2	0.1	1.9	2.0	0.7	0.0	0.0	1.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.7	0.4	0.4	1.6	2.5	2.5	54.3	0.0	0.0	55.2	0.0	57.9
LnGrp LOS	A	A	A	A	A	A	D	A	A	E	A	E
Approach Vol, veh/h		992			1289			23			102	
Approach Delay, s/veh		0.7			2.5			54.3			56.7	
Approach LOS		A			A			D			E	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		107.5		12.5		107.5		12.5				
Change Period (Y+Rc), s		* 5.4		5.6		* 5.4		* 5.6				
Max Green Setting (Gmax), s		* 78		31.0		* 78		* 32				
Max Q Clear Time (g_c+I1), s		16.7		6.2		11.6		3.6				
Green Ext Time (p_c), s		5.7		0.2		6.8		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		4.5
HCM 6th LOS		A

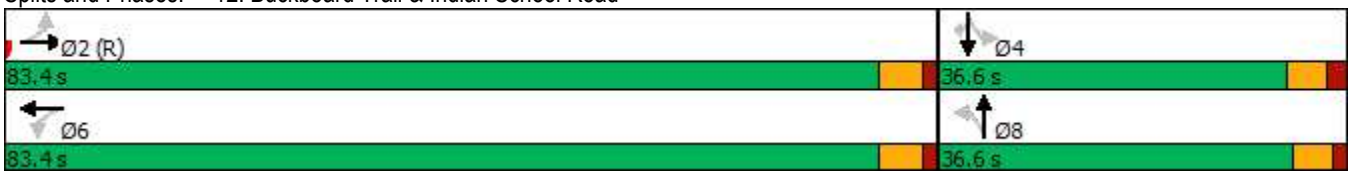
Notes

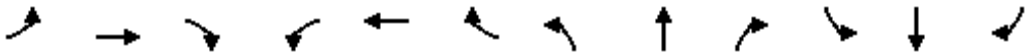
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	83.4	36.6	83.4	36.6
Maximum Split (%)	69.5%	30.5%	69.5%	30.5%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	19	102.4	19	102.4
End Time (s)	102.4	19	102.4	19
Yield/Force Off (s)	97	13.4	97	14
Yield/Force Off 170(s)	82	109.4	82	110
Local Start Time (s)	0	83.4	0	83.4
Local Yield (s)	78	114.4	78	115
Local Yield 170(s)	63	90.4	63	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 19 (16%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	607	36	324	1153	210	63	383	187	90	147	18
Future Volume (veh/h)	90	607	36	324	1153	210	63	383	187	90	147	18
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	98	660	39	352	1253	228	68	416	203	98	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	1108	65	477	1605	716	230	814	363	363	653	80
Arrive On Green	0.05	0.43	0.43	0.17	0.45	0.45	0.13	0.23	0.23	0.10	0.21	0.21
Sat Flow, veh/h	1781	3410	201	1781	3554	1585	1781	3554	1585	3456	3184	392
Grp Volume(v), veh/h	98	344	355	352	1253	228	68	416	203	98	88	92
Grp Sat Flow(s),veh/h/ln	1781	1777	1834	1781	1777	1585	1781	1777	1585	1728	1777	1800
Q Serve(g_s), s	1.7	17.7	17.8	9.5	35.8	11.1	4.1	12.3	13.6	3.1	5.0	5.1
Cycle Q Clear(g_c), s	1.7	17.7	17.8	9.5	35.8	11.1	4.1	12.3	13.6	3.1	5.0	5.1
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	141	577	596	477	1605	716	230	814	363	363	364	369
V/C Ratio(X)	0.70	0.60	0.60	0.74	0.78	0.32	0.30	0.51	0.56	0.27	0.24	0.25
Avail Cap(c_a), veh/h	219	577	596	555	1605	716	230	814	363	363	364	369
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	28.0	28.0	39.9	27.9	21.1	47.3	40.4	40.9	49.5	39.9	40.0
Incr Delay (d2), s/veh	2.2	4.3	4.2	3.4	3.8	1.2	0.3	2.3	6.1	0.1	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.5	7.8	9.8	15.5	4.3	1.9	5.6	5.9	1.4	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	32.4	32.3	43.3	31.7	22.2	47.6	42.7	47.0	49.6	41.5	41.6
LnGrp LOS	E	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		797			1833			687			278	
Approach Delay, s/veh		35.3			32.8			44.4			44.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	29.7	10.1	59.4	17.9	32.6	25.3	44.2
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 10	* 25	* 10	* 54	* 7.3	* 28	* 25	* 39
Max Q Clear Time (g_c+I1), s	6.1	7.1	3.7	37.8	5.1	15.6	11.5	19.8
Green Ext Time (p_c), s	0.0	0.1	0.1	1.7	0.0	0.4	0.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

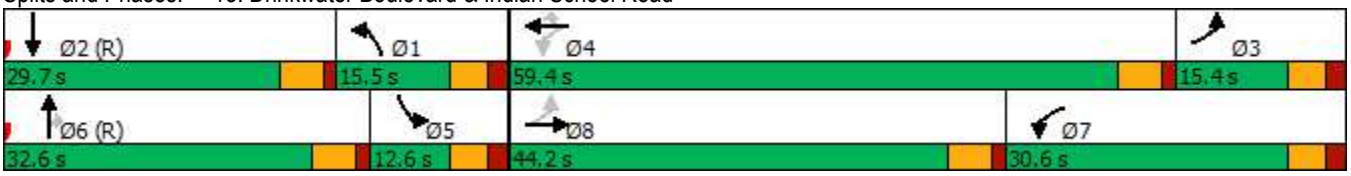
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	15.5	29.7	15.4	59.4	12.6	32.6	30.6	44.2
Maximum Split (%)	12.9%	24.8%	12.8%	49.5%	10.5%	27.2%	25.5%	36.8%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	28.7	119	103.6	44.2	31.6	119	88.4	44.2
End Time (s)	44.2	28.7	119	103.6	44.2	31.6	119	88.4
Yield/Force Off (s)	38.9	23.6	113.7	98.4	38.9	26.5	113.7	83.2
Yield/Force Off 170(s)	38.9	3.6	113.7	79.4	38.9	6.5	113.7	62.2
Local Start Time (s)	29.7	0	104.6	45.2	32.6	0	89.4	45.2
Local Yield (s)	39.9	24.6	114.7	99.4	39.9	27.5	114.7	84.2
Local Yield 170(s)	39.9	4.6	114.7	80.4	39.9	7.5	114.7	63.2

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 119 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	81	656	15	18	786
Future Vol, veh/h	30	81	656	15	18	786
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	88	713	16	20	854

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1103	365	0	0	729	0
Stage 1	721	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*730	*820	-	-	*1227	-
Stage 1	*742	-	-	-	-	-
Stage 2	*624	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*718	*820	-	-	*1227	-
Mov Cap-2 Maneuver	*684	-	-	-	-	-
Stage 1	*742	-	-	-	-	-
Stage 2	*614	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	778	* 1227	-
HCM Lane V/C Ratio	-	-	0.155	0.016	-
HCM Control Delay (s)	-	-	10.5	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

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

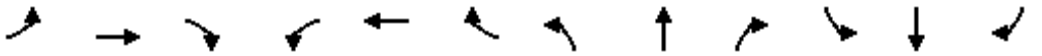
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	56	90	17	21	24
Future Vol, veh/h	25	56	90	17	21	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	61	98	18	23	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	116	0	-	0	222	107
Stage 1	-	-	-	-	107	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1493	-	-	-	806	1003
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1493	-	-	-	790	1003
Mov Cap-2 Maneuver	-	-	-	-	790	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1493	-	-	-	891
HCM Lane V/C Ratio	0.018	-	-	-	0.055
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	26	101	63	52	189	60	616	28	34	823	51
Future Volume (veh/h)	56	26	101	63	52	189	60	616	28	34	823	51
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	61	28	110	68	57	205	65	670	30	37	895	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	79	312	331	85	307	364	1943	87	538	1993	889
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	1.00	1.00	1.00	0.56	0.56	0.56
Sat Flow, veh/h	1117	332	1304	1251	357	1283	590	3464	155	746	3554	1585
Grp Volume(v), veh/h	61	0	138	68	0	262	65	343	357	37	895	55
Grp Sat Flow(s),veh/h/ln	1117	0	1636	1251	0	1639	590	1777	1842	746	1777	1585
Q Serve(g_s), s	3.1	0.0	4.2	2.9	0.0	8.7	2.2	0.0	0.0	1.4	8.9	0.9
Cycle Q Clear(g_c), s	11.8	0.0	4.2	7.1	0.0	8.7	11.0	0.0	0.0	1.4	8.9	0.9
Prop In Lane	1.00		0.80	1.00		0.78	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	225	0	391	331	0	392	364	997	1033	538	1993	889
V/C Ratio(X)	0.27	0.00	0.35	0.21	0.00	0.67	0.18	0.34	0.35	0.07	0.45	0.06
Avail Cap(c_a), veh/h	442	0	709	574	0	710	364	997	1033	538	1993	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	19.0	21.9	0.0	20.7	1.5	0.0	0.0	6.1	7.7	6.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	0.7	0.7	0.6	0.6	0.2	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.5	0.8	0.0	3.2	0.1	0.2	0.2	0.2	2.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	19.2	22.0	0.0	21.4	2.2	0.6	0.6	6.3	8.5	6.1
LnGrp LOS	C	A	B	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		199			330			765			987	
Approach Delay, s/veh		21.3			21.5			0.7			8.3	
Approach LOS		C			C			A			A	

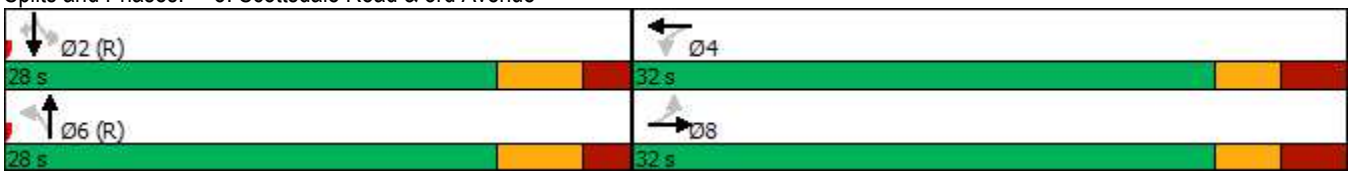
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.7		20.3		39.7		20.3				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		10.9		10.7		13.0		13.8				
Green Ext Time (p_c), s		2.3		1.1		1.5		0.5				

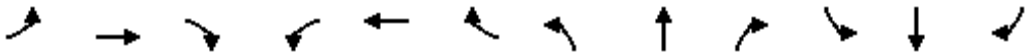
Intersection Summary												
HCM 6th Ctrl Delay			8.8									
HCM 6th LOS			A									

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	27	55	27	55
End Time (s)	55	27	55	27
Yield/Force Off (s)	49	21	49	21
Yield/Force Off 170(s)	39	2	39	2
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 27 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	739	64	70	652	60	98	372	47	82	568	172
Future Volume (veh/h)	228	739	64	70	652	60	98	372	47	82	568	172
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	248	803	70	76	709	65	107	404	51	89	617	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1303	581	133	979	90	251	927	116	218	1061	315
Arrive On Green	0.11	0.37	0.37	0.03	0.20	0.20	0.14	0.29	0.29	0.12	0.27	0.27
Sat Flow, veh/h	3456	3554	1585	3456	3291	302	1781	3177	399	1781	3905	1160
Grp Volume(v), veh/h	248	803	70	76	383	391	107	225	230	89	536	268
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1816	1781	1777	1799	1781	1702	1661
Q Serve(g_s), s	8.3	22.2	2.2	2.6	24.2	24.2	6.6	12.3	12.5	5.5	16.3	16.8
Cycle Q Clear(g_c), s	8.3	22.2	2.2	2.6	24.2	24.2	6.6	12.3	12.5	5.5	16.3	16.8
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.22	1.00		0.70
Lane Grp Cap(c), veh/h	363	1303	581	133	529	540	251	518	525	218	925	451
V/C Ratio(X)	0.68	0.62	0.12	0.57	0.72	0.72	0.43	0.43	0.44	0.41	0.58	0.59
Avail Cap(c_a), veh/h	423	1303	581	190	529	540	251	518	525	218	925	451
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	31.1	10.1	57.5	43.4	43.4	47.1	34.5	34.5	48.6	37.8	37.9
Incr Delay (d2), s/veh	2.5	2.2	0.4	1.3	7.6	7.5	0.4	2.6	2.7	0.5	2.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	9.7	1.4	1.2	12.1	12.4	2.9	5.7	5.8	2.5	7.1	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	33.3	10.5	58.8	51.1	51.0	47.6	37.1	37.2	49.1	40.4	43.6
LnGrp LOS	D	C	B	E	D	D	D	D	D	D	D	D
Approach Vol, veh/h		1121			850			562			893	
Approach Delay, s/veh		36.5			51.7			39.1			42.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	38.3	18.0	41.2	20.3	40.5	9.8	49.4
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 15	32.6	14.7	* 36	* 13	35.0	* 6.6	* 44
Max Q Clear Time (g_c+I1), s	8.6	18.8	10.3	26.2	7.5	14.5	4.6	24.2
Green Ext Time (p_c), s	0.1	1.8	0.2	1.3	0.0	0.8	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

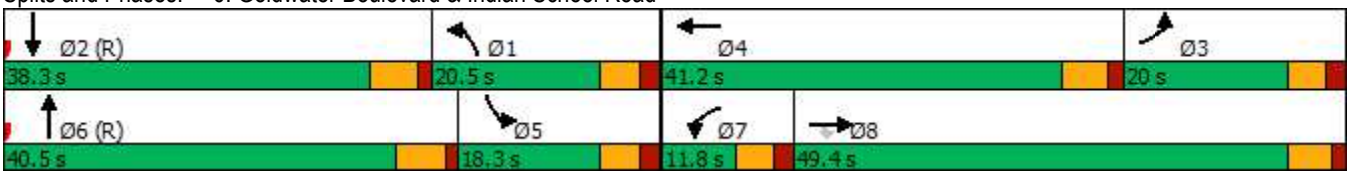
Notes

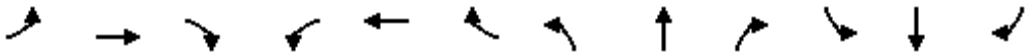
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	20.5	38.3	20	41.2	18.3	40.5	11.8	49.4
Maximum Split (%)	17.1%	31.9%	16.7%	34.3%	15.3%	33.8%	9.8%	41.2%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	43.3	5	105	63.8	45.5	5	63.8	75.6
End Time (s)	63.8	43.3	5	105	63.8	45.5	75.6	5
Yield/Force Off (s)	58.2	37.6	119.7	99.5	58.2	40	70.4	119.6
Yield/Force Off 170(s)	58.2	13.6	119.7	77.5	58.2	12	70.4	97.6
Local Start Time (s)	38.3	0	100	58.8	40.5	0	58.8	70.6
Local Yield (s)	53.2	32.6	114.7	94.5	53.2	35	65.4	114.6
Local Yield 170(s)	53.2	8.6	114.7	72.5	53.2	7	65.4	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 5 (4%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	821	34	61	789	63	19	19	34	15	37	51
Future Volume (veh/h)	34	821	34	61	789	63	19	19	34	15	37	51
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	37	892	37	66	858	68	21	21	37	16	40	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	2138	89	350	2051	163	143	147	222	83	202	246
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	604	3477	144	602	3335	264	351	492	743	162	675	822
Grp Volume(v), veh/h	37	456	473	66	457	469	79	0	0	111	0	0
Grp Sat Flow(s),veh/h/ln	604	1777	1844	602	1777	1823	1586	0	0	1659	0	0
Q Serve(g_s), s	4.1	15.9	15.9	7.6	16.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.1	15.9	15.9	23.6	16.0	16.0	4.0	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.15	0.27		0.47	0.14		0.50
Lane Grp Cap(c), veh/h	351	1093	1134	350	1093	1121	512	0	0	531	0	0
V/C Ratio(X)	0.11	0.42	0.42	0.19	0.42	0.42	0.15	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	351	1093	1134	350	1093	1121	512	0	0	531	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)	0.81	0.81	0.81	0.78	0.78	0.78	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	12.0	12.0	18.1	12.0	12.0	30.9	0.0	0.0	31.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	1.0	0.9	0.9	0.9	0.9	0.6	0.0	0.0	0.9	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(50%),veh/ln	0.6	6.2	6.5	1.1	6.3	6.4	1.8	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	12.9	12.9	19.0	12.9	12.9	31.5	0.0	0.0	32.4	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		966			992			79			111	
Approach Delay, s/veh		13.1			13.3			31.5			32.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		79.0		41.0		79.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		35.9		* 74		35.9		* 74				
Max Q Clear Time (g_c+I1), s		7.8		25.6		6.0		22.1				
Green Ext Time (p_c), s		0.4		4.7		0.3		4.4				

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

Notes

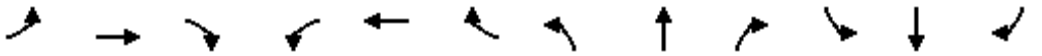
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	41	79	41	79
Maximum Split (%)	34.2%	65.8%	34.2%	65.8%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	112	33	112	33
End Time (s)	33	112	33	112
Yield/Force Off (s)	27.9	106.8	27.9	106.8
Yield/Force Off 170(s)	10.9	99.8	10.9	98.8
Local Start Time (s)	0	41	0	41
Local Yield (s)	35.9	114.8	35.9	114.8
Local Yield 170(s)	18.9	107.8	18.9	106.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 7: Marshall Way & Indian School Road



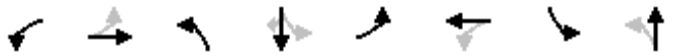
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	692	113	170	701	175	60	457	117	203	663	147
Future Volume (veh/h)	111	692	113	170	701	175	60	457	117	203	663	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	121	752	123	185	762	190	65	497	127	221	721	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	1065	174	351	1099	274	174	669	170	305	1113	497
Arrive On Green	0.03	0.11	0.11	0.13	0.39	0.39	0.04	0.24	0.24	0.15	0.42	0.42
Sat Flow, veh/h	1781	3057	500	1781	2818	703	1781	2806	713	1781	3554	1585
Grp Volume(v), veh/h	121	437	438	185	480	472	65	314	310	221	721	160
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	1781	1777	1744	1781	1777	1742	1781	1777	1585
Q Serve(g_s), s	0.0	28.4	28.4	3.0	27.1	27.1	0.0	19.6	19.8	6.7	19.4	8.2
Cycle Q Clear(g_c), s	0.0	28.4	28.4	3.0	27.1	27.1	0.0	19.6	19.8	6.7	19.4	8.2
Prop In Lane	1.00		0.28	1.00		0.40	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	288	619	620	351	693	680	174	423	415	305	1113	497
V/C Ratio(X)	0.42	0.71	0.71	0.53	0.69	0.69	0.37	0.74	0.75	0.73	0.65	0.32
Avail Cap(c_a), veh/h	288	619	620	351	693	680	210	423	415	341	1113	497
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.91	0.91	0.91	0.91	0.91	0.91	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	48.8	47.2	47.2	43.9	30.6	30.6	52.3	42.3	42.4	45.9	29.7	26.4
Incr Delay (d2), s/veh	0.3	6.1	6.1	0.7	5.2	5.2	0.5	11.1	11.6	4.8	2.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	14.6	14.6	5.0	12.3	12.1	1.9	10.0	9.9	6.4	8.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	53.3	53.3	44.6	35.8	35.8	52.8	53.4	54.0	50.7	32.4	28.0
LnGrp LOS	D	D	D	D	D	D	D	D	D	D	C	C
Approach Vol, veh/h		996			1137			689			1102	
Approach Delay, s/veh		52.8			37.2			53.6			35.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	47.0	9.5	43.0	15.5	52.0	18.5	34.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 13	41.8	* 6.9	37.6	* 8	46.8	* 16	28.6
Max Q Clear Time (g_c+I1), s	5.0	30.4	2.0	21.4	2.0	29.1	8.7	21.8
Green Ext Time (p_c), s	0.2	1.6	0.0	3.4	0.1	2.0	0.2	1.6

Intersection Summary	
HCM 6th Ctrl Delay	43.5
HCM 6th LOS	D

Notes

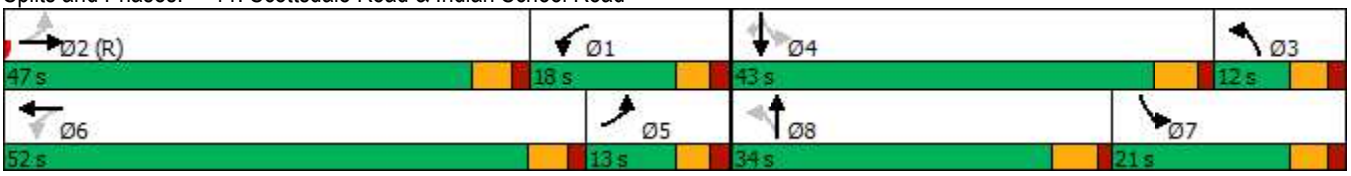
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

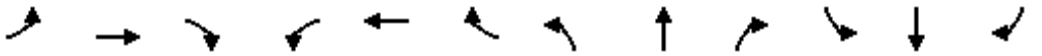


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	18	47	12	43	13	52	21	34
Maximum Split (%)	15.0%	39.2%	10.0%	35.8%	10.8%	43.3%	17.5%	28.3%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	47	0	108	65	52	0	99	65
End Time (s)	65	47	0	108	65	52	0	99
Yield/Force Off (s)	60	41.8	114.9	102.6	60	46.8	114.9	93.6
Yield/Force Off 170(s)	60	19.8	114.9	82.6	60	24.8	114.9	73.6
Local Start Time (s)	47	0	108	65	52	0	99	65
Local Yield (s)	60	41.8	114.9	102.6	60	46.8	114.9	93.6
Local Yield 170(s)	60	19.8	114.9	82.6	60	24.8	114.9	73.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1037	9	65	1048	28	11	5	49	121	4	83
Future Volume (veh/h)	36	1037	9	65	1048	28	11	5	49	121	4	83
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	39	1127	10	71	1139	30	12	5	53	132	4	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	2265	20	368	2220	58	35	31	98	178	5	515
Arrive On Green	1.00	1.00	1.00	0.63	0.63	0.63	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	480	3609	32	495	3537	93	0	97	302	367	14	1585
Grp Volume(v), veh/h	39	555	582	71	572	597	70	0	0	136	0	90
Grp Sat Flow(s),veh/h/ln	480	1777	1865	495	1777	1854	398	0	0	381	0	1585
Q Serve(g_s), s	3.3	0.0	0.0	7.6	21.2	21.2	0.0	0.0	0.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s	25.7	0.0	0.0	8.2	21.2	21.2	39.0	0.0	0.0	39.0	0.0	4.9
Prop In Lane	1.00		0.02	1.00		0.05	0.17		0.76	0.97		1.00
Lane Grp Cap(c), veh/h	272	1115	1170	368	1115	1163	165	0	0	183	0	515
V/C Ratio(X)	0.14	0.50	0.50	0.19	0.51	0.51	0.43	0.00	0.00	0.74	0.00	0.17
Avail Cap(c_a), veh/h	272	1115	1170	368	1115	1163	165	0	0	183	0	515
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.73	0.73	0.73	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.8	0.0	0.0	10.0	12.3	12.3	32.2	0.0	0.0	42.2	0.0	29.0
Incr Delay (d2), s/veh	0.8	1.1	1.0	0.9	1.2	1.2	0.6	0.0	0.0	13.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.3	0.9	8.2	8.6	1.5	0.0	0.0	4.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.6	1.1	1.0	10.8	13.5	13.5	32.8	0.0	0.0	55.7	0.0	29.0
LnGrp LOS	A	A	A	B	B	B	C	A	A	E	A	C
Approach Vol, veh/h		1176			1240			70			226	
Approach Delay, s/veh		1.2			13.3			32.8			45.1	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		81.3		44.6		81.3		44.6				
Change Period (Y+Rc), s		* 5.4		5.6		* 5.4		* 5.6				
Max Green Setting (Gmax), s		* 71		38.4		* 71		* 39				
Max Q Clear Time (g_c+I1), s		27.7		41.0		23.2		41.0				
Green Ext Time (p_c), s		5.9		0.0		6.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

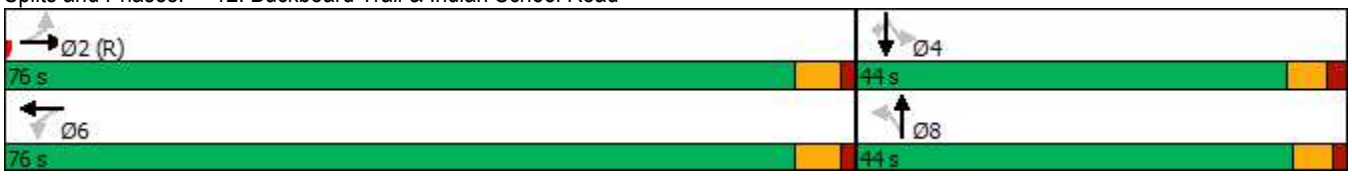
Notes

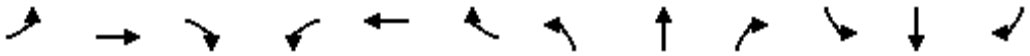
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	76	44	76	44
Maximum Split (%)	63.3%	36.7%	63.3%	36.7%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	11	87	11	87
End Time (s)	87	11	87	11
Yield/Force Off (s)	81.6	5.4	81.6	6
Yield/Force Off 170(s)	66.6	101.4	66.6	102
Local Start Time (s)	0	76	0	76
Local Yield (s)	70.6	114.4	70.6	115
Local Yield 170(s)	55.6	90.4	55.6	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 11 (9%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1134	62	300	898	226	89	497	441	334	278	60
Future Volume (veh/h)	88	1134	62	300	898	226	89	497	441	334	278	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	1233	67	326	976	246	97	540	479	363	302	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1211	66	329	1510	674	183	743	332	389	639	136
Arrive On Green	0.03	0.12	0.12	0.15	0.43	0.43	0.10	0.21	0.21	0.11	0.22	0.22
Sat Flow, veh/h	1781	3428	186	1781	3554	1585	1781	3554	1585	3456	2917	619
Grp Volume(v), veh/h	96	639	661	326	976	246	97	540	479	363	182	185
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1585	1781	1777	1585	1728	1777	1759
Q Serve(g_s), s	0.0	42.4	42.4	17.9	26.1	12.7	6.2	17.0	25.1	12.5	10.7	11.0
Cycle Q Clear(g_c), s	0.0	42.4	42.4	17.9	26.1	12.7	6.2	17.0	25.1	12.5	10.7	11.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	263	628	649	329	1510	674	183	743	332	389	389	386
V/C Ratio(X)	0.37	1.02	1.02	0.99	0.65	0.37	0.53	0.73	1.44	0.93	0.47	0.48
Avail Cap(c_a), veh/h	263	628	649	329	1510	674	183	743	332	389	389	386
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	53.0	53.0	49.2	27.3	23.5	51.1	44.2	47.4	52.8	40.8	40.9
Incr Delay (d2), s/veh	0.3	38.6	38.6	47.3	2.1	1.5	1.5	6.1	216.5	29.0	4.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	26.9	27.8	13.5	11.2	5.0	2.8	8.0	29.7	6.9	5.1	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	91.6	91.6	96.5	29.5	25.0	52.6	50.4	263.9	81.8	44.8	45.1
LnGrp LOS	D	F	F	F	C	C	D	D	F	F	D	D
Approach Vol, veh/h		1396			1548			1116			730	
Approach Delay, s/veh		88.7			42.9			142.2			63.3	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	31.4	14.8	56.2	18.8	30.2	23.4	47.6
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 12	* 26	* 9.5	* 51	* 14	* 25	* 18	* 42
Max Q Clear Time (g_c+I1), s	8.2	13.0	2.0	28.1	14.5	27.1	19.9	44.4
Green Ext Time (p_c), s	0.0	0.3	0.1	1.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	82.5
HCM 6th LOS	F

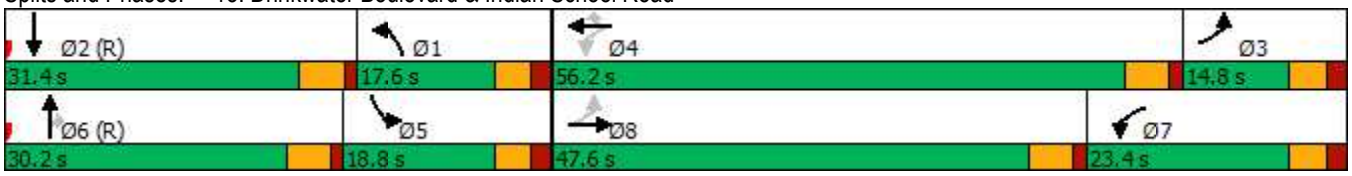
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	17.6	31.4	14.8	56.2	18.8	30.2	23.4	47.6
Maximum Split (%)	14.7%	26.2%	12.3%	46.8%	15.7%	25.2%	19.5%	39.7%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	49.4	18	3.2	67	48.2	18	114.6	67
End Time (s)	67	49.4	18	3.2	67	48.2	18	114.6
Yield/Force Off (s)	61.7	44.3	12.7	118	61.7	43.1	12.7	109.4
Yield/Force Off 170(s)	61.7	24.3	12.7	99	61.7	23.1	12.7	88.4
Local Start Time (s)	31.4	0	105.2	49	30.2	0	96.6	49
Local Yield (s)	43.7	26.3	114.7	100	43.7	25.1	114.7	91.4
Local Yield 170(s)	43.7	6.3	114.7	81	43.7	5.1	114.7	70.4

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 18 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road



Appendix J – Year 2024 Build Capacity Analysis

J

10-ZN-2020
10/22/20

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	31	561	46	41	586
Future Vol, veh/h	21	31	561	46	41	586
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	34	610	50	45	637

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	980	330	0	0	660	0
Stage 1	635	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*675	*871	-	-	*1304	-
Stage 1	*789	-	-	-	-	-
Stage 2	*652	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*651	*871	-	-	*1304	-
Mov Cap-2 Maneuver	*570	-	-	-	-	-
Stage 1	*789	-	-	-	-	-
Stage 2	*629	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	718	* 1304	-
HCM Lane V/C Ratio	-	-	0.079	0.034	-
HCM Control Delay (s)	-	-	10.4	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

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

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	82	13	14	50	0	15	0	39	0	0	0
Future Vol, veh/h	0	82	13	14	50	0	15	0	39	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	89	14	15	54	0	16	0	42	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	54	0	0	103	0	0	180	180	96	201	187	54
Stage 1	-	-	-	-	-	-	96	96	-	84	84	-
Stage 2	-	-	-	-	-	-	84	84	-	117	103	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1558	-	-	1489	-	-	795	722	960	770	716	1028
Stage 1	-	-	-	-	-	-	911	815	-	935	831	-
Stage 2	-	-	-	-	-	-	935	831	-	888	810	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1558	-	-	1489	-	-	788	715	960	731	709	1028
Mov Cap-2 Maneuver	-	-	-	-	-	-	788	715	-	731	709	-
Stage 1	-	-	-	-	-	-	911	815	-	935	823	-
Stage 2	-	-	-	-	-	-	926	823	-	849	810	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.6	9.3	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	905	1558	-	-	1489	-	-	-
HCM Lane V/C Ratio	0.065	-	-	-	0.01	-	-	-
HCM Control Delay (s)	9.3	0	-	-	7.4	0	-	0
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	110	61	11	16	3
Future Vol, veh/h	11	110	61	11	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	120	66	12	17	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	78	0	-	0	216	72
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	144	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1525	-	-	-	782	1004
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	883	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1525	-	-	-	775	1004
Mov Cap-2 Maneuver	-	-	-	-	775	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1525	-	-	-	804
HCM Lane V/C Ratio	0.008	-	-	-	0.026
HCM Control Delay (s)	7.4	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

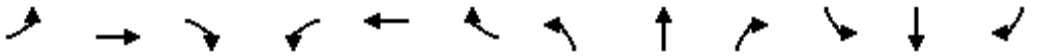
Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	106	20	31	99	16	20
Future Vol, veh/h	106	20	31	99	16	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	22	34	108	17	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	137	0	302	126
Stage 1	-	-	-	-	126	-
Stage 2	-	-	-	-	176	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1447	-	720	924
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-		-	1	
Mov Cap-1 Maneuver	-	-	1447	-	702	924
Mov Cap-2 Maneuver	-	-	-	-	702	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	857	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	810	-	-	1447	-
HCM Lane V/C Ratio	0.048	-	-	0.023	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

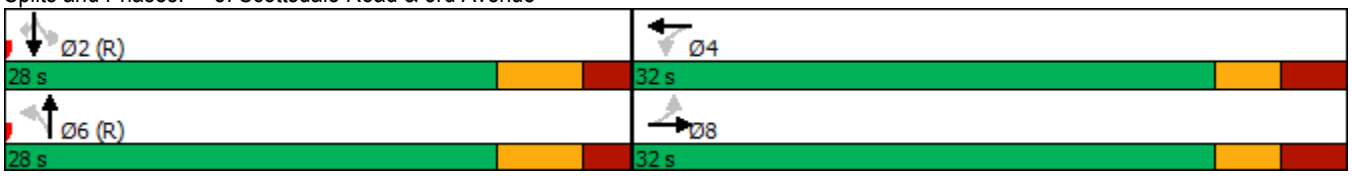


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	19	54	22	7	52	96	468	28	63	400	27
Future Volume (veh/h)	17	19	54	22	7	52	96	468	28	63	400	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	18	21	59	24	8	57	104	509	30	68	435	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	69	194	274	32	226	668	2185	129	675	2277	1016
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	1.00	1.00	1.00	0.64	0.64	0.64
Sat Flow, veh/h	1337	433	1218	1319	199	1417	928	3410	201	866	3554	1585
Grp Volume(v), veh/h	18	0	80	24	0	65	104	265	274	68	435	29
Grp Sat Flow(s),veh/h/ln	1337	0	1651	1319	0	1615	928	1777	1834	866	1777	1585
Q Serve(g_s), s	0.7	0.0	2.6	1.0	0.0	2.1	0.6	0.0	0.0	1.8	3.0	0.4
Cycle Q Clear(g_c), s	2.8	0.0	2.6	3.6	0.0	2.1	3.6	0.0	0.0	1.8	3.0	0.4
Prop In Lane	1.00		0.74	1.00		0.88	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	286	0	263	274	0	257	668	1138	1175	675	2277	1016
V/C Ratio(X)	0.06	0.00	0.30	0.09	0.00	0.25	0.16	0.23	0.23	0.10	0.19	0.03
Avail Cap(c_a), veh/h	652	0	716	635	0	700	668	1138	1175	675	2277	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	0.0	22.3	23.9	0.0	22.1	0.1	0.0	0.0	4.2	4.4	3.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.1	0.0	0.2	0.4	0.4	0.4	0.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.0	0.3	0.0	0.8	0.1	0.1	0.1	0.3	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	0.0	22.5	23.9	0.0	22.3	0.6	0.4	0.4	4.5	4.6	4.0
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		98			89			643			532	
Approach Delay, s/veh		22.7			22.7			0.4			4.6	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.4		15.6		44.4		15.6				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		5.0		5.6		5.6		4.8				
Green Ext Time (p_c), s		1.2		0.2		1.3		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			5.1									
HCM 6th LOS			A									

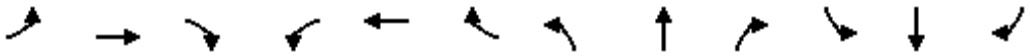
Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	35	3	35	3
End Time (s)	3	35	3	35
Yield/Force Off (s)	57	29	57	29
Yield/Force Off 170(s)	47	10	47	10
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 35 (58%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue



6: Goldwater Boulevard & Indian School Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	676	77	69	610	37	73	387	15	38	465	94
Future Volume (veh/h)	203	676	77	69	610	37	73	387	15	38	465	94
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	221	735	84	75	663	40	79	421	16	41	505	102
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	1291	576	132	1036	62	247	1120	42	172	1187	234
Arrive On Green	0.09	0.36	0.36	0.03	0.20	0.20	0.14	0.32	0.32	0.10	0.28	0.28
Sat Flow, veh/h	3456	3554	1585	3456	3405	205	1781	3491	132	1781	4277	845
Grp Volume(v), veh/h	221	735	84	75	346	357	79	214	223	41	400	207
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1833	1781	1777	1847	1781	1702	1718
Q Serve(g_s), s	7.4	19.9	2.7	2.6	21.4	21.4	4.8	11.2	11.2	2.6	11.5	11.9
Cycle Q Clear(g_c), s	7.4	19.9	2.7	2.6	21.4	21.4	4.8	11.2	11.2	2.6	11.5	11.9
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.07	1.00		0.49
Lane Grp Cap(c), veh/h	328	1291	576	132	540	558	247	570	592	172	945	477
V/C Ratio(X)	0.67	0.57	0.15	0.57	0.64	0.64	0.32	0.38	0.38	0.24	0.42	0.44
Avail Cap(c_a), veh/h	423	1291	576	225	540	558	247	570	592	172	945	477
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	30.7	10.5	57.5	41.8	41.8	46.6	31.5	31.5	50.1	35.5	35.6
Incr Delay (d2), s/veh	1.4	1.8	0.5	1.4	5.4	5.3	0.3	1.9	1.8	0.3	1.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.7	1.7	1.1	10.5	10.9	2.1	5.0	5.3	1.1	4.9	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	32.5	11.0	58.8	47.2	47.1	46.9	33.3	33.3	50.4	36.9	38.5
LnGrp LOS	D	C	B	E	D	D	D	C	C	D	D	D
Approach Vol, veh/h		1040			778			516			648	
Approach Delay, s/veh		35.3			48.3			35.4			38.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	39.0	16.8	42.0	17.2	44.0	9.8	49.0
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 13	33.3	14.7	* 37	* 8.4	38.5	* 7.8	* 44
Max Q Clear Time (g_c+I1), s	6.8	13.9	9.4	23.4	4.6	13.2	4.6	21.9
Green Ext Time (p_c), s	0.0	1.4	0.2	1.3	0.0	0.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

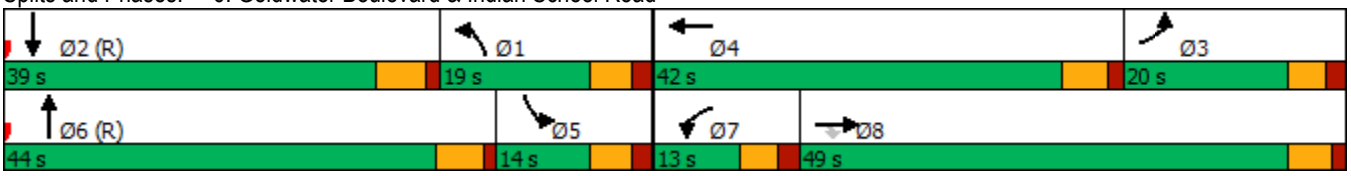
Notes

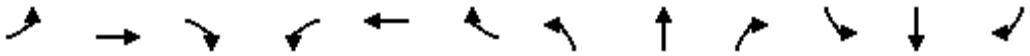
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	19	39	20	42	14	44	13	49
Maximum Split (%)	15.8%	32.5%	16.7%	35.0%	11.7%	36.7%	10.8%	40.8%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	12	112	70	56	12	70	83
End Time (s)	70	51	12	112	70	56	83	12
Yield/Force Off (s)	64.4	45.3	6.7	106.5	64.4	50.5	77.8	6.6
Yield/Force Off 170(s)	64.4	21.3	6.7	84.5	64.4	22.5	77.8	104.6
Local Start Time (s)	39	0	100	58	44	0	58	71
Local Yield (s)	52.4	33.3	114.7	94.5	52.4	38.5	65.8	114.6
Local Yield 170(s)	52.4	9.3	114.7	72.5	52.4	10.5	65.8	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 12 (10%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	655	13	70	718	34	5	5	10	3	5	15
Future Volume (veh/h)	29	655	13	70	718	34	5	5	10	3	5	15
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	32	712	14	76	780	37	5	5	11	3	5	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	439	2370	47	483	2297	109	112	117	211	64	106	271
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	669	3565	70	728	3454	164	299	470	846	120	425	1089
Grp Volume(v), veh/h	32	355	371	76	401	416	21	0	0	24	0	0
Grp Sat Flow(s),veh/h/ln	669	1777	1858	728	1777	1841	1615	0	0	1634	0	0
Q Serve(g_s), s	2.6	10.0	10.0	5.9	11.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.3	10.0	10.0	15.9	11.7	11.7	1.1	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.09	0.24		0.52	0.12		0.67
Lane Grp Cap(c), veh/h	439	1182	1235	483	1182	1224	440	0	0	441	0	0
V/C Ratio(X)	0.07	0.30	0.30	0.16	0.34	0.34	0.05	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	439	1182	1235	483	1182	1224	440	0	0	441	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)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.8	8.4	8.4	11.7	8.7	8.7	34.2	0.0	0.0	34.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.5	0.7	0.8	0.8	0.2	0.0	0.0	0.2	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(50%),veh/ln	0.4	3.8	3.9	1.0	4.4	4.6	0.5	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	9.0	9.0	12.4	9.5	9.5	34.5	0.0	0.0	34.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		758			893			21			24	
Approach Delay, s/veh		9.1			9.7			34.5			34.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.0		85.0		35.0		85.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		29.9		* 80		29.9		* 80				
Max Q Clear Time (g_c+I1), s		3.3		17.9		3.1		16.3				
Green Ext Time (p_c), s		0.1		3.9		0.0		3.2				

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

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	35	85	35	85
Maximum Split (%)	29.2%	70.8%	29.2%	70.8%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	6	41	6	41
End Time (s)	41	6	41	6
Yield/Force Off (s)	35.9	0.8	35.9	0.8
Yield/Force Off 170(s)	18.9	113.8	18.9	112.8
Local Start Time (s)	0	35	0	35
Local Yield (s)	29.9	114.8	29.9	114.8
Local Yield 170(s)	12.9	107.8	12.9	106.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 7: Marshall Way & Indian School Road

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	668	806	9	0	16
Future Vol, veh/h	0	668	806	9	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	726	876	10	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	443
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	562
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	562
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	562
HCM Lane V/C Ratio	-	-	-	0.031
HCM Control Delay (s)	-	-	-	11.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

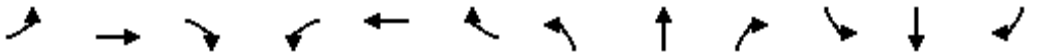
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	668	813	0	0	2
Future Vol, veh/h	0	668	813	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	726	884	0	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	442
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	563
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	563
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	563
HCM Lane V/C Ratio	-	-	0.004
HCM Control Delay (s)	-	-	11.4
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0



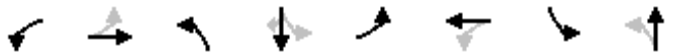
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	555	56	5	791	137	61	366	74	115	294	60
Future Volume (veh/h)	94	555	56	5	791	137	61	366	74	115	294	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	102	603	61	5	860	149	66	398	80	125	320	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	1488	150	387	1282	222	308	728	145	298	995	444
Arrive On Green	0.09	0.46	0.46	0.05	0.42	0.42	0.04	0.25	0.25	0.09	0.37	0.37
Sat Flow, veh/h	1781	3259	329	1781	3028	525	1781	2953	588	1781	3554	1585
Grp Volume(v), veh/h	102	328	336	5	505	504	66	238	240	125	320	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1776	1781	1777	1764	1781	1777	1585
Q Serve(g_s), s	0.0	14.8	14.8	0.0	27.4	27.4	0.0	14.0	14.2	0.0	7.7	3.3
Cycle Q Clear(g_c), s	0.0	14.8	14.8	0.0	27.4	27.4	0.0	14.0	14.2	0.0	7.7	3.3
Prop In Lane	1.00		0.18	1.00		0.30	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	320	811	827	387	752	752	308	438	435	298	995	444
V/C Ratio(X)	0.32	0.40	0.41	0.01	0.67	0.67	0.21	0.54	0.55	0.42	0.32	0.15
Avail Cap(c_a), veh/h	320	811	827	387	752	752	330	438	435	320	995	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	38.6	21.7	21.7	25.2	27.9	27.9	39.1	39.3	39.4	43.9	29.5	28.1
Incr Delay (d2), s/veh	0.2	1.5	1.5	0.0	4.3	4.3	0.1	4.8	5.0	0.3	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	6.4	6.5	0.1	12.3	12.2	1.7	6.8	6.8	3.4	3.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	23.2	23.2	25.2	32.2	32.2	39.3	44.1	44.4	44.2	30.4	28.8
LnGrp LOS	D	C	C	C	C	C	D	D	D	D	C	C
Approach Vol, veh/h		766			1014			544			510	
Approach Delay, s/veh		25.3			32.1			43.6			33.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.0	9.5	39.0	15.5	56.0	13.5	35.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 5	54.8	* 5.9	33.6	* 9	50.8	* 9.9	29.6
Max Q Clear Time (g_c+I1), s	2.0	16.8	2.0	9.7	2.0	29.4	2.0	16.2
Green Ext Time (p_c), s	0.0	1.3	0.0	1.5	0.1	2.2	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

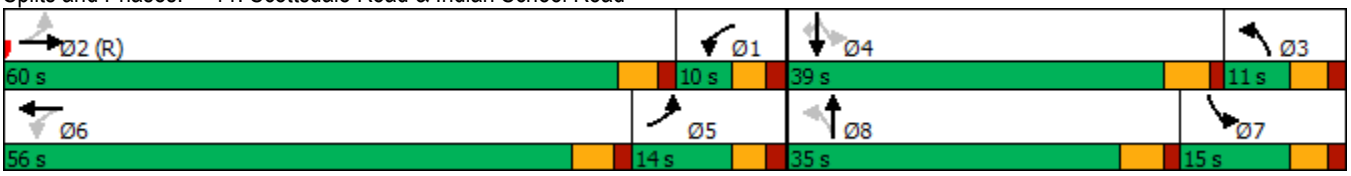
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

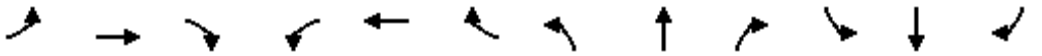


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	10	60	11	39	14	56	15	35
Maximum Split (%)	8.3%	50.0%	9.2%	32.5%	11.7%	46.7%	12.5%	29.2%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	60	0	109	70	56	0	105	70
End Time (s)	70	60	0	109	70	56	0	105
Yield/Force Off (s)	65	54.8	114.9	103.6	65	50.8	114.9	99.6
Yield/Force Off 170(s)	65	32.8	114.9	83.6	65	28.8	114.9	79.6
Local Start Time (s)	60	0	109	70	56	0	105	70
Local Yield (s)	65	54.8	114.9	103.6	65	50.8	114.9	99.6
Local Yield 170(s)	65	32.8	114.9	83.6	65	28.8	114.9	79.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	813	11	44	1038	142	3	2	17	41	0	52
Future Volume (veh/h)	123	813	11	44	1038	142	3	2	17	41	0	52
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	134	884	12	48	1128	154	3	2	18	45	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	3054	41	589	2674	364	39	14	72	145	0	91
Arrive On Green	1.00	1.00	1.00	0.85	0.85	0.85	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	431	3590	49	621	3142	428	97	252	1257	1483	0	1585
Grp Volume(v), veh/h	134	438	458	48	637	645	23	0	0	45	0	57
Grp Sat Flow(s),veh/h/ln	431	1777	1862	621	1777	1793	1606	0	0	1483	0	1585
Q Serve(g_s), s	5.8	0.0	0.0	1.5	10.0	10.1	0.0	0.0	0.0	1.7	0.0	4.2
Cycle Q Clear(g_c), s	15.8	0.0	0.0	1.5	10.0	10.1	1.6	0.0	0.0	3.3	0.0	4.2
Prop In Lane	1.00		0.03	1.00		0.24	0.13		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	391	1512	1584	589	1512	1526	126	0	0	145	0	91
V/C Ratio(X)	0.34	0.29	0.29	0.08	0.42	0.42	0.18	0.00	0.00	0.31	0.00	0.63
Avail Cap(c_a), veh/h	391	1512	1584	589	1512	1526	449	0	0	425	0	409
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.52	0.52	0.52	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.8	0.0	0.0	1.4	2.1	2.1	54.1	0.0	0.0	54.8	0.0	55.3
Incr Delay (d2), s/veh	2.2	0.5	0.4	0.1	0.4	0.4	0.3	0.0	0.0	0.4	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.2	0.1	2.0	2.1	0.7	0.0	0.0	1.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.0	0.5	0.4	1.6	2.5	2.5	54.3	0.0	0.0	55.2	0.0	57.9
LnGrp LOS	A	A	A	A	A	A	D	A	A	E	A	E
Approach Vol, veh/h		1030			1330			23			102	
Approach Delay, s/veh		0.8			2.5			54.3			56.7	
Approach LOS		A			A			D			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	107.5	12.5	107.5	12.5
Change Period (Y+Rc), s	* 5.4	5.6	* 5.4	* 5.6
Max Green Setting (Gmax), s	* 78	31.0	* 78	* 32
Max Q Clear Time (g_c+I1), s	17.8	6.2	12.1	3.6
Green Ext Time (p_c), s	6.1	0.2	7.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

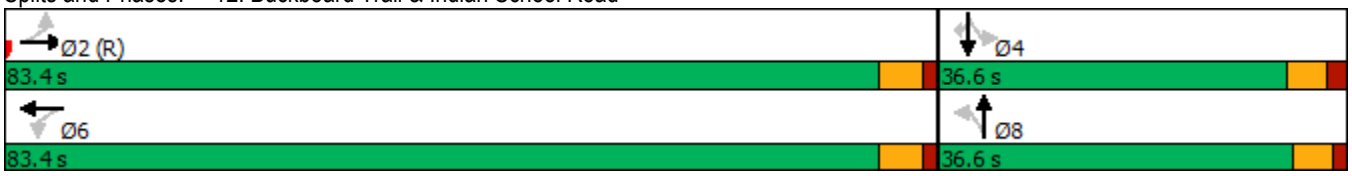
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	83.4	36.6	83.4	36.6
Maximum Split (%)	69.5%	30.5%	69.5%	30.5%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	19	102.4	19	102.4
End Time (s)	102.4	19	102.4	19
Yield/Force Off (s)	97	13.4	97	14
Yield/Force Off 170(s)	82	109.4	82	110
Local Start Time (s)	0	83.4	0	83.4
Local Yield (s)	78	114.4	78	115
Local Yield 170(s)	63	90.4	63	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 19 (16%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	629	49	324	1181	210	73	383	187	90	147	18
Future Volume (veh/h)	90	629	49	324	1181	210	73	383	187	90	147	18
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	98	684	53	352	1284	228	79	416	203	98	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	997	77	471	1593	711	202	897	400	293	714	88
Arrive On Green	0.04	0.30	0.30	0.19	0.45	0.45	0.11	0.25	0.25	0.08	0.22	0.22
Sat Flow, veh/h	1781	3342	259	1781	3554	1585	1781	3554	1585	3456	3184	392
Grp Volume(v), veh/h	98	363	374	352	1284	228	79	416	203	98	88	92
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1585	1781	1777	1585	1728	1777	1800
Q Serve(g_s), s	2.4	21.6	21.7	12.8	37.5	11.1	4.9	11.9	13.2	3.2	4.9	5.0
Cycle Q Clear(g_c), s	2.4	21.6	21.7	12.8	37.5	11.1	4.9	11.9	13.2	3.2	4.9	5.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	131	530	544	471	1593	711	202	897	400	293	398	403
V/C Ratio(X)	0.75	0.69	0.69	0.75	0.81	0.32	0.39	0.46	0.51	0.33	0.22	0.23
Avail Cap(c_a), veh/h	174	530	544	514	1593	711	202	897	400	293	398	403
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)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	37.1	37.1	40.9	28.6	21.3	49.4	38.0	38.4	51.7	38.0	38.1
Incr Delay (d2), s/veh	7.1	6.9	6.7	4.5	4.5	1.2	0.5	1.7	4.5	0.2	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	10.3	10.5	10.0	16.3	4.3	2.2	5.4	5.6	1.4	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	44.0	43.9	45.4	33.1	22.5	49.8	39.7	43.0	52.0	39.3	39.4
LnGrp LOS	E	D	D	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		835			1864			698			278	
Approach Delay, s/veh		46.1			34.1			41.8			43.8	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	32.0	10.1	59.0	15.5	35.4	28.1	41.0
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 11	* 27	* 7.7	* 54	* 7.3	* 30	* 26	* 36
Max Q Clear Time (g_c+I1), s	6.9	7.0	4.4	39.5	5.2	15.2	14.8	23.7
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	0.4	0.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	39.0
HCM 6th LOS	D

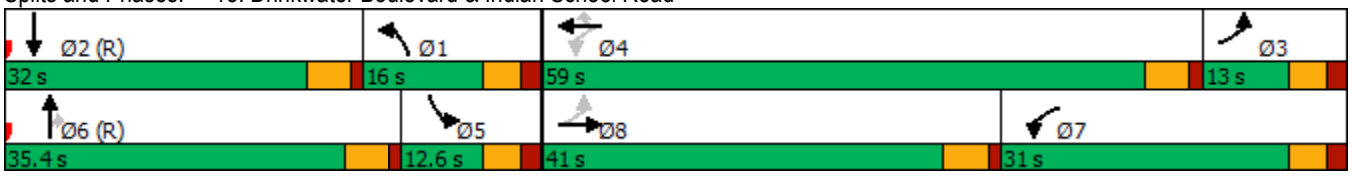
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	16	32	13	59	12.6	35.4	31	41
Maximum Split (%)	13.3%	26.7%	10.8%	49.2%	10.5%	29.5%	25.8%	34.2%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	31	119	106	47	34.4	119	88	47
End Time (s)	47	31	119	106	47	34.4	119	88
Yield/Force Off (s)	41.7	25.9	113.7	100.8	41.7	29.3	113.7	82.8
Yield/Force Off 170(s)	41.7	5.9	113.7	81.8	41.7	9.3	113.7	61.8
Local Start Time (s)	32	0	107	48	35.4	0	89	48
Local Yield (s)	42.7	26.9	114.7	101.8	42.7	30.3	114.7	83.8
Local Yield 170(s)	42.7	6.9	114.7	82.8	42.7	10.3	114.7	62.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 119 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road



Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	95	656	50	34	786
Future Vol, veh/h	50	95	656	50	34	786
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	103	713	54	37	854

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1156	384	0	0	767	0
Stage 1	740	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*669	*820	-	-	*1227	-
Stage 1	*742	-	-	-	-	-
Stage 2	*599	-	-	-	-	-
Platoon blocked, %	1	1	-	-	1	-
Mov Cap-1 Maneuver	*649	*820	-	-	*1227	-
Mov Cap-2 Maneuver	*362	-	-	-	-	-
Stage 1	*742	-	-	-	-	-
Stage 2	*581	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	571 *	1227	-
HCM Lane V/C Ratio	-	-	0.276	0.03	-
HCM Control Delay (s)	-	-	13.7	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.1	-

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

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	103	29	21	134	0	14	0	31	0	0	0
Future Vol, veh/h	0	103	29	21	134	0	14	0	31	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	112	32	23	146	0	15	0	34	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	146	0	0	144	0	0	320	320	128	337	336	146
Stage 1	-	-	-	-	-	-	128	128	-	192	192	-
Stage 2	-	-	-	-	-	-	192	192	-	145	144	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1452	-	-	1438	-	-	668	619	922	650	605	947
Stage 1	-	-	-	-	-	-	876	790	-	844	758	-
Stage 2	-	-	-	-	-	-	844	758	-	858	778	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1452	-	-	1438	-	-	659	609	922	618	595	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	659	609	-	618	595	-
Stage 1	-	-	-	-	-	-	876	790	-	844	745	-
Stage 2	-	-	-	-	-	-	830	745	-	827	778	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1	9.7	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	820	1452	-	-	1438	-	-	-
HCM Lane V/C Ratio	0.06	-	-	-	0.016	-	-	-
HCM Control Delay (s)	9.7	0	-	-	7.5	0	-	0
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	109	131	17	21	24
Future Vol, veh/h	25	109	131	17	21	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	118	142	18	23	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	160	0	-	0	323	151
Stage 1	-	-	-	-	151	-
Stage 2	-	-	-	-	172	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1435	-	-	-	699	945
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1435	-	-	-	685	945
Mov Cap-2 Maneuver	-	-	-	-	685	-
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	858	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1435	-	-	-	803
HCM Lane V/C Ratio	0.019	-	-	-	0.061
HCM Control Delay (s)	7.6	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

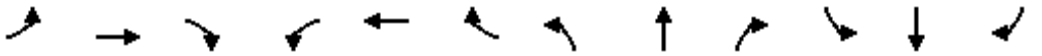
Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	108	22	34	184	20	27
Future Vol, veh/h	108	22	34	184	20	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	24	37	200	22	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	141	0	403	129
Stage 1	-	-	-	-	129	-
Stage 2	-	-	-	-	274	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1442	-	645	921
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %	-	-		-	1	
Mov Cap-1 Maneuver	-	-	1442	-	627	921
Mov Cap-2 Maneuver	-	-	-	-	627	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	783	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	768	-	-	1442	-
HCM Lane V/C Ratio	0.067	-	-	0.026	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	29	143	63	54	189	101	616	28	34	823	63
Future Volume (veh/h)	69	29	143	63	54	189	101	616	28	34	823	63
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	75	32	155	68	59	205	110	670	30	37	895	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	243	70	341	307	93	322	350	1895	85	528	1944	867
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	1.00	1.00	1.00	0.55	0.55	0.55
Sat Flow, veh/h	1115	279	1349	1196	367	1274	583	3464	155	746	3554	1585
Grp Volume(v), veh/h	75	0	187	68	0	264	110	343	357	37	895	68
Grp Sat Flow(s),veh/h/ln	1115	0	1628	1196	0	1641	583	1777	1842	746	1777	1585
Q Serve(g_s), s	3.9	0.0	5.8	3.1	0.0	8.6	4.8	0.0	0.0	1.4	9.2	1.2
Cycle Q Clear(g_c), s	12.4	0.0	5.8	8.9	0.0	8.6	14.0	0.0	0.0	1.4	9.2	1.2
Prop In Lane	1.00		0.83	1.00		0.78	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	243	0	412	307	0	415	350	972	1008	528	1944	867
V/C Ratio(X)	0.31	0.00	0.45	0.22	0.00	0.64	0.31	0.35	0.35	0.07	0.46	0.08
Avail Cap(c_a), veh/h	444	0	705	522	0	711	350	972	1008	528	1944	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	18.9	22.7	0.0	19.9	1.9	0.0	0.0	6.5	8.2	6.4
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.1	0.0	0.6	1.5	0.6	0.6	0.3	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.1	0.8	0.0	3.1	0.1	0.2	0.2	0.2	3.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	19.2	22.8	0.0	20.6	3.4	0.6	0.6	6.7	9.0	6.6
LnGrp LOS	C	A	B	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		262			332			810			1000	
Approach Delay, s/veh		21.1			21.0			1.0			8.8	
Approach LOS		C			C			A			A	

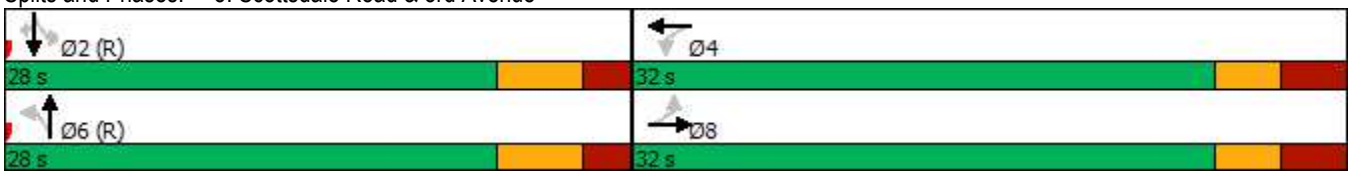
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.8		21.2		38.8		21.2				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		22.0		26.0		22.0		26.0				
Max Q Clear Time (g_c+I1), s		11.2		10.9		16.0		14.4				
Green Ext Time (p_c), s		2.3		1.1		1.3		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									

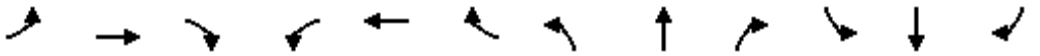
Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	28	32	28	32
Maximum Split (%)	46.7%	53.3%	46.7%	53.3%
Minimum Split (s)	23	32	23	32
Yellow Time (s)	3.8	3	3.8	3
All-Red Time (s)	2.2	3	2.2	3
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	1	2	1	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	10	19	10	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	27	55	27	55
End Time (s)	55	27	55	27
Yield/Force Off (s)	49	21	49	21
Yield/Force Off 170(s)	39	2	39	2
Local Start Time (s)	0	28	0	28
Local Yield (s)	22	54	22	54
Local Yield 170(s)	12	35	12	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 27 (45%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 5: Scottsdale Road & 3rd Avenue



6: Goldwater Boulevard & Indian School Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	739	64	75	659	60	98	384	47	82	577	183
Future Volume (veh/h)	251	739	64	75	659	60	98	384	47	82	577	183
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	273	803	70	82	716	65	107	417	51	89	627	199
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	1327	592	135	980	89	253	904	110	220	1016	316
Arrive On Green	0.11	0.37	0.37	0.03	0.20	0.20	0.14	0.28	0.28	0.12	0.26	0.26
Sat Flow, veh/h	3456	3554	1585	3456	3294	299	1781	3189	388	1781	3857	1201
Grp Volume(v), veh/h	273	803	70	82	386	395	107	231	237	89	552	274
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1817	1781	1777	1801	1781	1702	1654
Q Serve(g_s), s	9.1	22.0	2.2	2.8	24.4	24.5	6.6	12.9	13.0	5.5	17.1	17.6
Cycle Q Clear(g_c), s	9.1	22.0	2.2	2.8	24.4	24.5	6.6	12.9	13.0	5.5	17.1	17.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.22	1.00		0.73
Lane Grp Cap(c), veh/h	388	1327	592	135	529	540	253	503	510	220	896	436
V/C Ratio(X)	0.70	0.61	0.12	0.61	0.73	0.73	0.42	0.46	0.46	0.40	0.62	0.63
Avail Cap(c_a), veh/h	452	1327	592	196	529	540	253	503	510	220	896	436
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	30.4	9.7	57.5	43.5	43.5	47.0	35.4	35.5	48.5	38.9	39.0
Incr Delay (d2), s/veh	2.9	2.1	0.4	1.5	7.8	7.7	0.4	3.0	3.0	0.4	3.2	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	9.6	1.3	1.3	12.3	12.5	2.9	5.9	6.1	2.5	7.5	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	32.5	10.1	59.0	51.3	51.2	47.4	38.4	38.5	49.0	42.0	45.8
LnGrp LOS	D	C	B	E	D	D	D	D	D	D	D	D
Approach Vol, veh/h		1146			863			575			915	
Approach Delay, s/veh		36.3			52.0			40.1			43.8	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	37.3	18.9	41.2	20.4	39.5	9.9	50.2
Change Period (Y+Rc), s	* 5.6	5.7	5.4	* 5.5	* 5.6	5.5	* 5.2	* 5.4
Max Green Setting (Gmax), s	* 15	31.6	15.7	* 36	* 13	34.0	* 6.8	* 45
Max Q Clear Time (g_c+I1), s	8.6	19.6	11.1	26.5	7.5	15.0	4.8	24.0
Green Ext Time (p_c), s	0.1	1.8	0.2	1.3	0.0	0.9	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

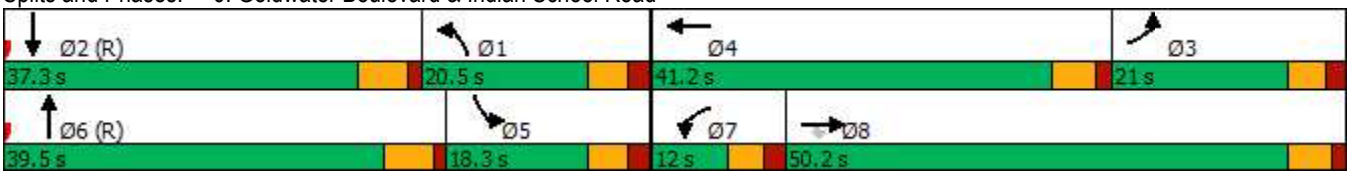
Notes

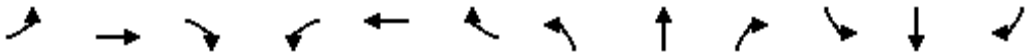
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	20.5	37.3	21	41.2	18.3	39.5	12	50.2
Maximum Split (%)	17.1%	31.1%	17.5%	34.3%	15.3%	32.9%	10.0%	41.8%
Minimum Split (s)	10.6	33.7	10.3	31.5	10.6	37.5	10.2	31.4
Yellow Time (s)	3.6	4.4	3.3	4	3.6	4.4	3.3	4
All-Red Time (s)	2	1.3	2	1.5	2	1.1	1.9	1.4
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	1	2	1	2	1	2	1
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		24		22		28		22
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	42.3	5	104	62.8	44.5	5	62.8	74.8
End Time (s)	62.8	42.3	5	104	62.8	44.5	74.8	5
Yield/Force Off (s)	57.2	36.6	119.7	98.5	57.2	39	69.6	119.6
Yield/Force Off 170(s)	57.2	12.6	119.7	76.5	57.2	11	69.6	97.6
Local Start Time (s)	37.3	0	99	57.8	39.5	0	57.8	69.8
Local Yield (s)	52.2	31.6	114.7	93.5	52.2	34	64.6	114.6
Local Yield 170(s)	52.2	7.6	114.7	71.5	52.2	6	64.6	92.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 5 (4%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 6: Goldwater Boulevard & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	821	34	61	801	63	19	19	34	15	37	51
Future Volume (veh/h)	34	821	34	61	801	63	19	19	34	15	37	51
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	37	892	37	66	871	68	21	21	37	16	40	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2138	89	350	2054	160	143	147	222	83	202	246
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	597	3477	144	602	3340	261	351	492	743	162	675	822
Grp Volume(v), veh/h	37	456	473	66	463	476	79	0	0	111	0	0
Grp Sat Flow(s),veh/h/ln	597	1777	1844	602	1777	1823	1586	0	0	1659	0	0
Q Serve(g_s), s	4.1	15.9	15.9	7.6	16.3	16.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.4	15.9	15.9	23.6	16.3	16.3	4.0	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.14	0.27		0.47	0.14		0.50
Lane Grp Cap(c), veh/h	346	1093	1134	350	1093	1121	512	0	0	531	0	0
V/C Ratio(X)	0.11	0.42	0.42	0.19	0.42	0.42	0.15	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	346	1093	1134	350	1093	1121	512	0	0	531	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)	0.81	0.81	0.81	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.4	12.0	12.0	18.1	12.0	12.0	30.9	0.0	0.0	31.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	1.0	0.9	1.2	1.2	1.2	0.6	0.0	0.0	0.9	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(50%),veh/ln	0.6	6.2	6.5	1.2	6.5	6.6	1.8	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	12.9	12.9	19.3	13.2	13.2	31.5	0.0	0.0	32.4	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	C	A	A	C	A	A
Approach Vol, veh/h		966			1005			79			111	
Approach Delay, s/veh		13.1			13.6			31.5			32.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		79.0		41.0		79.0				
Change Period (Y+Rc), s		5.1		* 5.2		5.1		* 5.2				
Max Green Setting (Gmax), s		35.9		* 74		35.9		* 74				
Max Q Clear Time (g_c+I1), s		7.8		25.6		6.0		22.4				
Green Ext Time (p_c), s		0.4		4.8		0.3		4.4				

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

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	SBTL	WBTL	NBTL	EBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	Max	C-Max	Max
Maximum Split (s)	41	79	41	79
Maximum Split (%)	34.2%	65.8%	34.2%	65.8%
Minimum Split (s)	29.1	22.5	30.1	22.5
Yellow Time (s)	3.6	4	3.6	4
All-Red Time (s)	1.5	1.2	1.5	1.2
Minimum Initial (s)	7	10	7	10
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	8	7
Flash Dont Walk (s)	17	7	17	8
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	112	33	112	33
End Time (s)	33	112	33	112
Yield/Force Off (s)	27.9	106.8	27.9	106.8
Yield/Force Off 170(s)	10.9	99.8	10.9	98.8
Local Start Time (s)	0	41	0	41
Local Yield (s)	35.9	114.8	35.9	114.8
Local Yield 170(s)	18.9	107.8	18.9	106.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 112 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 7: Marshall Way & Indian School Road

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	870	914	27	0	11
Future Vol, veh/h	0	870	914	27	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	946	993	29	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	511
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	508
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	508
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	508
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	-	12.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

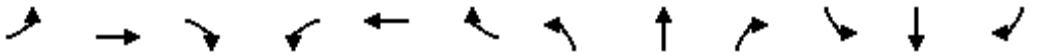
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	870	940	0	0	1
Future Vol, veh/h	0	870	940	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	946	1022	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	511
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	0	508
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	508
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	508
HCM Lane V/C Ratio	-	-	0.002
HCM Control Delay (s)	-	-	12.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0



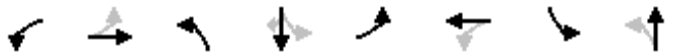
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	692	113	170	728	206	62	467	117	237	671	147
Future Volume (veh/h)	111	692	113	170	728	206	62	467	117	237	671	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	121	752	123	185	791	224	67	508	127	258	729	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1039	170	353	998	283	176	672	167	332	1173	523
Arrive On Green	0.10	0.34	0.34	0.12	0.37	0.37	0.04	0.24	0.24	0.17	0.44	0.44
Sat Flow, veh/h	1781	3057	500	1781	2734	774	1781	2820	701	1781	3554	1585
Grp Volume(v), veh/h	121	437	438	185	514	501	67	319	316	258	729	160
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	1781	1777	1731	1781	1777	1744	1781	1777	1585
Q Serve(g_s), s	0.3	25.8	25.8	1.8	31.0	31.0	0.0	20.0	20.2	9.3	19.0	7.9
Cycle Q Clear(g_c), s	0.3	25.8	25.8	1.8	31.0	31.0	0.0	20.0	20.2	9.3	19.0	7.9
Prop In Lane	1.00		0.28	1.00		0.45	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	275	604	605	353	649	632	176	423	416	332	1173	523
V/C Ratio(X)	0.44	0.72	0.72	0.52	0.79	0.79	0.38	0.75	0.76	0.78	0.62	0.31
Avail Cap(c_a), veh/h	275	604	605	353	649	632	212	423	416	368	1173	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	47.3	34.7	34.7	43.4	34.0	34.0	52.0	42.4	42.5	44.8	27.9	24.8
Incr Delay (d2), s/veh	0.4	7.4	7.4	0.6	8.7	9.0	0.5	11.8	12.3	7.3	2.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	12.2	12.2	4.9	14.6	14.3	2.0	10.2	10.2	7.6	7.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	42.0	42.0	44.0	42.8	43.0	52.5	54.2	54.8	52.1	30.1	26.1
LnGrp LOS	D	D	D	D	D	D	D	D	D	D	C	C
Approach Vol, veh/h		996			1200			702			1147	
Approach Delay, s/veh		42.7			43.1			54.3			34.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	46.0	9.6	45.0	16.4	49.0	20.6	34.0
Change Period (Y+Rc), s	* 5	5.2	* 5.1	5.4	* 5	5.2	* 5.1	5.4
Max Green Setting (Gmax), s	* 12	40.8	* 6.9	39.6	* 9	43.8	* 18	28.6
Max Q Clear Time (g_c+I1), s	3.8	27.8	2.0	21.0	2.3	33.0	11.3	22.2
Green Ext Time (p_c), s	0.2	1.7	0.0	3.6	0.1	1.9	0.2	1.6

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

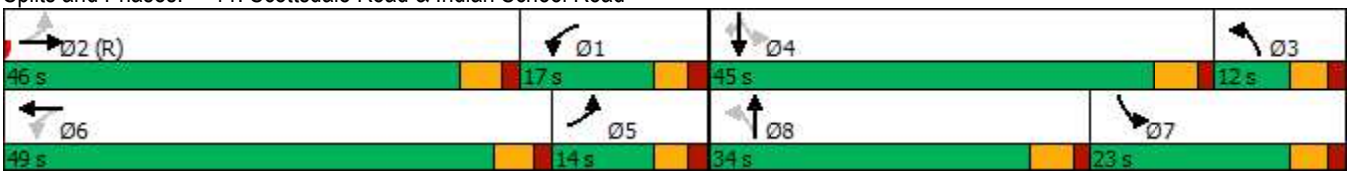
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

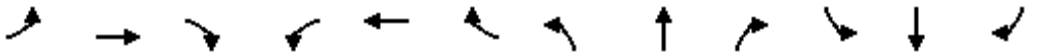


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	Max	None	Max
Maximum Split (s)	17	46	12	45	14	49	23	34
Maximum Split (%)	14.2%	38.3%	10.0%	37.5%	11.7%	40.8%	19.2%	28.3%
Minimum Split (s)	10	35.2	10.1	33.4	10	35.2	10.1	33.4
Yellow Time (s)	3	3.6	3.3	4	3	3.6	3.3	4
All-Red Time (s)	2	1.6	1.8	1.4	2	1.6	1.8	1.4
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	2	1	2	2	2	1	2	2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		22		20		22		20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	46	0	108	63	49	0	97	63
End Time (s)	63	46	0	108	63	49	0	97
Yield/Force Off (s)	58	40.8	114.9	102.6	58	43.8	114.9	91.6
Yield/Force Off 170(s)	58	18.8	114.9	82.6	58	21.8	114.9	71.6
Local Start Time (s)	46	0	108	63	49	0	97	63
Local Yield (s)	58	40.8	114.9	102.6	58	43.8	114.9	91.6
Local Yield 170(s)	58	18.8	114.9	82.6	58	21.8	114.9	71.6

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 11: Scottsdale Road & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1071	9	65	1107	28	11	5	49	121	4	83
Future Volume (veh/h)	36	1071	9	65	1107	28	11	5	49	121	4	83
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	39	1164	10	71	1203	30	12	5	53	132	4	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	2309	20	363	2265	56	35	31	98	176	4	502
Arrive On Green	1.00	1.00	1.00	0.64	0.64	0.64	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	452	3611	31	478	3543	88	0	99	309	369	14	1585
Grp Volume(v), veh/h	39	573	601	71	603	630	70	0	0	136	0	90
Grp Sat Flow(s),veh/h/ln	452	1777	1865	478	1777	1854	408	0	0	384	0	1585
Q Serve(g_s), s	3.7	0.0	0.0	7.7	22.2	22.3	0.0	0.0	0.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s	27.1	0.0	0.0	8.2	22.2	22.3	38.0	0.0	0.0	38.0	0.0	4.9
Prop In Lane	1.00		0.02	1.00		0.05	0.17		0.76	0.97		1.00
Lane Grp Cap(c), veh/h	261	1136	1192	363	1136	1186	164	0	0	181	0	502
V/C Ratio(X)	0.15	0.50	0.50	0.20	0.53	0.53	0.43	0.00	0.00	0.75	0.00	0.18
Avail Cap(c_a), veh/h	261	1136	1192	363	1136	1186	164	0	0	181	0	502
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.69	0.69	0.69	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.1	0.0	0.0	9.4	11.8	11.8	32.7	0.0	0.0	42.9	0.0	29.7
Incr Delay (d2), s/veh	0.8	1.1	1.0	0.8	1.2	1.2	0.7	0.0	0.0	14.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.3	0.8	8.5	8.9	1.5	0.0	0.0	4.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.9	1.1	1.0	10.2	13.0	13.0	33.3	0.0	0.0	57.6	0.0	29.8
LnGrp LOS	A	A	A	B	B	B	C	A	A	E	A	C
Approach Vol, veh/h		1213			1304			70			226	
Approach Delay, s/veh		1.2			12.9			33.3			46.5	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		82.7		43.6		82.7		43.6				
Change Period (Y+Rc), s		* 5.4		5.6		* 5.4		* 5.6				
Max Green Setting (Gmax), s		* 72		37.4		* 72		* 38				
Max Q Clear Time (g_c+I1), s		29.1		40.0		24.3		40.0				
Green Ext Time (p_c), s		6.2		0.0		7.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

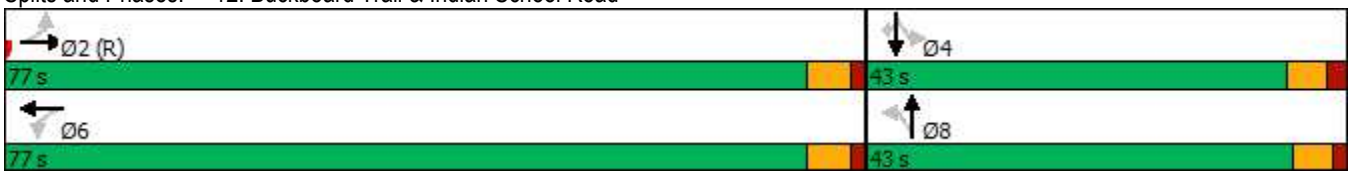
Notes

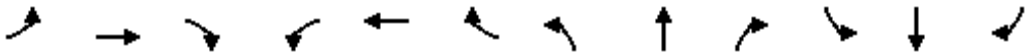
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	2	4	6	8
Movement	EBTL	SBTL	WBTL	NBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	Max	None
Maximum Split (s)	77	43	77	43
Maximum Split (%)	64.2%	35.8%	64.2%	35.8%
Minimum Split (s)	27.4	36.6	27.4	36
Yellow Time (s)	4	3.6	4	3.6
All-Red Time (s)	1.4	2	1.4	1.4
Minimum Initial (s)	10	7	10	7
Vehicle Extension (s)	2	2	2	2
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	15	24	15	24
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	11	88	11	88
End Time (s)	88	11	88	11
Yield/Force Off (s)	82.6	5.4	82.6	6
Yield/Force Off 170(s)	67.6	101.4	67.6	102
Local Start Time (s)	0	77	0	77
Local Yield (s)	71.6	114.4	71.6	115
Local Yield 170(s)	56.6	90.4	56.6	91

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	75
Offset: 11 (9%), Referenced to phase 2:EBTL, Start of Green	

Splits and Phases: 12: Buckboard Trail & Indian School Road





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1155	75	300	941	226	105	497	441	334	278	60
Future Volume (veh/h)	88	1155	75	300	941	226	105	497	441	334	278	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	1255	82	326	1023	246	114	540	479	363	302	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1208	79	323	1504	671	203	761	339	371	605	128
Arrive On Green	0.03	0.12	0.12	0.15	0.42	0.42	0.11	0.21	0.21	0.11	0.21	0.21
Sat Flow, veh/h	1781	3387	221	1781	3554	1585	1781	3554	1585	3456	2917	619
Grp Volume(v), veh/h	96	658	679	326	1023	246	114	540	479	363	182	185
Grp Sat Flow(s),veh/h/ln	1781	1777	1831	1781	1777	1585	1781	1777	1585	1728	1777	1759
Q Serve(g_s), s	0.0	42.8	42.8	17.7	28.0	12.7	7.3	16.9	25.7	12.6	10.9	11.2
Cycle Q Clear(g_c), s	0.0	42.8	42.8	17.7	28.0	12.7	7.3	16.9	25.7	12.6	10.9	11.2
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	258	634	653	323	1504	671	203	761	339	371	369	365
V/C Ratio(X)	0.37	1.04	1.04	1.01	0.68	0.37	0.56	0.71	1.41	0.98	0.49	0.51
Avail Cap(c_a), veh/h	258	634	653	323	1504	671	203	761	339	371	369	365
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	52.9	52.9	49.5	28.0	23.6	50.3	43.7	47.1	53.4	42.0	42.1
Incr Delay (d2), s/veh	0.3	44.0	44.4	52.7	2.5	1.5	2.1	5.5	201.7	40.3	4.7	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	28.1	29.1	14.3	12.1	5.0	3.3	7.9	29.0	7.5	5.2	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	97.0	97.4	102.2	30.5	25.2	52.4	49.2	248.8	93.7	46.7	47.0
LnGrp LOS	D	F	F	F	C	C	D	D	F	F	D	D
Approach Vol, veh/h		1433			1595			1133			730	
Approach Delay, s/veh		94.0			44.3			133.9			70.2	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	30.0	15.0	56.0	18.2	30.8	23.0	48.0
Change Period (Y+Rc), s	* 5.3	* 5.1	* 5.3	* 5.2	* 5.3	* 5.1	* 5.3	* 5.2
Max Green Setting (Gmax), s	* 14	* 25	* 9.7	* 51	* 13	* 26	* 18	* 43
Max Q Clear Time (g_c+I1), s	9.3	13.2	2.0	30.0	14.6	27.7	19.7	44.8
Green Ext Time (p_c), s	0.0	0.3	0.1	1.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	83.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Phase Number	1	2	3	4	5	6	7	8
Movement	NBL	SBT	EBL	WBTL	SBL	NBT	WBL	EBTL
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	19	30	15	56	18.2	30.8	23	48
Maximum Split (%)	15.8%	25.0%	12.5%	46.7%	15.2%	25.7%	19.2%	40.0%
Minimum Split (s)	10.3	29.1	10.3	28.2	10.3	29.1	10.3	30.2
Yellow Time (s)	3.3	4	3.3	4	3.3	4	3.3	4
All-Red Time (s)	2	1.1	2	1.2	2	1.1	2	1.2
Minimum Initial (s)	5	7	5	10	5	7	5	10
Vehicle Extension (s)	2	0.2	2	0.2	2	0.2	2	0.2
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		4		4		4		4
Flash Dont Walk (s)		20		19		20		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	48	18	3	67	48.8	18	115	67
End Time (s)	67	48	18	3	67	48.8	18	115
Yield/Force Off (s)	61.7	42.9	12.7	117.8	61.7	43.7	12.7	109.8
Yield/Force Off 170(s)	61.7	22.9	12.7	98.8	61.7	23.7	12.7	88.8
Local Start Time (s)	30	0	105	49	30.8	0	97	49
Local Yield (s)	43.7	24.9	114.7	99.8	43.7	25.7	114.7	91.8
Local Yield 170(s)	43.7	4.9	114.7	80.8	43.7	5.7	114.7	70.8

Intersection Summary	
Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	130
Offset: 18 (15%), Referenced to phase 2:SBT and 6:NBT, Start of Green	

Splits and Phases: 13: Drinkwater Boulevard & Indian School Road