



May 27, 2016

Mr. David Aden P.E.
Traffic Engineer
Town of Parker
20120 E. Mainstreet
Parker, CO 80138

Re: Traffic Compliance Analysis and Variance Request
Compark Village South Filing No. 1
FHU Reference No. 115360-01

Dear Mr. Aden:

KB Homes is proposing to develop a portion of Compark Village with approximately 192 residential units. The site is located south of E-470 between Peoria Street and Chambers Road in Parker, Colorado. Access to the site would be via Belford Avenue, a future Major Collector roadway that will parallel E-470 between Chambers Road and Peoria Street, bisecting the site. The attached **Figure 1** depicts the study area and primary roadway system.

The overall traffic impacts of this site were addressed in the report entitled *Chambers Crossing Transportation Impact Study*, Fehr & Peers, June 2012. While the Fehr & Peers analyses considered a mix of residential and commercial uses within the Chambers Crossing site, a site plan was not included, and internal roadway and access configurations were not addressed. More recently, the report entitled *Chambers High Point Traffic Impact Analysis*, Felsburg Holt & Ullevig, October, 2015 addressed a mixed-use development on the east side of Compark Village. Our report included traffic volume projections for Belford Avenue based in part on the Fehr & Peers study; however, traffic analyses of the KB Homes site accesses were not conducted.

Although the available documentation in this area does not directly address the traffic impacts specific to the KB Homes site, the Town of Parker has indicated that an abbreviated analysis, rather than a full Traffic Impact Study, may be sufficient for this submittal. Therefore, to address the Town's specific concerns, this brief letter report documents the projected future travel demand, intersection operational conditions, and access requirements associated with the current land use planning for Compark Village.

Land Use and Trip Generation

Figure 2 depicts the current site concept and land use projections for Compark Village. As indicated, the portion of Compark Village located south of Belford Avenue would consist of residential uses, with retail and office/flex uses located along the north side of Belford Avenue. Planning Area (PA) 18 is the first phase of development and consists of the KB Homes proposal for 120 duplex homes and 72 single family detached homes. The remainder of the planning areas within Compark Village would develop as follows:

- PA 13 – 404,082 square feet of office/flex uses.
- PA 14 – 72,868 square feet of neighborhood retail.
- PA 15 – 150,918 square feet of office/flex uses.
- PA 16 – 50 multi-family residential dwelling units.
- PA 17 – 80 multi-family residential dwelling units.

Thus, the total projected land use plan now includes about 555,000 square feet of office/flex, 72,868 square feet of retail, and approximately 322 residential units. The previous land use forecasts, as documented in the Fehr & Peers report, included 477,000 square feet of office/flex/ 45,000 square feet of retail, and 465 residential units. It can be seen that, although the current plan includes somewhat more commercial development than the previous concept, the residential component is now reduced by about 143 dwelling units.

A trip generation analysis of the current Compark Village concept was conducted using data contained in *Trip Generation*, 9th Edition, Institute of Transportation Engineers (ITE), 2012. **Table 1** summarizes the analysis in comparison to the trip generation results extracted from the Fehr & Peers study. Note that, because ITE does not have specific rates for duplexes, the single family rates have been applied for this use.

Table 1. Compark Village Trip Generation Comparison

| Planning Area | Land Use | Quantity | Daily | AM Peak Hour | | | PM Peak Hour | | |
|----------------------------------------------------------------------------------------------------|---------------------|------------|---------------|--------------|------------|--------------|--------------|------------|--------------|
| | | | | In | Out | Total | In | Out | Total |
| June 2012 Fehr & Peers Report | | | | | | | | | |
| | Retail | 45.00 KSF | 1,932 | 27 | 18 | 45 | 82 | 86 | 168 |
| | Single Family Homes | 213 DU | 2,038 | 40 | 120 | 160 | 136 | 80 | 216 |
| | Office/Flex | 477 KSF | 6,087 | 573 | 109 | 682 | 142 | 474 | 616 |
| | Apartments | 252 DU | 1,676 | 26 | 103 | 129 | 102 | 55 | 157 |
| Total Trip Generation | | | 11,733 | 666 | 350 | 1,016 | 462 | 695 | 1,157 |
| Reduced for Internal Capture (1) | | | 10,912 | 666 | 350 | 1,016 | 439 | 660 | 1,099 |
| Current Site Concept | | | | | | | | | |
| PA 13 | Office/Flex | 404.08 KSF | 5,030 | 480 | 85 | 565 | 130 | 380 | 510 |
| PA 14 | Retail | 72.87 KSF | 3,110 | 45 | 25 | 70 | 130 | 140 | 270 |
| PA 15 | Office/Flex | 150.92 KSF | 1,880 | 180 | 30 | 210 | 50 | 140 | 190 |
| PA 16 | Multi-Family | 50 DU | 330 | 5 | 20 | 25 | 20 | 10 | 30 |
| PA 17 | Multi-Family | 80 DU | 530 | 10 | 30 | 40 | 30 | 20 | 50 |
| PA 18 | SF/Duplex | 192 DU | 1,830 | 35 | 110 | 145 | 125 | 65 | 190 |
| Total Trip Generation | | | 12,710 | 755 | 300 | 1,055 | 485 | 755 | 1,240 |
| Reduced for Internal Capture (1) | | | 11,820 | 755 | 300 | 1,055 | 460 | 720 | 1,180 |
| Percent Change from Previous Plan | | | +8.3% | | | +3.8% | | | +7.4% |
| 1. Internal reductions of 7% daily and 5% PM peak hour applied per Fehr & Peers report. | | | | | | | | | |

As can be seen, the current concept for Compark Village would represent a slight increase in trip generation in comparison to the previous plan. On a daily basis, the potential increase would be about 8.3 percent. Peak hour increases would range between about 3.8 and 7.4 percent.

Trip Distribution and Site Generated Traffic Assignment

The above site generated trips for the current site concept were assigned to the proposed site accesses along Belford Avenue based on the trip distribution documented in the Fehr & Peers report, with 55 percent oriented to/from the east and 45 percent oriented to/from the west. The trip distribution and resultant site generated traffic assignment is depicted on **Figure 3**. As shown, Compark Village would contribute approximately 6,500 vehicles per day (VPD) to Belford Avenue east of the site, and about 5,320 VPD to the west.

Background Traffic

Background traffic represent the component of roadway volumes that is unrelated to the site. For this analysis, year 2035 projections were based on our previous analyses for Chambers High Point. These volumes are depicted on the attached **Figure 4**. It can be seen that Belford Avenue would carry about 5,600 VPD in background volumes, with about 465 to 525 vehicles per hour (VPH) during the AM and PM peak hours.

Total Traffic Conditions

The site generated traffic volumes (**Figure 3**) were added to the 2035 background volumes (**Figure 4**) to obtain the total projected traffic volumes depicted on **Figure 5**. As shown, Belford Avenue within the study area would experience between about 10,920 and 12,100 VPD in 2035.

The peak hour traffic volumes were used as the basis for intersection level of service (LOS) computations, the results of which are also summarized on the figure. LOS is a qualitative measure of traffic operational conditions, based on roadway capacity and motorist delay. The 2010 *Highway Capacity Manual* defines six levels of service, ranging from A to F, with LOS A representing the best possible operating conditions and LOS F representing over-capacity, or congested conditions. In urbanized areas, LOS D is typically considered to be acceptable for peak hour traffic operations.

As indicated on **Figure 5**, the projected traffic operations at the study area intersections would be generally acceptable during the peak hours. One exception is the southbound left-turn movement from PA 14, which would experience near-capacity conditions (LOS E) and some delay during the PM peak hour. Note that, of the three accesses serving the commercial developments, only the westernmost (PA 13/18) would be expected to meet signal warrants. All other accesses would function as unsignalized intersections. The easternmost site access (PA 16) is projected to be restricted to right-in/right-out movements. LOS worksheets are included in the attachments to this letter.

Storage Requirements

The projected traffic volumes along Belford Avenue were evaluated relative to Town of Parker criteria for auxiliary lane requirements. Belford Avenue is classified as a Major Collector, with a posted speed limit of 35 miles per hour (MPH). Left-turn storage lanes are required where the associated movement is 25 VPH or more, with a minimum of 100 feet of storage plus 144 feet of transition taper. Right-turn deceleration lanes are required when the associated movement is 50 VPH or more, with 226 feet of deceleration length plus 144 feet of lead-in taper. As shown on

Figure 6, left-turn storage lanes are anticipated at the three full-movement site accesses. Right-turn deceleration lanes would be needed along westbound Belford Avenue entering the commercial site accesses only; traffic volumes entering the residential accesses from eastbound Belford Avenue would be insufficient to warrant right-turn deceleration lanes. At the westernmost site access (PA 13/18), the eastbound left-turn storage requirement would be increased to 215 feet based on the projected AM peak hour turning volume.

As a part of the LOS analyses, the 95th percentile maximum probable queue lengths are calculated. These projected queue lengths were extracted from the LOS worksheets (attached) and compared to the above storage requirements as summarized in **Table 2**.

Table 2. Queues

| Access | Movement | 95% Max Queue (ft) | | Storage (ft) |
|-------------|----------|--------------------|--------------|--------------|
| | | AM Peak Hour | PM Peak Hour | |
| PA 13/18 | EB Left | 90 | 30 | 215 |
| | WB Left | 9 | 21 | 100 |
| | WB Right | 0 | 0 | 226 |
| PA 14/17/18 | EB Left | 3 | 5 | 100 |
| | WB Left | 0 | 3 | 100 |
| | WB Right | 0 | 0 | 226 |
| PA 15/16/17 | EB Left | 8 | 3 | 100 |
| | WB Left | 0 | 3 | 100 |
| | WB Right | 0 | 0 | 226 |

As indicated, the proposed storage lengths would be sufficient to accommodate the anticipated vehicle queues.

Access Spacing

Per Town of Parker standards, the minimum spacing along Major Collectors is 1,320 feet between full-movement signalized intersections and 1,050 feet between full-movement unsignalized intersections. The minimum spacing for restricted movement intersections is 305 feet.

The approximate distances between the proposed site accesses are included on **Figure 6**. As indicated, the westernmost two accesses exceed the minimum spacing of 1,320 feet for full-movement signalized intersections. The next access to the east would be spaced at 900 feet, which is about 150 feet less than the Town standard of 1,050 feet, and would, therefore, require a variance. The proposed right-in/right-out access could be spaced at about 1,050 feet to maintain flexibility in future planning efforts.

As noted above, the proposed spacing of 900 feet between the middle two accesses (PA 14/18/17 and PA 15/16/17) is somewhat less than required per Town standards. However, the back-to back left-turn storage requirements for these accesses is only 200 feet total, plus 288 feet of taper, which can easily be accommodated within the proposed spacing. As previously discussed, the projected queue lengths would be well within the storage requirements, and traffic operations along Belford Avenue would not be impacted as a result of the proposed spacing. Based on this, a variance from the Town of Parker spacing criteria could be supported.

Summary and Conclusions

KB Homes is proposing to develop a portion of Compark Village with approximately 192 residential units. Access to the site would be via Belford Avenue, a future Major Collector bisecting the site. The current buildout plan for Compark Village includes about 555,000 square feet of office/flex, 72,868 square feet of retail, and approximately 322 residential units, which represents somewhat more commercial development than previously considered. However, the residential component has been reduced from 465 dwelling units to 322 units. Due to the increase in potential commercial uses, the current concept for Compark Village would represent increases in trip generation of between about 3.8 and 8.3 percent, as compared to the previous plan.

The projected traffic operations at the site accesses along Belford Avenue would be generally acceptable through 2035. Relative to this, the following access improvements are anticipated:

- **PA 13/18.** Full-movement access. Signalize when warranted. Provide left-turn lanes on the eastbound and westbound approaches on Belford Avenue. Eastbound left-turn storage of 215 feet plus 144 feet of taper required. Westbound left-turn storage of 100 feet plus 144 feet of taper required. Provide a westbound right-turn deceleration lane of 226 feet deceleration length plus 144 feet transition taper.
- **PA 14/17/18.** Full-movement access. STOP sign control on the northbound and southbound approaches to Belford Avenue. Provide left-turn storage lanes on the eastbound and westbound approaches on Belford Avenue. Left-turn storage of 100 feet plus 144 feet of taper required for each. Provide a westbound right-turn deceleration lane of 226 feet deceleration length plus 144 feet transition taper.
- **PA 15/16/17.** Full-movement access. STOP sign control on the northbound and southbound approaches to Belford Avenue. Provide left-turn storage on eastbound and westbound approaches on Belford Avenue. Left-turn storage of 100 feet plus 144 feet of taper required for each. Provide a westbound right-turn deceleration lane of 226 feet deceleration length plus 144 feet of taper.
- **PA 16.** Right-in/right-out access. STOP sign control on the northbound approach to Belford Avenue. Auxiliary lanes not required at this access.

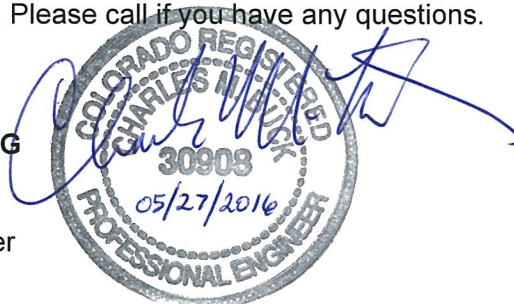
The proposed spacing of approximately 900 feet between the middle two site accesses is about 150 feet less than required per the Town's standard of 1,050 feet. However, the back-to back left-turn lane requirement for these accesses is only 200 feet of storage plus 288 feet of taper, which can be accommodated within the proposed spacing. Because the projected queue lengths would be well within the storage requirements, and because traffic operations along Belford Avenue would not be impacted as a result, a variance from the Town of Parker's spacing requirements is respectfully requested.

We trust the analyses documented in this letter will assist you in your review of the Compark Village development proposal. Please call if you have any questions.

Sincerely,

FELSBURG HOLT & ULLEVIG

Charles M. Buck, P.E., PTOE
Senior Transportation Engineer



Attachments

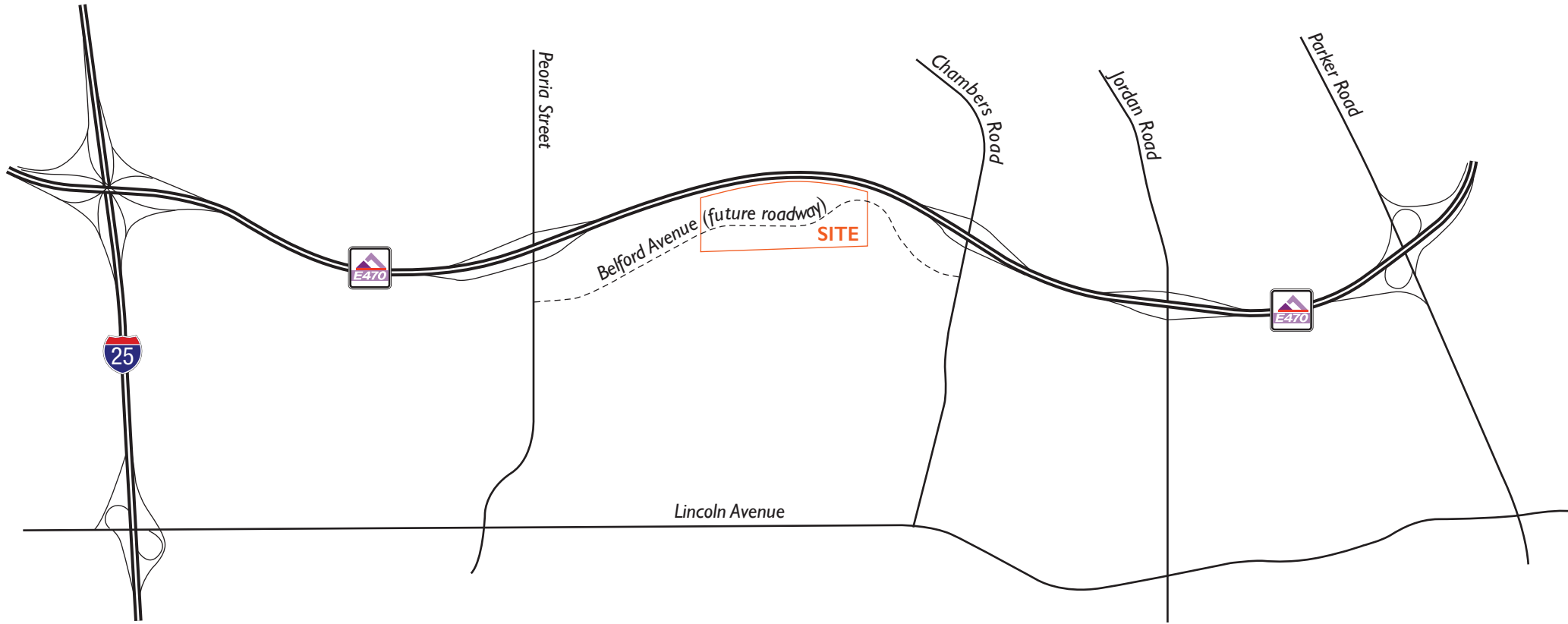


Figure 1
Vicinity Map



NOTES:
 1. THE FLOODPLAIN OF HAPPY CANYON CREEK WITHIN THE OWNERSHIP OF 470 COMPARK, LLC SHALL BE DEDICATED TO THE TOWN OF PARKER.
 2. DEDICATED LAND INCLUDES:
 OPEN SPACE
 OS-G 9.33 AC
 OS-H 5.13 AC
 OS-I 9.89 AC
 OS-J 3.87 AC
 OS-K 4.81 AC
 OS-L 2.64 AC
 TOTAL 35.57 AC
 R.O.W. MOUNT BELFORD AVE 19.84 AC
 TOTAL LAND DEDICATION 55.45 ACRES

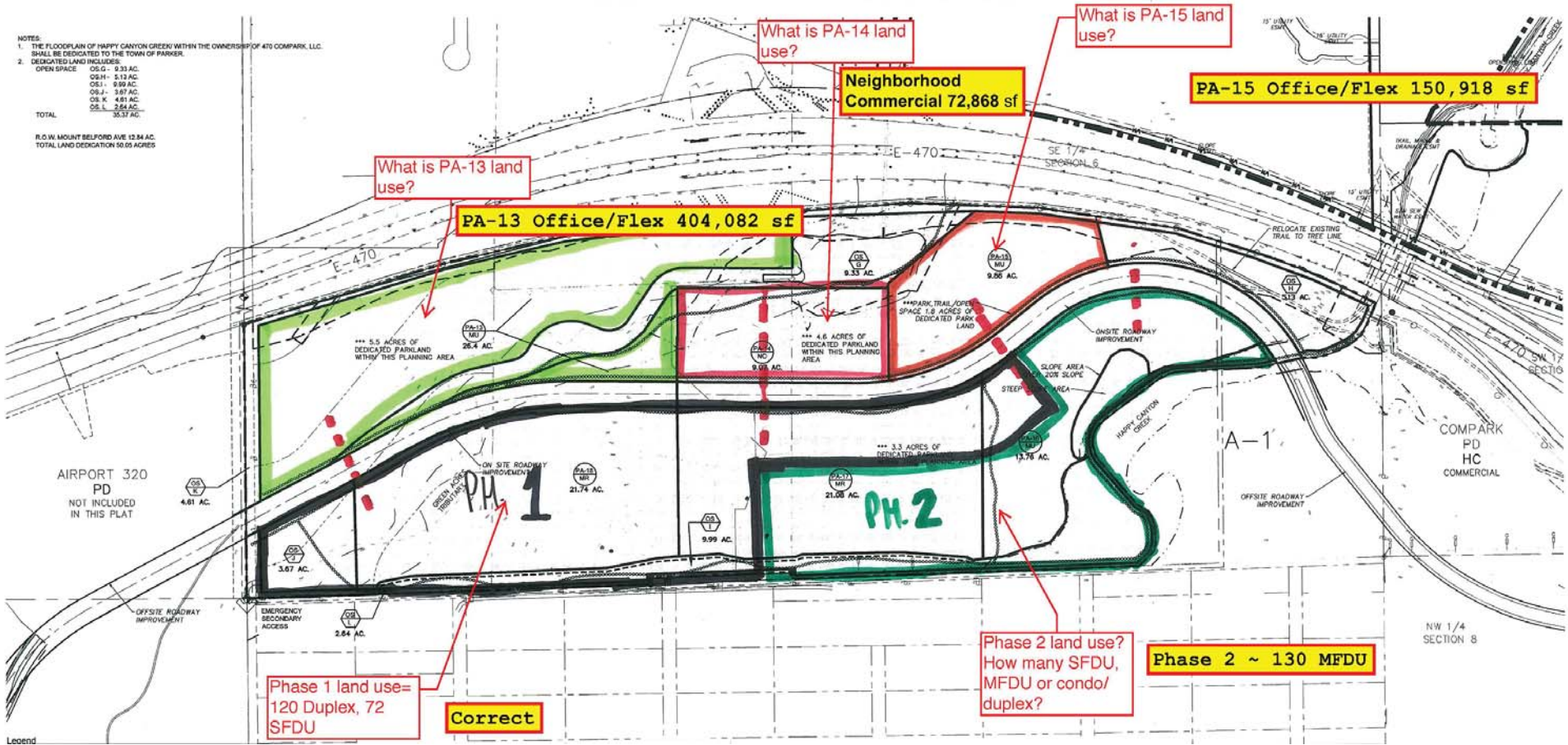
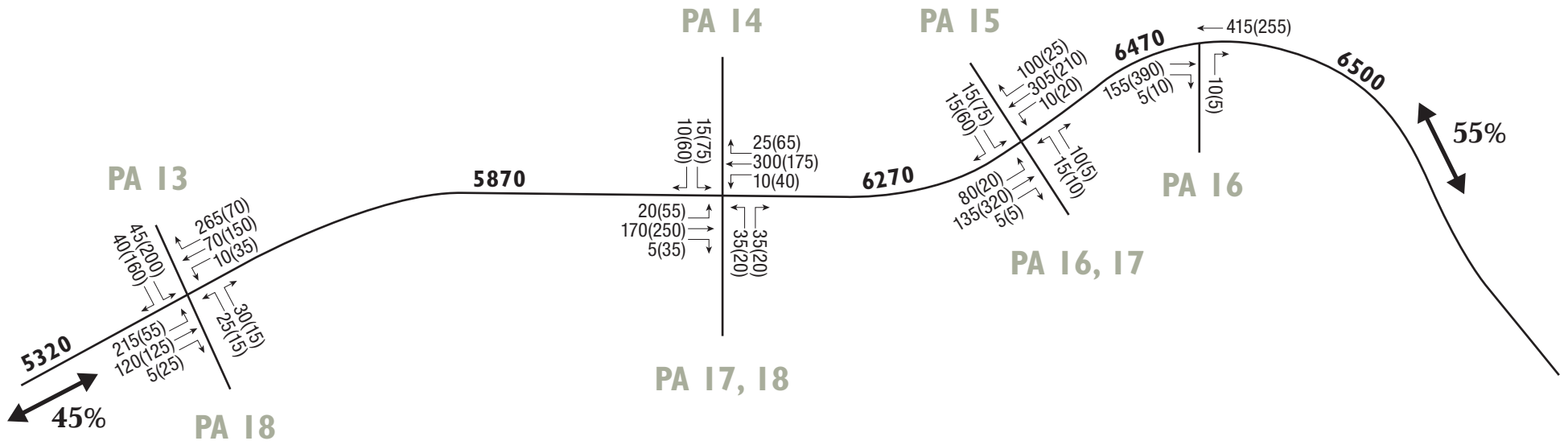


Figure 2
 Site Plan Concept



LEGEND

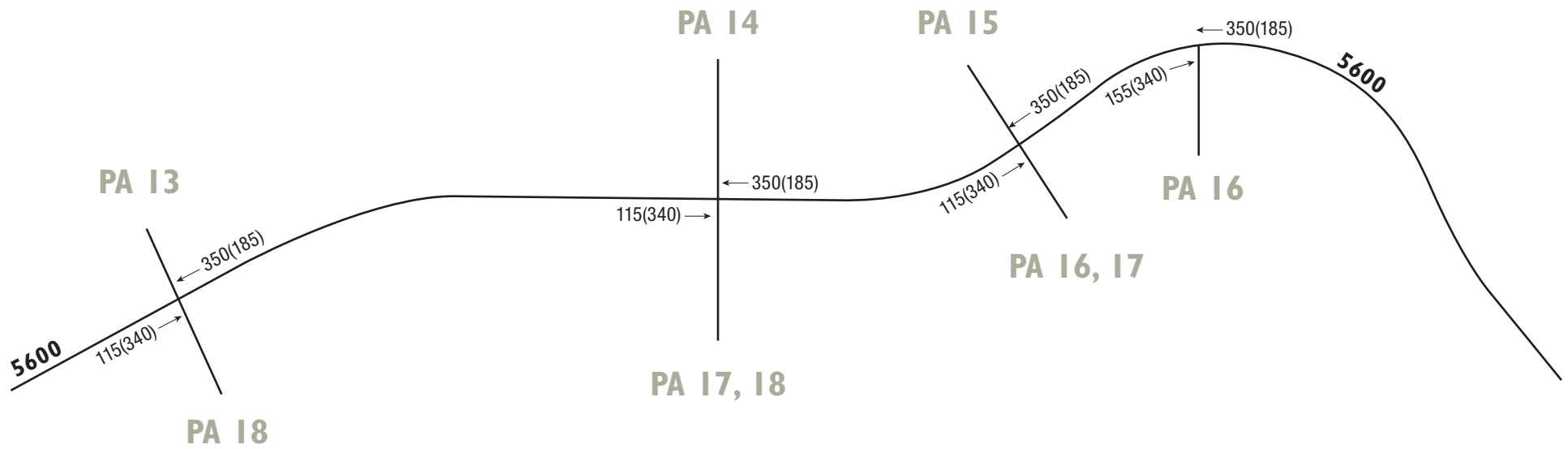
xxx(xxx) = AM(PM) Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

XX% = Site Trip Distribution

Figure 3
Site Generated Traffic Assignment





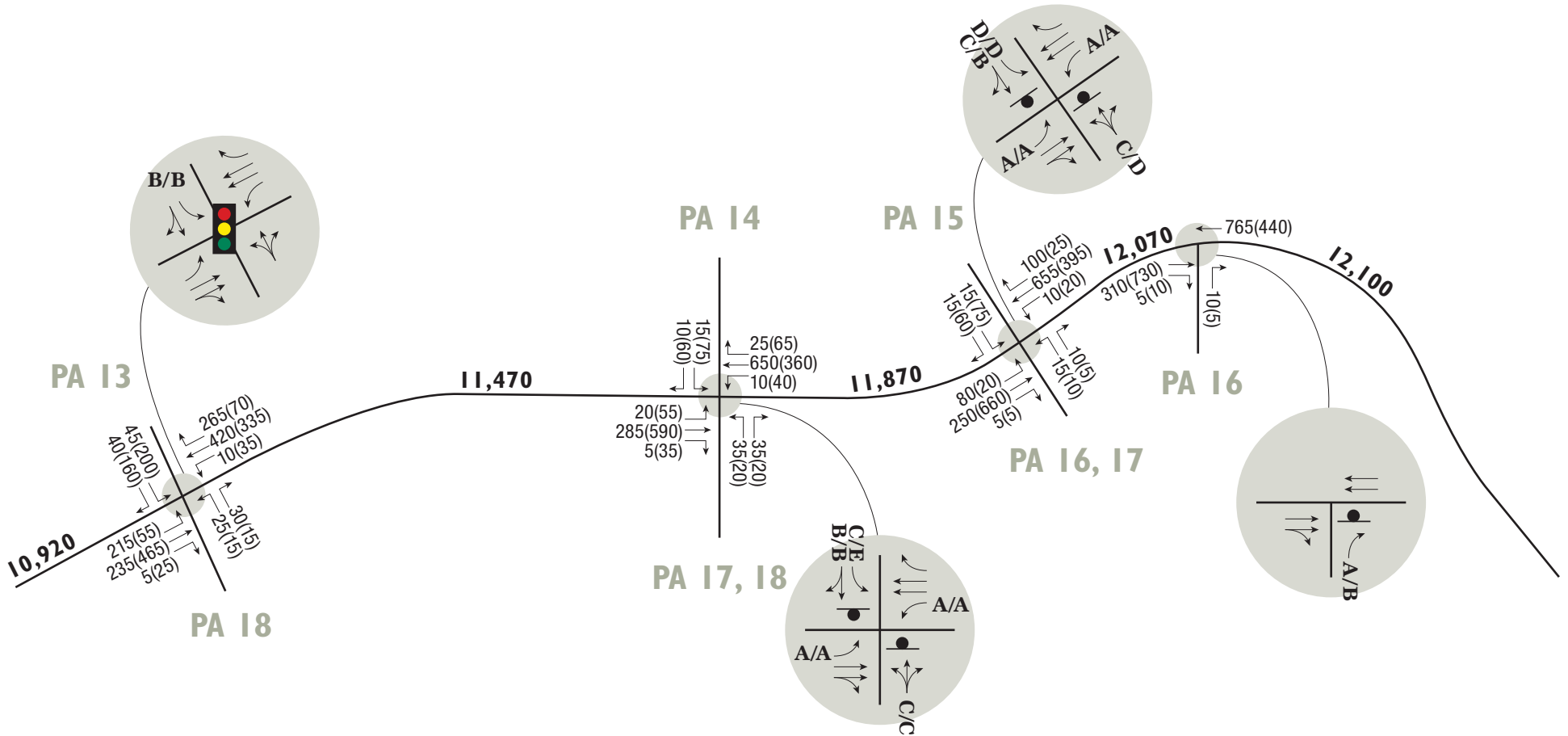
LEGEND

XXX(XXX) = AM(PM) Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

Figure 4
Long Range Future
Background Traffic Volumes





LEGEND

xxx(xxx) = AM(PM) Peak Hour Traffic Volumes

XXXX = Daily Traffic Volumes

X/X = AM/PM Peak Hour Level of Service

● = Stop Sign

🚦 = Traffic Signal

Figure 5
Total Traffic Conditions



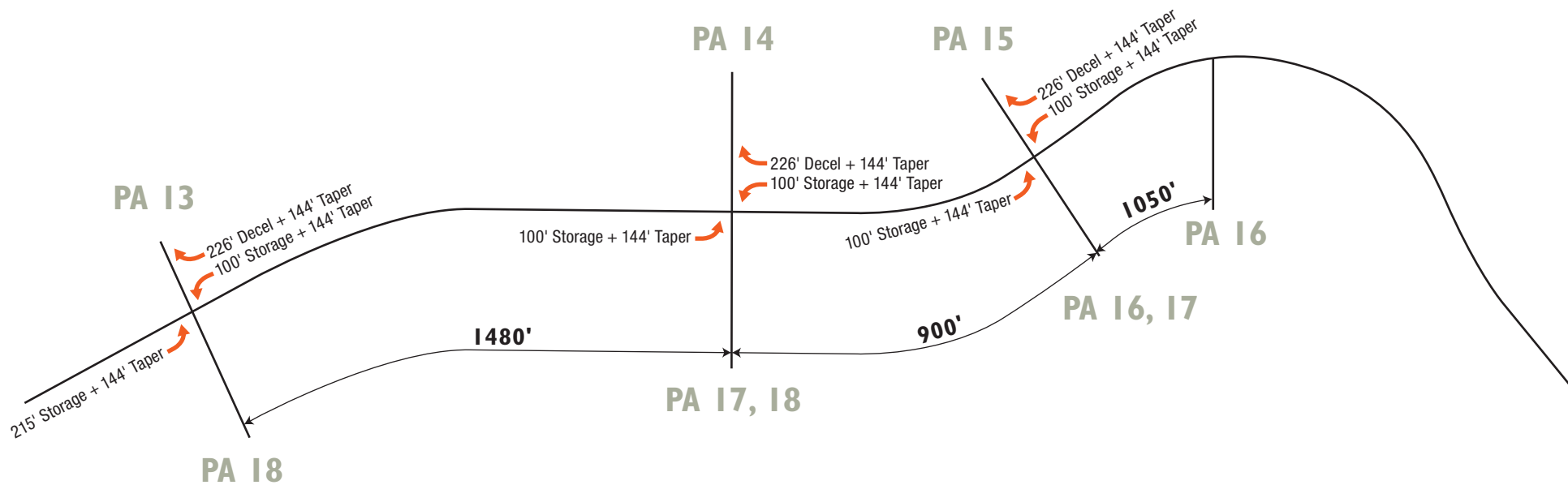


Figure 6
Auxiliary Lane Requirements



Timings
2: PA 18/PA 13 & Belford Ave

Total AM Peak Hour
5/27/2016

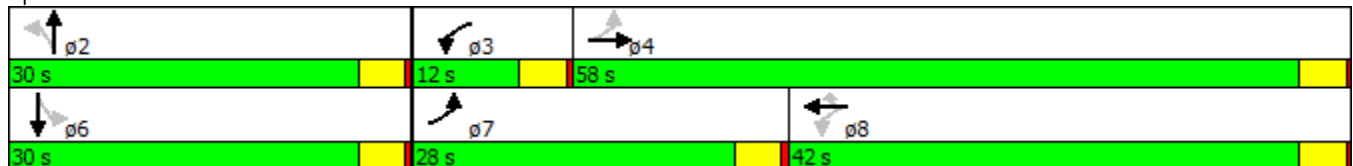


| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | ↖ | ↕ | ↖ | ↕ | ↖ | | ↕ | ↖ | ↕ |
| Volume (vph) | 215 | 235 | 10 | 420 | 265 | 25 | 5 | 45 | 5 |
| Turn Type | pm+pt | NA | pm+pt | NA | Perm | Perm | NA | Perm | NA |
| Protected Phases | 7 | 4 | 3 | 8 | | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 8 | 2 | | 6 | |
| Detector Phase | 7 | 4 | 3 | 8 | 8 | 2 | 2 | 6 | 6 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Minimum Split (s) | 8.0 | 20.0 | 8.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Total Split (s) | 28.0 | 58.0 | 12.0 | 42.0 | 42.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Total Split (%) | 28.0% | 58.0% | 12.0% | 42.0% | 42.0% | 30.0% | 30.0% | 30.0% | 30.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 |
| Lead/Lag | Lead | Lag | Lead | Lag | Lag | | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | | | | |
| Recall Mode | None | None | None | None | None | Max | Max | Max | Max |
| Act Effct Green (s) | 32.7 | 30.9 | 20.6 | 14.8 | 14.8 | | 26.3 | 26.3 | 26.3 |
| Actuated g/C Ratio | 0.49 | 0.46 | 0.31 | 0.22 | 0.22 | | 0.39 | 0.39 | 0.39 |
| v/c Ratio | 0.44 | 0.16 | 0.03 | 0.59 | 0.50 | | 0.10 | 0.09 | 0.07 |
| Control Delay | 12.5 | 11.0 | 9.7 | 27.0 | 6.6 | | 10.1 | 16.3 | 7.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 12.5 | 11.0 | 9.7 | 27.0 | 6.6 | | 10.1 | 16.3 | 7.0 |
| LOS | B | B | A | C | A | | B | B | A |
| Approach Delay | | 11.7 | | 19.0 | | | 10.1 | | 11.7 |
| Approach LOS | | B | | B | | | B | | B |

Intersection Summary

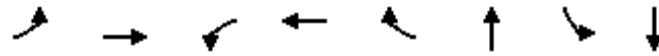
Cycle Length: 100
 Actuated Cycle Length: 67.1
 Natural Cycle: 50
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 15.5
 Intersection Capacity Utilization 43.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 2: PA 18/PA 13 & Belford Ave



Queues
2: PA 18/PA 13 & Belford Ave

Total AM Peak Hour
5/27/2016



| Lane Group | EBL | EBT | WBL | WBT | WBR | NBT | SBL | SBT |
|-------------------------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 234 | 260 | 11 | 457 | 288 | 65 | 49 | 48 |
| v/c Ratio | 0.44 | 0.16 | 0.03 | 0.59 | 0.50 | 0.10 | 0.09 | 0.07 |
| Control Delay | 12.5 | 11.0 | 9.7 | 27.0 | 6.6 | 10.1 | 16.3 | 7.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 12.5 | 11.0 | 9.7 | 27.0 | 6.6 | 10.1 | 16.3 | 7.0 |
| Queue Length 50th (ft) | 52 | 28 | 2 | 88 | 0 | 8 | 12 | 1 |
| Queue Length 95th (ft) | 90 | 62 | 9 | 141 | 55 | 37 | 40 | 23 |
| Internal Link Dist (ft) | | 324 | | 1383 | | 38 | | 32 |
| Turn Bay Length (ft) | 215 | | 100 | | 226 | | 100 | |
| Base Capacity (vph) | 715 | 2874 | 455 | 2027 | 1030 | 637 | 522 | 658 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.09 | 0.02 | 0.23 | 0.28 | 0.10 | 0.09 | 0.07 |

Intersection Summary

| Intersection | | | | | | | | | | | | | |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 1.9 | | | | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h | 20 | 285 | 5 | 10 | 650 | 25 | 35 | 5 | 35 | 15 | 5 | 10 |
| 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 | 100 | - | 226 | 100 | - | 226 | - | - | - | 100 | - | - |
| 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 | 22 | 310 | 5 | 11 | 707 | 27 | 38 | 5 | 38 | 16 | 5 | 11 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 707 | 0 | 0 | 310 | 0 | 0 | 731 | 1081 | 155 | 929 | 1081 | 353 |
| Stage 1 | - | - | - | - | - | - | 353 | 353 | - | 728 | 728 | - |
| Stage 2 | - | - | - | - | - | - | 378 | 728 | - | 201 | 353 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 887 | - | - | 1247 | - | - | 310 | 216 | 863 | 222 | 216 | 643 |
| Stage 1 | - | - | - | - | - | - | 637 | 629 | - | 381 | 427 | - |
| Stage 2 | - | - | - | - | - | - | 616 | 427 | - | 782 | 629 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 887 | - | - | 1247 | - | - | 291 | 209 | 863 | 203 | 209 | 643 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 291 | 209 | - | 203 | 209 | - |
| Stage 1 | - | - | - | - | - | - | 621 | 613 | - | 372 | 423 | - |
| Stage 2 | - | - | - | - | - | - | 593 | 423 | - | 723 | 613 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|------|------|
| HCM Control Delay, s | 0.6 | 0.1 | 16.1 | 19.6 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 406 | 887 | - | - | 1247 | - | - | 203 | 380 |
| HCM Lane V/C Ratio | 0.201 | 0.025 | - | - | 0.009 | - | - | 0.08 | 0.043 |
| HCM Control Delay (s) | 16.1 | 9.2 | - | - | 7.9 | - | - | 24.3 | 14.9 |
| HCM Lane LOS | C | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.7 | 0.1 | - | - | 0 | - | - | 0.3 | 0.1 |

| Intersection | | | | | | | | | | | | | |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 1.9 | | | | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h | 80 | 250 | 5 | 10 | 655 | 100 | 15 | 5 | 10 | 15 | 5 | 15 |
| 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 | 100 | - | - | 100 | - | 226 | - | - | - | 100 | - | - |
| 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 | 87 | 272 | 5 | 11 | 712 | 109 | 16 | 5 | 11 | 16 | 5 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 712 | 0 | 0 | 277 | 0 | 0 | 828 | 1182 | 139 | 1047 | 1185 | 356 |
| Stage 1 | - | - | - | - | - | - | 448 | 448 | - | 734 | 734 | - |
| Stage 2 | - | - | - | - | - | - | 380 | 734 | - | 313 | 451 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 884 | - | - | 1283 | - | - | 263 | 188 | 884 | 182 | 188 | 640 |
| Stage 1 | - | - | - | - | - | - | 560 | 571 | - | 378 | 424 | - |
| Stage 2 | - | - | - | - | - | - | 614 | 424 | - | 672 | 569 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 884 | - | - | 1283 | - | - | 230 | 168 | 884 | 161 | 168 | 640 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 230 | 168 | - | 161 | 168 | - |
| Stage 1 | - | - | - | - | - | - | 505 | 515 | - | 341 | 420 | - |
| Stage 2 | - | - | - | - | - | - | 586 | 420 | - | 592 | 513 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|------|------|
| HCM Control Delay, s | 2.3 | 0.1 | 19.4 | 21.5 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 282 | 884 | - | - | 1283 | - | - | 161 | 376 |
| HCM Lane V/C Ratio | 0.116 | 0.098 | - | - | 0.008 | - | - | 0.101 | 0.058 |
| HCM Control Delay (s) | 19.4 | 9.5 | - | - | 7.8 | - | - | 29.9 | 15.2 |
| HCM Lane LOS | C | A | - | - | A | - | - | D | C |
| HCM 95th %tile Q(veh) | 0.4 | 0.3 | - | - | 0 | - | - | 0.3 | 0.2 |

Intersection

Int Delay, s/veh 0.1

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h | 310 | 5 | 0 | 765 | 0 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 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 | 337 | 5 | 0 | 832 | 0 | 11 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 756 |
| Stage 1 | - | - | 340 |
| Stage 2 | - | - | 416 |
| Critical Hdwy | - | 4.14 | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | - | 2.22 | 3.52 |
| Pot Cap-1 Maneuver | - | 1214 | 344 |
| Stage 1 | - | - | 692 |
| Stage 2 | - | - | 634 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | 1214 | 344 |
| Mov Cap-2 Maneuver | - | - | 344 |
| Stage 1 | - | - | 692 |
| Stage 2 | - | - | 634 |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 9.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|------|-----|
| Capacity (veh/h) | 843 | - | - | 1214 | - |
| HCM Lane V/C Ratio | 0.013 | - | - | - | - |
| HCM Control Delay (s) | 9.3 | - | - | 0 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

Timings
2: PA 18/PA 13 & Belford Ave

Total PM Peak Hour
5/27/2016

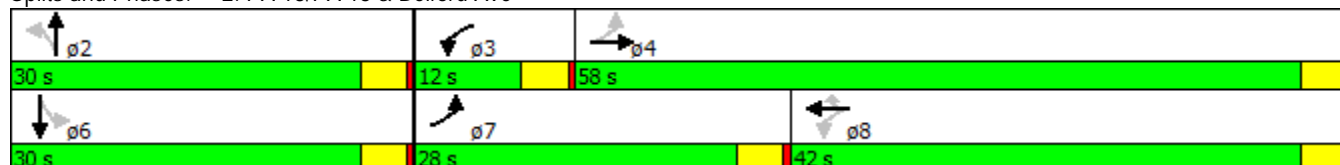


| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | ↖ | ↕ | ↖ | ↕ | ↖ | | ↕ | ↖ | ↕ |
| Volume (vph) | 55 | 465 | 35 | 335 | 70 | 15 | 5 | 200 | 5 |
| Turn Type | pm+pt | NA | pm+pt | NA | Perm | Perm | NA | Perm | NA |
| Protected Phases | 7 | 4 | 3 | 8 | | | 2 | | 6 |
| Permitted Phases | 4 | | 8 | | 8 | 2 | | 6 | |
| Detector Phase | 7 | 4 | 3 | 8 | 8 | 2 | 2 | 6 | 6 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Minimum Split (s) | 8.0 | 20.0 | 8.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Total Split (s) | 28.0 | 58.0 | 12.0 | 42.0 | 42.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Total Split (%) | 28.0% | 58.0% | 12.0% | 42.0% | 42.0% | 30.0% | 30.0% | 30.0% | 30.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 |
| Lead/Lag | Lead | Lag | Lead | Lag | Lag | | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | | | | |
| Recall Mode | None | None | None | None | None | Max | Max | Max | Max |
| Act Effct Green (s) | 17.7 | 15.1 | 16.3 | 12.7 | 12.7 | | 26.6 | 26.6 | 26.6 |
| Actuated g/C Ratio | 0.33 | 0.28 | 0.30 | 0.24 | 0.24 | | 0.50 | 0.50 | 0.50 |
| v/c Ratio | 0.15 | 0.54 | 0.11 | 0.43 | 0.17 | | 0.05 | 0.32 | 0.20 |
| Control Delay | 11.2 | 18.9 | 10.8 | 19.9 | 4.2 | | 7.9 | 12.5 | 3.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 11.2 | 18.9 | 10.8 | 19.9 | 4.2 | | 7.9 | 12.5 | 3.2 |
| LOS | B | B | B | B | A | | A | B | A |
| Approach Delay | | 18.1 | | 16.7 | | | 7.9 | | 8.3 |
| Approach LOS | | B | | B | | | A | | A |

Intersection Summary

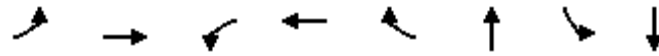
| | |
|-----------------------------------------|------------------------|
| Cycle Length: 100 | |
| Actuated Cycle Length: 53.7 | |
| Natural Cycle: 50 | |
| Control Type: Semi Act-Uncoord | |
| Maximum v/c Ratio: 0.54 | |
| Intersection Signal Delay: 14.8 | Intersection LOS: B |
| Intersection Capacity Utilization 44.7% | ICU Level of Service A |
| Analysis Period (min) 15 | |

Splits and Phases: 2: PA 18/PA 13 & Belford Ave



Queues
2: PA 18/PA 13 & Belford Ave

Total PM Peak Hour
5/27/2016



| Lane Group | EBL | EBT | WBL | WBT | WBR | NBT | SBL | SBT |
|-------------------------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 60 | 532 | 38 | 364 | 76 | 37 | 217 | 179 |
| v/c Ratio | 0.15 | 0.54 | 0.11 | 0.43 | 0.17 | 0.05 | 0.32 | 0.20 |
| Control Delay | 11.2 | 18.9 | 10.8 | 19.9 | 4.2 | 7.9 | 12.5 | 3.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 11.2 | 18.9 | 10.8 | 19.9 | 4.2 | 7.9 | 12.5 | 3.2 |
| Queue Length 50th (ft) | 12 | 63 | 8 | 57 | 0 | 4 | 43 | 1 |
| Queue Length 95th (ft) | 30 | 131 | 21 | 92 | 20 | 20 | 107 | 33 |
| Internal Link Dist (ft) | | 324 | | 1383 | | 38 | | 32 |
| Turn Bay Length (ft) | 215 | | 100 | | 226 | | 100 | |
| Base Capacity (vph) | 832 | 3305 | 389 | 2566 | 1175 | 790 | 677 | 877 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.07 | 0.16 | 0.10 | 0.14 | 0.06 | 0.05 | 0.32 | 0.20 |

Intersection Summary

| Intersection | | | | | | | | | | | | |
|------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 4.1 | | | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h | 55 | 590 | 35 | 40 | 360 | 65 | 20 | 5 | 20 | 75 | 5 | 60 |
| 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 | 100 | - | - | 100 | - | 226 | - | - | - | 100 | - | - |
| 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 | 60 | 641 | 38 | 43 | 391 | 71 | 22 | 5 | 22 | 82 | 5 | 65 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 391 | 0 | 0 | 679 | 0 | 0 | 1065 | 1258 | 340 | 921 | 1277 | 196 |
| Stage 1 | - | - | - | - | - | - | 780 | 780 | - | 478 | 478 | - |
| Stage 2 | - | - | - | - | - | - | 285 | 478 | - | 443 | 799 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1164 | - | - | 909 | - | - | 177 | 170 | 656 | 225 | 165 | 812 |
| Stage 1 | - | - | - | - | - | - | 354 | 404 | - | 537 | 554 | - |
| Stage 2 | - | - | - | - | - | - | 698 | 554 | - | 564 | 396 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1164 | - | - | 909 | - | - | 147 | 154 | 656 | 196 | 149 | 812 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 147 | 154 | - | 196 | 149 | - |
| Stage 1 | - | - | - | - | - | - | 336 | 383 | - | 509 | 528 | - |
| Stage 2 | - | - | - | - | - | - | 605 | 528 | - | 510 | 376 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|------|------|
| HCM Control Delay, s | 0.7 | 0.8 | 25.3 | 24.7 |
| HCM LOS | | | D | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 226 | 1164 | - | - | 909 | - | - | 196 | 605 |
| HCM Lane V/C Ratio | 0.216 | 0.051 | - | - | 0.048 | - | - | 0.416 | 0.117 |
| HCM Control Delay (s) | 25.3 | 8.3 | - | - | 9.2 | - | - | 35.9 | 11.7 |
| HCM Lane LOS | D | A | - | - | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.8 | 0.2 | - | - | 0.1 | - | - | 1.9 | 0.4 |

| Intersection | | | | | | | | | | | | |
|------------------|---|--|--|--|--|--|--|--|--|--|--|--|
| Int Delay, s/veh | 3 | | | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol, veh/h | 20 | 660 | 5 | 20 | 395 | 25 | 10 | 5 | 5 | 75 | 5 | 60 |
| 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 | 100 | - | - | 100 | - | 226 | - | - | - | 100 | - | - |
| 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 | 22 | 717 | 5 | 22 | 429 | 27 | 11 | 5 | 5 | 82 | 5 | 65 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 429 | 0 | 0 | 723 | 0 | 0 | 1025 | 1237 | 361 | 878 | 1239 | 215 |
| Stage 1 | - | - | - | - | - | - | 764 | 764 | - | 473 | 473 | - |
| Stage 2 | - | - | - | - | - | - | 261 | 473 | - | 405 | 766 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1127 | - | - | 875 | - | - | 189 | 175 | 636 | 242 | 174 | 790 |
| Stage 1 | - | - | - | - | - | - | 362 | 411 | - | 541 | 557 | - |
| Stage 2 | - | - | - | - | - | - | 721 | 557 | - | 593 | 410 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1127 | - | - | 875 | - | - | 163 | 167 | 636 | 226 | 166 | 790 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 163 | 167 | - | 226 | 166 | - |
| Stage 1 | - | - | - | - | - | - | 355 | 403 | - | 530 | 543 | - |
| Stage 2 | - | - | - | - | - | - | 638 | 543 | - | 569 | 402 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|----|------|
| HCM Control Delay, s | 0.2 | 0.4 | 25 | 21.3 |
| HCM LOS | | | D | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 202 | 1127 | - | - | 875 | - | - | 226 | 613 |
| HCM Lane V/C Ratio | 0.108 | 0.019 | - | - | 0.025 | - | - | 0.361 | 0.115 |
| HCM Control Delay (s) | 25 | 8.3 | - | - | 9.2 | - | - | 29.7 | 11.6 |
| HCM Lane LOS | D | A | - | - | A | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.4 | 0.1 | - | - | 0.1 | - | - | 1.6 | 0.4 |

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Vol, veh/h | 730 | 10 | 0 | 440 | 0 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 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 | 793 | 11 | 0 | 478 | 0 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 1038 |
| Stage 1 | - | - | 799 |
| Stage 2 | - | - | 239 |
| Critical Hdwy | - | 4.14 | 6.84 |
| Critical Hdwy Stg 1 | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | 5.84 |
| Follow-up Hdwy | - | 2.22 | 3.52 |
| Pot Cap-1 Maneuver | - | 816 | 598 |
| Stage 1 | - | - | 403 |
| Stage 2 | - | - | 778 |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | 816 | 598 |
| Mov Cap-2 Maneuver | - | - | 227 |
| Stage 1 | - | - | 403 |
| Stage 2 | - | - | 778 |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-----|-----|
| Capacity (veh/h) | 598 | - | - | 816 | - |
| HCM Lane V/C Ratio | 0.009 | - | - | - | - |
| HCM Control Delay (s) | 11.1 | - | - | 0 | - |
| HCM Lane LOS | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |