

Traffic Impact Study Proposed Residential Development

Aurora, Illinois



Prepared For:



M/I HOMES



August 4, 2021

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed residential development (Chelsea Manor) to be located on the east side of Commons Drive, south of the intersection of Commons Drive and 75th Street in Aurora, Illinois. As proposed, the site (which is currently vacant) will be developed to provide a townhome subdivision with 48 buildings totaling 250 units. Access to the site will be provided via two full movement access drives off Commons Drive. A cross-access to Calvary Church will also be provided which will be only utilized for church services between 3:00 P.M. on Saturday and 3:00 P.M. on Sunday.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development.

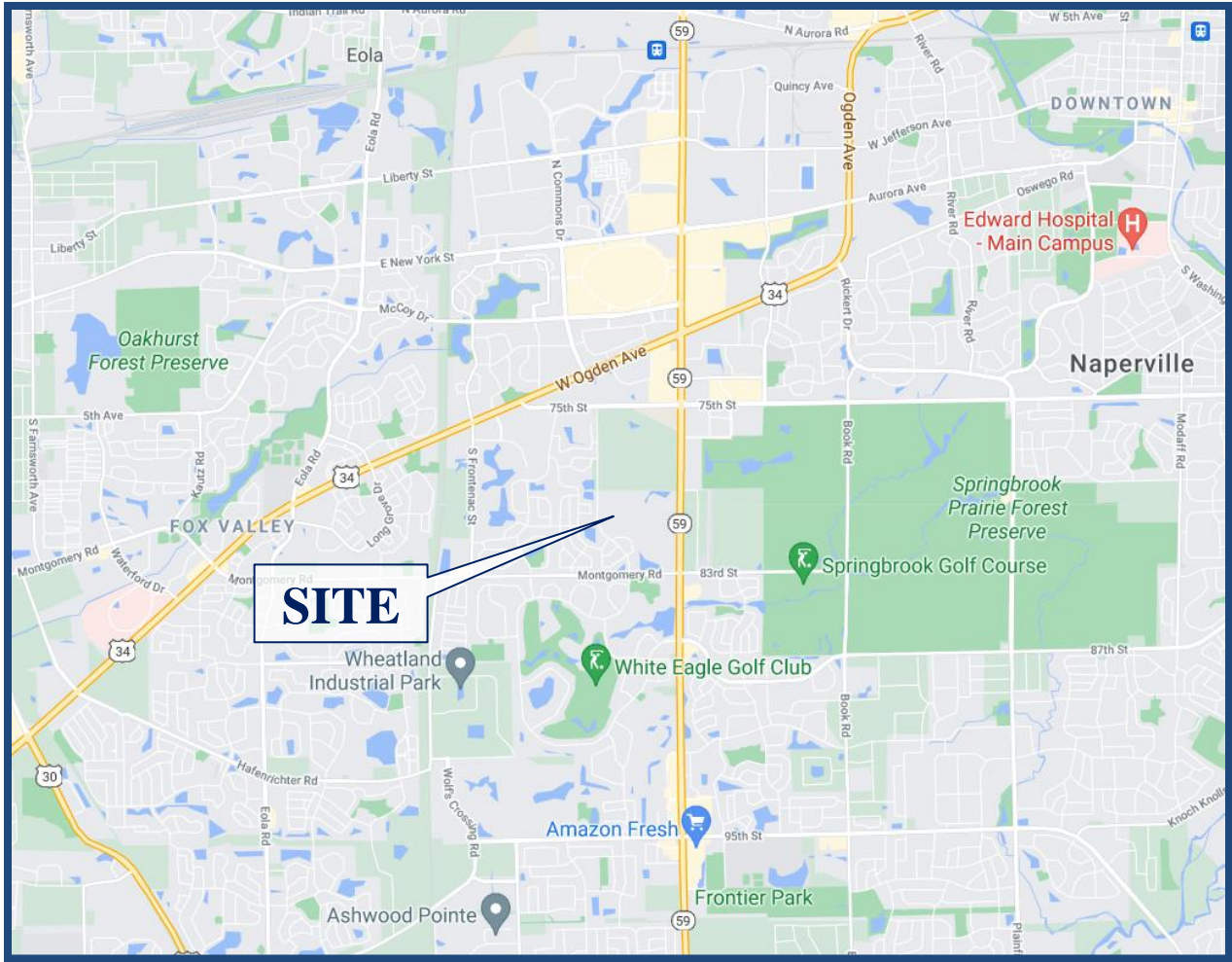
Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Projected Conditions – Analyzes the projected traffic volumes which includes the existing traffic volumes increased by an ambient area growth factor (growth not attributable to any particular development) and the traffic estimated to be generated by the proposed subject development.



Site Location

Figure 1



Aerial View of Site

Figure 2

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

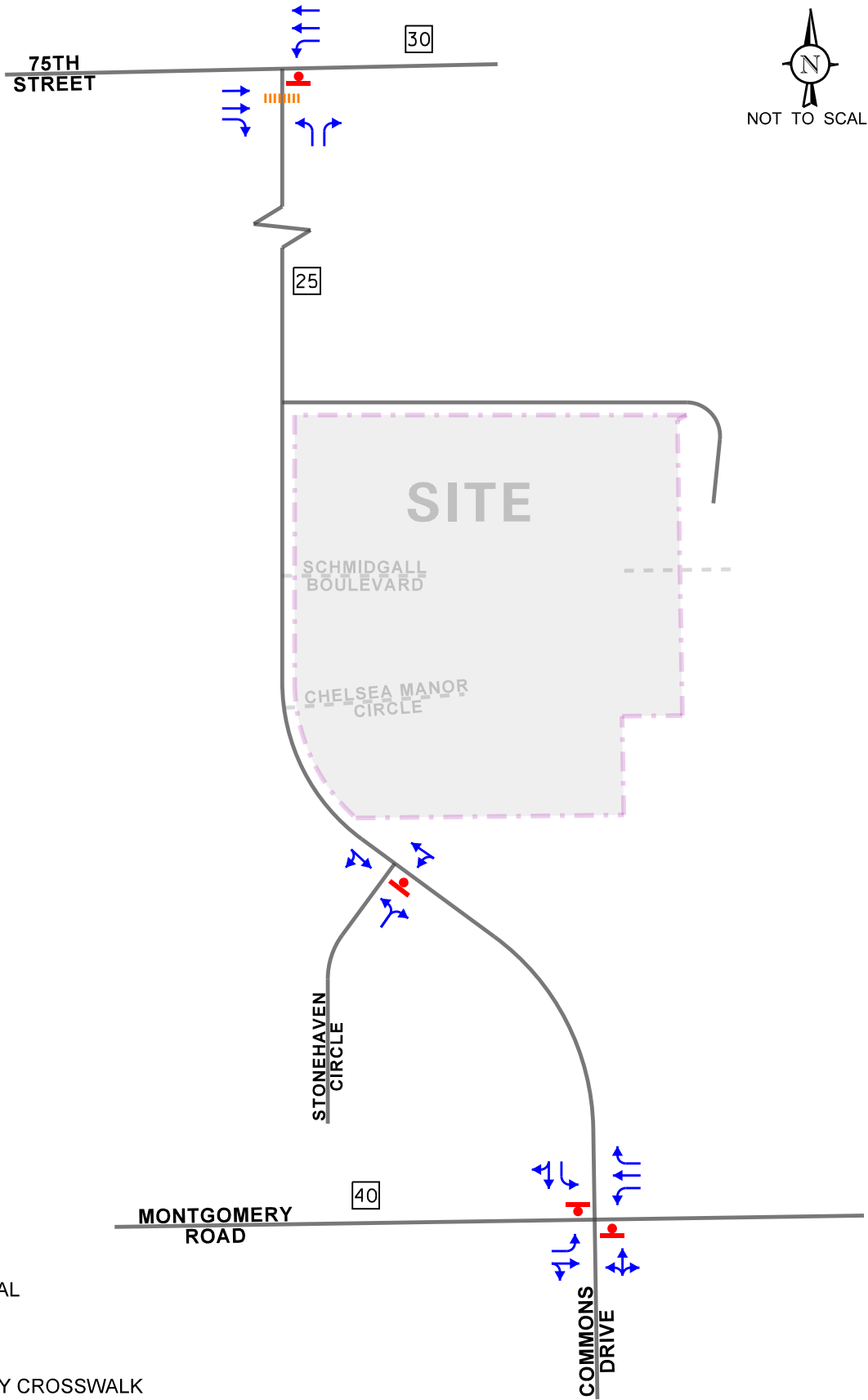
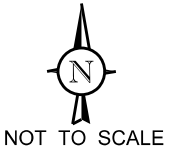
The site, which is currently vacant, is located on the east side of Commons Drive, northeast of the intersection of Commons Drive with Stonehaven Circle. The site is located approximately one-half mile south of the intersection of Commons Drive with 75th Street (DuPage County Route 33) and one-half mile north of the intersection of Commons Drive with Montgomery Road. Land uses in the vicinity of the site include Stonehaven residential subdivision to the south, Chicory Place residential subdivision to the west, Gramercy Square residential subdivision to the north, and Calvary Church of Naperville to the east.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below. **Figure 3** illustrates the existing roadway characteristics.

75th Street (DuPage County Road 33) is an east-west arterial roadway that in the vicinity of the site provides two through lanes in each direction separated by an approximately 40-foot raised landscaped median. At its unsignalized intersection with Commons Drive, 75th Street provides an exclusive left-turn lane and two through lanes in the westbound direction and an exclusive right-turn lane and two through lanes in the eastbound direction. 75th Street is under the jurisdiction of the DuPage County Division of Transportation (DuDOT), is classified as a Strategic Regional Arterial (SRA), carries an annual average daily traffic (AADT) volume of 15,600 vehicles (IDOT 2016), and has a posted speed limit of 50 miles per hour.

Montgomery Road is an east-west arterial roadway that provides one through lane in each direction in the vicinity of the site. At its unsignalized intersection with Commons Drive, Montgomery Road provides an exclusive left-turn lane and a shared through/right-turn lane on the eastbound approach and an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the westbound approach. Montgomery Road is under the jurisdiction of the City of Aurora, is not classified as a Strategic Regional Arterial (SRA), carries an AADT volume of 12,200 vehicles (IDOT 2016), and has a posted speed limit of 40 miles per hour.



- LEGEND**
- TRAVEL LANE
 - TRAFFIC SIGNAL
 - STOP SIGN
 - SPEED LIMIT
 - HIGH VISIBILITY CROSSWALK

Chelsea Manor
Aurora, Illinois

Existing Roadway Characteristics



Job No: 21-196

Figure: 3

Commons Drive is a north-south local roadway that provides one lane in each direction. At its unsignalized, stop sign-controlled intersection with Montgomery Road, the north leg of Commons Drive provides an exclusive left-turn lane and a shared through/right-turn lane. The south leg of the intersection is named White Eagle Drive and provides a shared left-turn/through/right lane. At its unsignalized stop sign-controlled T-intersection with 75th Street, Commons Drive provides an exclusive left-turn lane, an exclusive right-turn lane, and a high-visibility crosswalk. Commons Drive is under the jurisdiction of the City of Aurora and has a posted speed limit of 25 miles per hour.

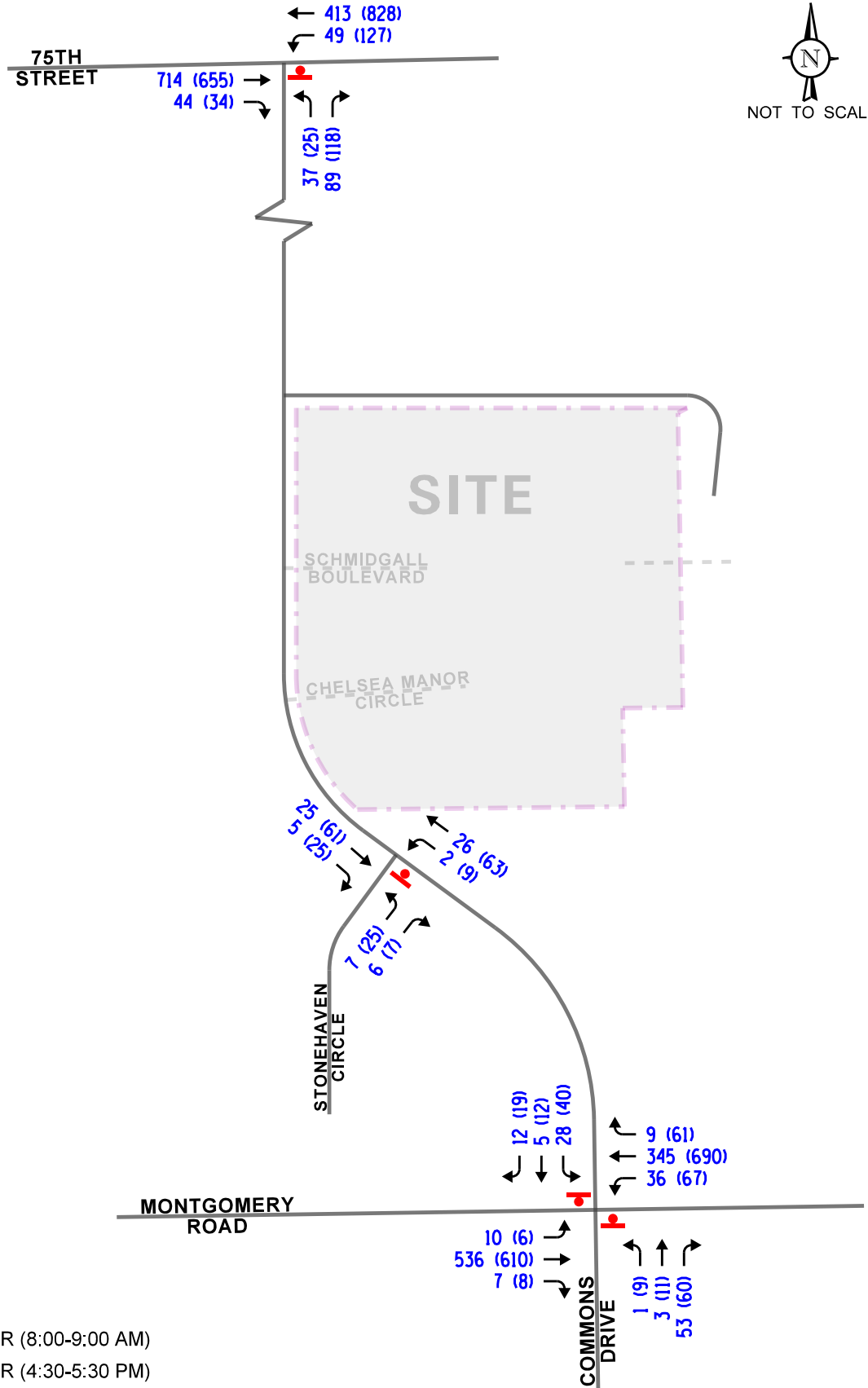
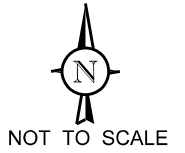
Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Thursday, July 8, 2021, during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Commons Drive with 75th Street (DuPage County Route 33)
- Commons Drive with Montgomery Road
- Commons Drive with Stonehaven Circle

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 8:00 A.M. to 9:00 A.M. and the weekday evening peak hour of traffic occurs from 4:30 P.M. to 5:30 P.M. Copies of the traffic count summary sheets are included in the Appendix.

Due to the COVID-19 pandemic, it is anticipated that traffic volumes within the area are not representative of typical conditions and, as such, the Year 2021 traffic counts were compared to traffic counts previously conducted by KLOA, Inc. at the intersection of 75th Street with Commons Drive in 2017. The results of the comparison showed that the morning peak hour volumes in 2021 were 15 percent lower than the counts from 2017 and the weekday evening peak hour volumes in 2021 were consistent with the counts from 2017. As such, the morning peak hour counts were increased by 15 percent. Additionally, to be conservative, the evening peak hour counts were increased by five percent. **Figure 4** illustrates the Year 2021 base traffic volumes.



LEGEND

- 00 - AM PEAK HOUR (8:00-9:00 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

Crash Analysis

KLOA, Inc. obtained crash data¹ from IDOT for the most recent available five years (2016 to 2020) for the intersections of Commons Drive with Montgomery Road, Commons Drive with Stonehaven Circle, and Commons Drive with 75th Street. The crash data for the intersection of Commons Drive with Montgomery Road is summarized in **Table 1**. A review of the crash data indicated that only one crash occurred at the intersection of Commons Drive with Stonehaven Circle and eight crashes occurred at the intersection of Commons Drive with 75th Street between 2016 and 2020. Additionally, it should be noted that no fatalities were reported at these intersections.

Table 1
COMMONS DRIVE WITH MONTGOMERY ROAD – CRASH SUMMARY

| Year | Type of Crash Frequency | | | | | | | Total |
|----------------|-------------------------|----------------|----------------|------------|----------------|----------------|----------------|------------|
| | Angle | Pedestrian | Object | Rear End | Sideswipe | Turning | Other | |
| 2016 | 0 | 0 | 1 | 6 | 0 | 2 | 0 | 9 |
| 2017 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 2018 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 2019 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2020 | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>1</u> |
| Total | 2 | 0 | 1 | 8 | 0 | 2 | 1 | 14 |
| Average | <1.0 | <1.0 | <1.0 | 1.6 | <1.0 | <1.0 | <1.0 | 2.8 |

¹ IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the plans call for developing the site with 250 townhome units across 48 buildings. Access to the site will be provided via two full movement access roadways off Commons Drive. The south access roadway will be known as Chelsea Manor Circle and the north access roadway will be known as Schmidgall Boulevard. The access roadways will each provide one inbound lane and one outbound lane and outbound movements should be under stop sign control. It should be noted that as part of the proposed development, the existing access drive off Commons Drive serving Calvary Church will be eliminated. However, the proposed development will provide cross-access connection to Calvary Church and this cross access will continue to be utilized for church services between 3:00 P.M. on Saturday and 3:00 P.M. on Sunday. A copy of the preliminary site plan depicting the proposed development and access is included in the Appendix.

Directional Distribution

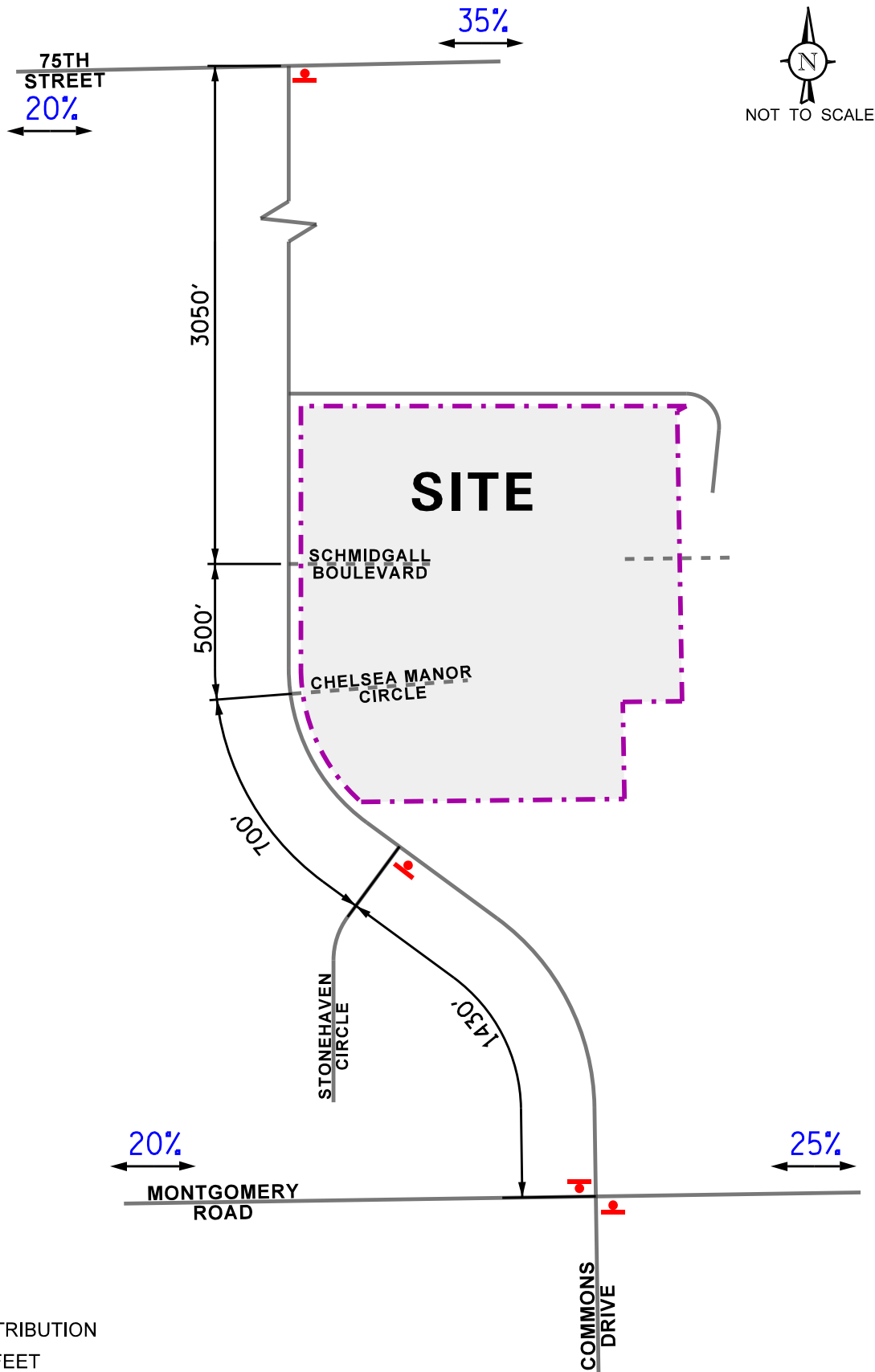
The directions from which residents of the proposed development will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic.

Estimated Site Traffic Generation

The volume of traffic generated by the proposed apartment development was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The “Multifamily Housing (Low Rise)” (Land-Use Code 220) was used. **Table 2** tabulates the vehicle trips anticipated for this development.

Table 2
ESTIMATED SITE-GENERATED TRAFFIC VOLUMES

| ITE Land Use Code | Type/Size | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | | Daily Two-Way Trips | | |
|-------------------|-----------------------|---------------------------|-----|-------|---------------------------|-----|-------|---------------------|-----|-------|
| | | In | Out | Total | In | Out | Total | In | Out | Total |
| 220 | Townhomes (250 Units) | 26 | 88 | 114 | 84 | 49 | 133 | 925 | 925 | 1850 |



LEGEND

- 00% - PERCENT DISTRIBUTION
- 00' - DISTANCE IN FEET

Chelsea Manor
Aurora, Illinois

Estimated Directional Distribution



Job No: 21-196

Figure: 5

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

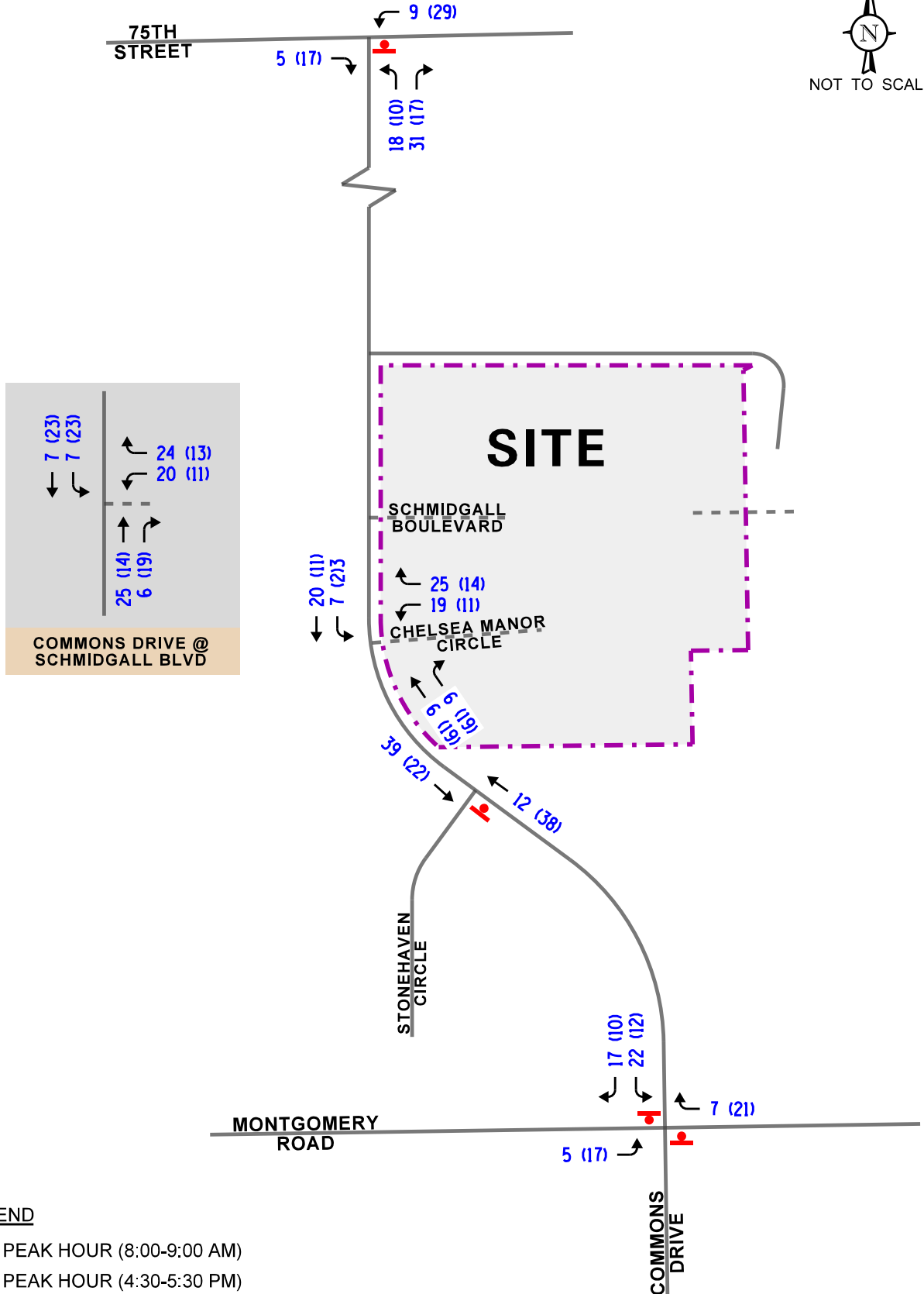
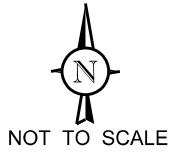
The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The total new traffic assignment for the residential development is illustrated in **Figure 6**.

Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated July 26, 2021, the existing traffic volume were increased by an annually compounded growth rate for six years (one-year buildout plus five years) totaling five percent to represent Year 2027 total projected conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The development-generated traffic (Figure 6) was added to the existing traffic volumes increased by a regional growth factor to determine the Year 2027 total projected traffic volumes, as illustrated in **Figure 7**.



LEGEND

- 00 - AM PEAK HOUR (8:00-9:00 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

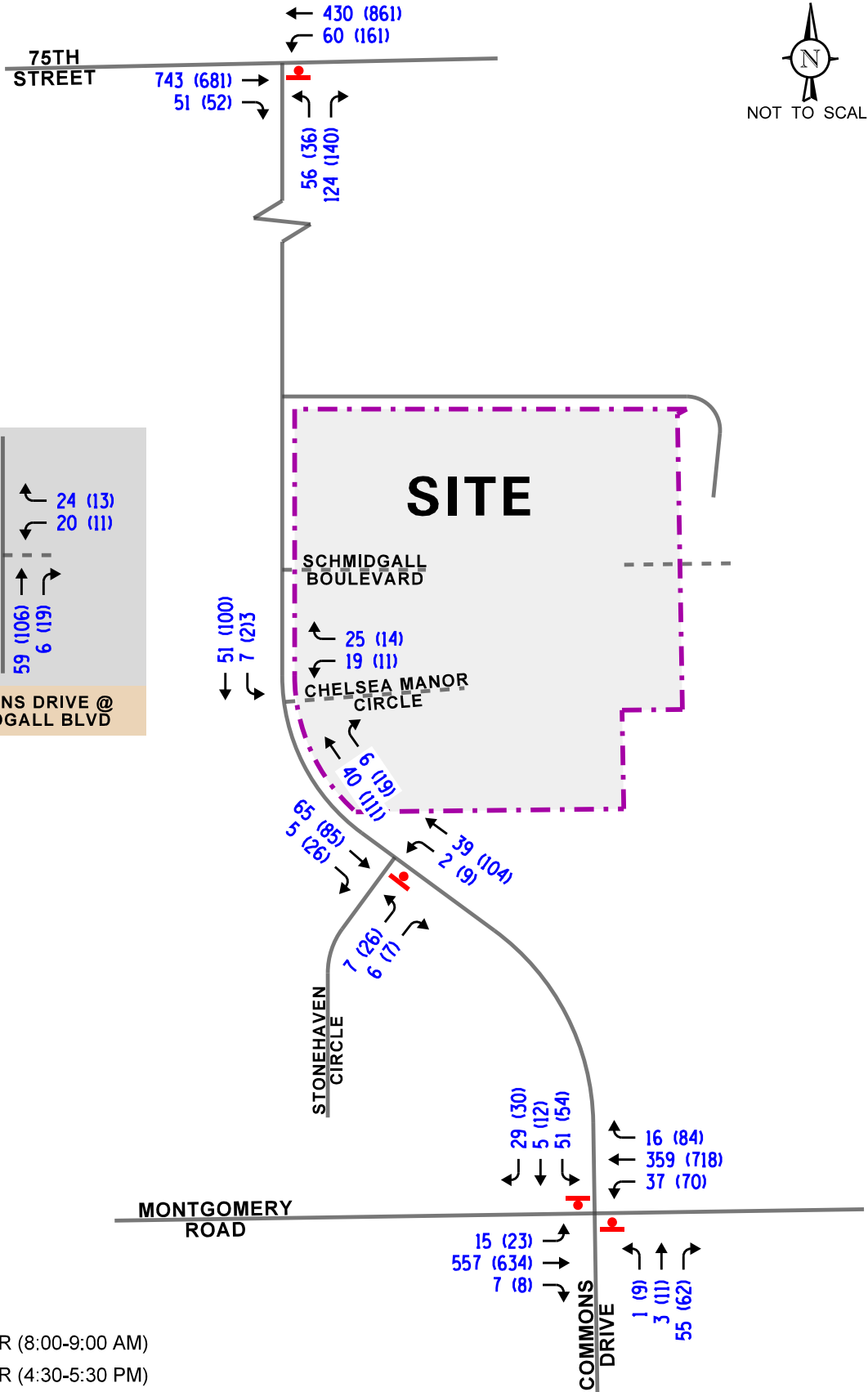
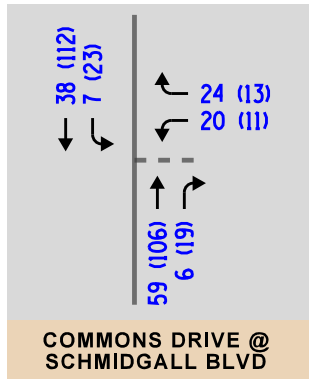
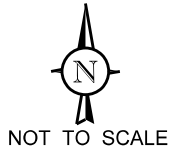
Chelsea Manor
Aurora, Illinois

Estimated Site-Generated
Traffic Volumes



Job No: 21-196

Figure: 6



5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, and weekday evening peak hours for the existing (Year 2021) and future projected (Year 2027) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using Synchro/SimTraffic 11 computer software.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2027 total projected conditions are presented in **Tables 3** and **4**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – YEAR 2021 EXISTING CONDITIONS¹

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay |
| Commons Drive with 75th Street | | | | |
| • Northbound Approach | B | 13.1 | B | 12.9 |
| • Westbound Left Turn | A | 9.9 | A | 9.8 |
| Commons Drive with Stonehaven Circle | | | | |
| • Eastbound Approach | A | 8.8 | A | 9.6 |
| • Northbound Left Turn | A | 7.3 | A | 7.4 |
| Commons Drive with Montgomery Road | | | | |
| • Northbound Approach | B | 14.0 | E | 39.9 |
| • Southbound Left Turn | D | 32.1 | F | 99+ |
| • Southbound Through/Right Turn | B | 14.3 | D | 30.4 |
| • Eastbound Left Turn | A | 8.2 | A | 9.5 |
| • Westbound Left Turn | A | 8.1 | A | 9.3 |
| LOS = Level of Service 1 – All Intersections are Two-Way Stop Controlled Delay is measured in seconds | | | | |

Table 4
CAPACITY ANALYSIS RESULTS – YEAR 2027 PROJECTED CONDITIONS¹

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay |
| Commons Drive with 75th Street | | | | |
| • Northbound Approach | B | 14.0 | B | 14.0 |
| • Westbound Left Turn | B | 10.2 | B | 10.3 |
| Commons Drive with Stonehaven Circle | | | | |
| • Eastbound Approach | A | 9.1 | B | 10.2 |
| • Northbound Left Turn | A | 7.4 | A | 7.5 |
| Commons Drive with Montgomery Road | | | | |
| • Northbound Approach | B | 14.5 | F | 54.9 |
| • Southbound Left Turn | E | 42.8 | F | 99+ |
| • Southbound Through/Right Turn | B | 13.1 | D | 32.0 |
| • Eastbound Left Turn | A | 8.3 | A | 9.9 |
| • Westbound Left Turn | A | 9.0 | A | 9.4 |
| Commons Drive with Chelsea Manor Circle | | | | |
| • Westbound Approach | A | 9.0 | A | 9.6 |
| • Southbound Left Turn | A | 7.3 | A | 7.5 |
| Commons Drive with Schmidgall Boulevard | | | | |
| • Westbound Approach | A | 9.0 | A | 9.6 |
| • Southbound Left Turn | A | 7.4 | A | 7.5 |
| LOS = Level of Service Delay is measured in seconds. 1 – All Intersections Are Two-Way Stop Controlled | | | | |

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development traffic.

Commons Drive with 75th Street

The results of the capacity analysis indicate that the northbound approach currently operates at Level of Service (LOS) B during the weekday morning and weekday evening peak hours. Under projected conditions, the northbound approach is projected to continue operating at LOS B during the weekday morning and weekday evening peak hours with increases in delay of less than two seconds. The westbound left-turn movement currently operates at LOS A during the weekday morning and weekday evening peak hours.

Under projected conditions, the westbound left-turn movement is projected to operate at LOS B during the peak hours with increases in delay of less than one second. The 95th percentile queues for the northbound and westbound approaches are projected to be one to two vehicles which can be accommodated within the existing left-turn lane storage provided. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Commons Drive with Montgomery Road

The results of the capacity analysis indicate that the northbound approach currently operates at LOS B during the weekday morning peak hour and LOS E during the weekday evening peak hour. Under projected conditions, the northbound approach is projected to continue operating at LOS B during the weekday morning peak hour with increases in delay of less than one second and is projected to operate at LOS F during the weekday evening peak hour. However, this level of service and increase in delay is primarily attributed to the background growth applied to the intersection as the proposed development is not projected to increase the volume of northbound traffic or the eastbound/westbound through traffic. It should be noted that the northbound approach is projected to have a volume-to-capacity ratio of less than one, and 95th percentile queues are only projected to be three vehicles. Overall, this level of service is expected for a local roadway that has an unsignalized intersection with an arterial roadway such as Montgomery Road.

The southbound approach currently operates at LOS D during the weekday morning peak hour and LOS F during the weekday evening peak hour. The LOS F during the weekday evening peak hour is primarily attributed to the existing southbound left-turn volume. Under projected conditions, the southbound approach is projected to operate at LOS D and LOS F during the weekday morning and evening peak hours, respectively. The 95th percentile queues for the southbound approach are projected to be one to two vehicles during the weekday morning peak hour and six to seven vehicles during the weekday evening peak hour. As previously indicated, this level of service is existing and is expected for a local roadway that has an unsignalized intersection with an arterial roadway such as Montgomery Road.

The eastbound and westbound left-turn movements currently operate at LOS A and are projected to continue operating at LOS A, with increases in delay of less than one second. The 95th percentile queues for the eastbound and westbound left-turn movements are projected to be one to two vehicles during the peak hours, which can be accommodated within the existing left-turn lane storage provided.

The projected traffic volumes for the morning and evening peak hours were compared to the traffic signal warrant guidelines outlined in Warrant 3, Peak Hour from the *Manual on Uniform Traffic Control Devices* (MUTCD) to determine if a traffic signal is warranted at this intersection. For both the morning and evening peak hours, the traffic volumes do not exceed the required minimum volumes for a signal and therefore a signal is not warranted at this intersection. The figure for Warrant 3, Peak Hour is included in the Appendix.

Overall, this intersection generally has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development.

Commons Drive with Stonehaven Circle

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS A during the weekday morning and weekday evening peak hours. Under projected conditions, the eastbound approach is projected to continue operating at LOS A during the weekday morning peak hour and to operate at LOS B during the weekday evening peak hour, with increases in delay of less than one second. The northbound left-turn movement currently operates at LOS A during the weekday morning and evening peak hours. Under projected conditions, the northbound left-turn movement is projected to continue operating at LOS A during the peak hours. The 95th percentile queues for the eastbound and northbound approaches are projected to be one to two vehicles. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Commons Drive with Chelsea Manor Circle and Schmidgall Boulevard

The results of the capacity analysis indicate that outbound movements from Chelsea Manor Circle onto Commons Drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Additionally, outbound movements from Schmidgall Boulevard onto Commons Drive are projected to operate at LOS A during the weekday morning and weekday evening peak hours. Furthermore, the southbound left-turn movements from Commons Drive onto both access roadways are projected to operate at LOS A during the peak hours. As such, these access roadways will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic that will be generated by the proposed residential development can be accommodated by the existing area roadway system.
- The proposed development generated traffic will have a limited impact on the operations of Commons Drive with 75th Street, Commons Drive with Stonehaven Circle, and Commons Drive with Montgomery Road.
- The proposed access system will be adequate in accommodating the traffic estimated to be generated by the proposed development and will ensure efficient and flexible access is provided.
- Cross-access to the Calvary Church will be provided which will be only utilized for church services between 3:00 P.M. on Saturday and 3:00 P.M. on Sunday.
- When the total projected traffic volumes at the intersection of Commons Drive with Montgomery Road are compared to the peak hour traffic signal warrant guidelines published in the MUTCD, a traffic signal is not warranted during either peak hour.

Appendix

Traffic Count Summary Sheets

Site Plan

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

Peak Hour Traffic Signal Warrant

Traffic Count Summary Sheets



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990 kpachowicz@kloainc.com

Count Name: S Commons Dr with 75th St
Site Code:
Start Date: 07/08/2021
Page No: 2

Turning Movement Peak Hour Data (8:00 AM)

| Start Time | 75th St Eastbound | | | | 75th St Westbound | | | | S Commons Dr Northbound | | | | | | | |
|----------------------|-------------------|-------|-------|------|-------------------|--------|-------|-------|-------------------------|------------|--------|-------|-------|-------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | Int. Total |
| 8:00 AM | 0 | 152 | 10 | 0 | 162 | 0 | 11 | 96 | 0 | 107 | 0 | 14 | 23 | 6 | 37 | 306 |
| 8:15 AM | 0 | 149 | 9 | 0 | 158 | 0 | 13 | 91 | 0 | 104 | 0 | 5 | 16 | 1 | 21 | 283 |
| 8:30 AM | 0 | 160 | 11 | 0 | 171 | 0 | 7 | 95 | 0 | 102 | 0 | 6 | 20 | 2 | 26 | 299 |
| 8:45 AM | 0 | 160 | 8 | 0 | 168 | 0 | 12 | 77 | 0 | 89 | 0 | 7 | 18 | 0 | 25 | 282 |
| Total | 0 | 621 | 38 | 0 | 659 | 0 | 43 | 359 | 0 | 402 | 0 | 32 | 77 | 9 | 109 | 1170 |
| Approach % | 0.0 | 94.2 | 5.8 | - | - | 0.0 | 10.7 | 89.3 | - | - | 0.0 | 29.4 | 70.6 | - | - | - |
| Total % | 0.0 | 53.1 | 3.2 | - | 56.3 | 0.0 | 3.7 | 30.7 | - | 34.4 | 0.0 | 2.7 | 6.6 | - | 9.3 | - |
| PHF | 0.000 | 0.970 | 0.864 | - | 0.963 | 0.000 | 0.827 | 0.935 | - | 0.939 | 0.000 | 0.571 | 0.837 | - | 0.736 | 0.956 |
| Lights | 0 | 590 | 37 | - | 627 | 0 | 39 | 334 | - | 373 | 0 | 30 | 72 | - | 102 | 1102 |
| % Lights | - | 95.0 | 97.4 | - | 95.1 | - | 90.7 | 93.0 | - | 92.8 | - | 93.8 | 93.5 | - | 93.6 | 94.2 |
| Buses | 0 | 4 | 0 | - | 4 | 0 | 1 | 3 | - | 4 | 0 | 0 | 0 | - | 0 | 8 |
| % Buses | - | 0.6 | 0.0 | - | 0.6 | - | 2.3 | 0.8 | - | 1.0 | - | 0.0 | 0.0 | - | 0.0 | 0.7 |
| Single-Unit Trucks | 0 | 16 | 1 | - | 17 | 0 | 2 | 11 | - | 13 | 0 | 1 | 4 | - | 5 | 35 |
| % Single-Unit Trucks | - | 2.6 | 2.6 | - | 2.6 | - | 4.7 | 3.1 | - | 3.2 | - | 3.1 | 5.2 | - | 4.6 | 3.0 |
| Articulated Trucks | 0 | 11 | 0 | - | 11 | 0 | 1 | 11 | - | 12 | 0 | 1 | 1 | - | 2 | 25 |
| % Articulated Trucks | - | 1.8 | 0.0 | - | 1.7 | - | 2.3 | 3.1 | - | 3.0 | - | 3.1 | 1.3 | - | 1.8 | 2.1 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 9 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: S Commons Dr with 75th St
Site Code:
Start Date: 07/08/2021
Page No: 3

Turning Movement Peak Hour Data (4:30 PM)

| Start Time | 75th St Eastbound | | | | | 75th St Westbound | | | | | S Commons Dr Northbound | | | | | |
|----------------------|-------------------|-------|-------|------|------------|-------------------|-------|-------|------|------------|-------------------------|-------|-------|-------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 152 | 5 | 0 | 157 | 2 | 29 | 202 | 0 | 233 | 0 | 3 | 26 | 0 | 29 | 419 |
| 4:45 PM | 0 | 156 | 12 | 0 | 168 | 1 | 27 | 196 | 0 | 224 | 0 | 7 | 24 | 1 | 31 | 423 |
| 5:00 PM | 1 | 167 | 5 | 0 | 173 | 2 | 30 | 175 | 0 | 207 | 0 | 9 | 27 | 4 | 36 | 416 |
| 5:15 PM | 0 | 148 | 10 | 0 | 158 | 0 | 30 | 216 | 0 | 246 | 0 | 5 | 35 | 0 | 40 | 444 |
| Total | 1 | 623 | 32 | 0 | 656 | 5 | 116 | 789 | 0 | 910 | 0 | 24 | 112 | 5 | 136 | 1702 |
| Approach % | 0.2 | 95.0 | 4.9 | - | - | 0.5 | 12.7 | 86.7 | - | - | 0.0 | 17.6 | 82.4 | - | - | - |
| Total % | 0.1 | 36.6 | 1.9 | - | 38.5 | 0.3 | 6.8 | 46.4 | - | 53.5 | 0.0 | 1.4 | 6.6 | - | 8.0 | - |
| PHF | 0.250 | 0.933 | 0.667 | - | 0.948 | 0.625 | 0.967 | 0.913 | - | 0.925 | 0.000 | 0.667 | 0.800 | - | 0.850 | 0.958 |
| Lights | 1 | 616 | 32 | - | 649 | 5 | 115 | 781 | - | 901 | 0 | 24 | 109 | - | 133 | 1683 |
| % Lights | 100.0 | 98.9 | 100.0 | - | 98.9 | 100.0 | 99.1 | 99.0 | - | 99.0 | - | 100.0 | 97.3 | - | 97.8 | 98.9 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 4 | 0 | - | 4 | 0 | 1 | 4 | - | 5 | 0 | 0 | 2 | - | 2 | 11 |
| % Single-Unit Trucks | 0.0 | 0.6 | 0.0 | - | 0.6 | 0.0 | 0.9 | 0.5 | - | 0.5 | - | 0.0 | 1.8 | - | 1.5 | 0.6 |
| Articulated Trucks | 0 | 3 | 0 | - | 3 | 0 | 0 | 4 | - | 4 | 0 | 0 | 0 | - | 0 | 7 |
| % Articulated Trucks | 0.0 | 0.5 | 0.0 | - | 0.5 | 0.0 | 0.0 | 0.5 | - | 0.4 | - | 0.0 | 0.0 | - | 0.0 | 0.4 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | - | 1 | 1 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | - | 0.7 | 0.1 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 5 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |



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Count Name: S Commons Dr with Montgomery Rd
Site Code:
Start Date: 07/08/2021
Page No: 1

Turning Movement Data

| Start Time | Montgomery Rd Eastbound | | | | | Montgomery Rd Westbound | | | | | White Eagle Dr Northbound | | | | | S Commons Dr Southbound | | | | | | | |
|----------------------|-------------------------|------|------|-------|------------|-------------------------|------|------|-------|------------|---------------------------|-------|------|-------|------------|-------------------------|-------|-------|-------|------------|------------|------|------|
| | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | Int. Total | | |
| 7:00 AM | 0 | 1 | 77 | 1 | 79 | 0 | 0 | 47 | 0 | 47 | 0 | 0 | 0 | 11 | 0 | 0 | 6 | 1 | 2 | 0 | 9 | 146 | |
| 7:15 AM | 0 | 1 | 98 | 1 | 100 | 0 | 2 | 77 | 4 | 83 | 0 | 2 | 0 | 11 | 0 | 13 | 0 | 3 | 0 | 3 | 6 | 202 | |
| 7:30 AM | 0 | 3 | 112 | 2 | 117 | 0 | 2 | 60 | 1 | 63 | 0 | 4 | 0 | 14 | 0 | 18 | 0 | 3 | 0 | 2 | 1 | 203 | |
| 7:45 AM | 1 | 4 | 128 | 1 | 134 | 0 | 6 | 83 | 4 | 93 | 0 | 1 | 1 | 9 | 0 | 11 | 0 | 3 | 3 | 1 | 1 | 245 | |
| Hourly Total | 1 | 9 | 415 | 5 | 430 | 0 | 10 | 267 | 9 | 286 | 0 | 7 | 1 | 45 | 0 | 53 | 0 | 15 | 4 | 8 | 2 | 796 | |
| 8:00 AM | 0 | 2 | 117 | 1 | 120 | 0 | 5 | 66 | 3 | 74 | 0 | 1 | 1 | 14 | 0 | 16 | 0 | 3 | 1 | 6 | 0 | 10 | 220 |
| 8:15 AM | 0 | 4 | 104 | 2 | 110 | 0 | 11 | 70 | 4 | 85 | 0 | 0 | 2 | 10 | 0 | 12 | 0 | 6 | 0 | 2 | 0 | 8 | 215 |
| 8:30 AM | 0 | 1 | 121 | 1 | 123 | 0 | 6 | 80 | 0 | 86 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 8 | 1 | 0 | 0 | 9 | 226 |
| 8:45 AM | 0 | 2 | 124 | 2 | 128 | 0 | 9 | 84 | 1 | 94 | 0 | 0 | 0 | 14 | 0 | 14 | 0 | 7 | 2 | 2 | 0 | 11 | 247 |
| Hourly Total | 0 | 9 | 466 | 6 | 481 | 0 | 31 | 300 | 8 | 339 | 0 | 1 | 3 | 46 | 0 | 50 | 0 | 24 | 4 | 10 | 0 | 38 | 908 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 4 | 113 | 0 | 117 | 0 | 13 | 139 | 9 | 161 | 0 | 0 | 1 | 20 | 1 | 21 | 0 | 11 | 2 | 4 | 0 | 17 | 316 |
| 4:15 PM | 0 | 13 | 126 | 1 | 140 | 0 | 16 | 150 | 25 | 191 | 0 | 3 | 0 | 19 | 0 | 22 | 0 | 11 | 0 | 4 | 2 | 15 | 368 |
| 4:30 PM | 0 | 1 | 137 | 1 | 139 | 0 | 12 | 151 | 13 | 176 | 0 | 2 | 2 | 19 | 0 | 23 | 0 | 12 | 2 | 4 | 0 | 18 | 356 |
| 4:45 PM | 0 | 1 | 148 | 1 | 150 | 0 | 22 | 169 | 11 | 202 | 0 | 2 | 0 | 12 | 1 | 14 | 0 | 13 | 1 | 1 | 0 | 15 | 381 |
| Hourly Total | 0 | 19 | 524 | 3 | 546 | 0 | 63 | 609 | 58 | 730 | 0 | 7 | 3 | 70 | 2 | 80 | 0 | 47 | 5 | 13 | 2 | 65 | 1421 |
| 5:00 PM | 0 | 1 | 121 | 2 | 124 | 0 | 15 | 168 | 15 | 198 | 0 | 4 | 5 | 9 | 0 | 18 | 0 | 9 | 4 | 3 | 0 | 16 | 356 |
| 5:15 PM | 0 | 3 | 175 | 4 | 182 | 0 | 15 | 169 | 19 | 203 | 0 | 1 | 3 | 17 | 0 | 21 | 0 | 4 | 4 | 10 | 1 | 18 | 424 |
| 5:30 PM | 0 | 1 | 117 | 2 | 120 | 0 | 20 | 169 | 10 | 199 | 0 | 3 | 0 | 11 | 0 | 14 | 1 | 10 | 2 | 5 | 0 | 18 | 351 |
| 5:45 PM | 0 | 12 | 137 | 1 | 150 | 0 | 19 | 150 | 36 | 205 | 0 | 3 | 5 | 7 | 0 | 15 | 0 | 3 | 2 | 5 | 0 | 10 | 380 |
| Hourly Total | 0 | 17 | 550 | 9 | 576 | 0 | 69 | 656 | 80 | 805 | 0 | 11 | 13 | 44 | 0 | 68 | 1 | 26 | 12 | 23 | 1 | 62 | 1511 |
| Grand Total | 1 | 54 | 1955 | 23 | 2033 | 0 | 173 | 1832 | 155 | 2160 | 0 | 26 | 20 | 205 | 2 | 251 | 1 | 112 | 25 | 54 | 5 | 192 | 4636 |
| Approach % | 0.0 | 2.7 | 96.2 | 1.1 | - | 0.0 | 8.0 | 84.8 | 7.2 | - | 0.0 | 10.4 | 8.0 | 81.7 | - | - | 0.5 | 58.3 | 13.0 | 28.1 | - | - | - |
| Total % | 0.0 | 1.2 | 42.2 | 0.5 | - | 0.0 | 3.7 | 39.5 | 3.3 | - | 0.0 | 0.6 | 0.4 | 4.4 | - | 5.4 | 0.0 | 2.4 | 0.5 | 1.2 | - | 4.1 | - |
| Lights | 1 | 53 | 1905 | 23 | - | 1982 | 0 | 171 | 1771 | 151 | - | 26 | 17 | 201 | - | 244 | 1 | 112 | 21 | 53 | - | 187 | 4506 |
| % Lights | 100.0 | 98.1 | 97.4 | 100.0 | - | 97.5 | - | 98.8 | 96.7 | 97.4 | - | 100.0 | 85.0 | 98.0 | - | 97.2 | 100.0 | 100.0 | 84.0 | 98.1 | - | 97.4 | 97.2 |
| Buses | 0 | 0 | 13 | 0 | 13 | 0 | 0 | 16 | 2 | 18 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| % Buses | 0.0 | 0.0 | 0.7 | 0.0 | 0.6 | 0.0 | 0.0 | 0.9 | 1.3 | 0.8 | 0.0 | 0.0 | 0.0 | 0.5 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |
| Single-Unit Trucks | 0 | 1 | 20 | 0 | 21 | 0 | 2 | 30 | 1 | 33 | 0 | 0 | 1 | 3 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 2 | 60 |
| % Single-Unit Trucks | 0.0 | 1.9 | 1.0 | 0.0 | 1.0 | 0.0 | 1.2 | 1.6 | 0.6 | 1.5 | 0.0 | 0.0 | 5.0 | 1.5 | 1.6 | 1.6 | 0.0 | 0.0 | 4.0 | 1.9 | 1.9 | 1.0 | 1.3 |
| Articulated Trucks | 0 | 0 | 17 | 0 | 17 | 0 | 0 | 15 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| % Articulated Trucks | 0.0 | 0.0 | 0.9 | 0.0 | 0.8 | 0.0 | 0.0 | 0.8 | 0.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |
| Bicycles on Road | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 3 | 0 | 0 | 3 | 5 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.1 |
| Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - |



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Count Name: S Commons Dr with Montgomery Rd
Site Code:
Start Date: 07/08/2021
Page No: 4

Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Montgomery Rd Eastbound | | | | | Montgomery Rd Westbound | | | | | White Eagle Dr Northbound | | | | | S Commons Dr Southbound | | | | | | | | | | | |
|----------------------|-------------------------|-------|-------|-------|------------|-------------------------|-------|-------|-------|------------|---------------------------|-------|-------|-------|------------|-------------------------|-------|-------|-------|------------|--------|-------|-------|-------|------------|------------|------|
| | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | App. Total | Int. Total | |
| 4:30 PM | 0 | 1 | 137 | 1 | 139 | 0 | 12 | 151 | 13 | 176 | 0 | 2 | 2 | 19 | 23 | 0 | 12 | 2 | 4 | 18 | 0 | 0 | 56.7 | 16.4 | 26.9 | - | 356 |
| 4:45 PM | 0 | 1 | 148 | 1 | 150 | 0 | 22 | 169 | 11 | 202 | 0 | 2 | 0 | 12 | 14 | 0 | 13 | 1 | 1 | 15 | 0 | 0 | 9 | 4 | 3 | 0 | 381 |
| 5:00 PM | 0 | 1 | 121 | 2 | 124 | 0 | 15 | 168 | 15 | 198 | 0 | 4 | 5 | 9 | 18 | 0 | 9 | 4 | 3 | 16 | 0 | 0 | 4 | 4 | 10 | 1 | 356 |
| 5:15 PM | 0 | 3 | 175 | 4 | 182 | 0 | 15 | 169 | 19 | 203 | 0 | 1 | 3 | 17 | 21 | 0 | 4 | 4 | 4 | 18 | 0 | 0 | 4 | 4 | 10 | 1 | 424 |
| Total | 0 | 6 | 581 | 8 | 595 | 0 | 64 | 657 | 58 | 779 | 0 | 9 | 10 | 57 | 76 | 0 | 38 | 11 | 18 | 67 | 0 | 0 | 38 | 11 | 18 | 1 | 1517 |
| Approach % | 0.0 | 1.0 | 97.6 | 1.3 | - | 0.0 | 8.2 | 84.3 | 7.4 | - | 0.0 | 11.8 | 13.2 | 75.0 | - | 0.0 | 56.7 | 16.4 | 26.9 | - | 0.0 | 2.5 | 0.7 | 1.2 | - | - | |
| Total % | 0.0 | 0.4 | 38.3 | 0.5 | 39.2 | 0.0 | 4.2 | 43.3 | 3.8 | 51.4 | 0.0 | 0.6 | 0.7 | 3.8 | 5.0 | 0.0 | 2.5 | 0.7 | 1.2 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | - |
| PHF | 0.000 | 0.500 | 0.830 | 0.500 | 0.817 | 0.000 | 0.727 | 0.972 | 0.763 | 0.959 | 0.000 | 0.563 | 0.500 | 0.750 | 0.826 | 0.000 | 0.731 | 0.688 | 0.450 | - | 0.000 | 0.731 | 0.688 | 0.450 | - | 0.931 | |
| Lights | 0 | 6 | 575 | 8 | 589 | 0 | 64 | 639 | 57 | 760 | 0 | 9 | 7 | 57 | 73 | 0 | 38 | 9 | 18 | 65 | 0 | 0 | 38 | 9 | 18 | 65 | 1487 |
| % Lights | - | 100.0 | 99.0 | 100.0 | 99.0 | - | 100.0 | 97.3 | 98.3 | 97.6 | - | 100.0 | 70.0 | 100.0 | 96.1 | - | 100.0 | 81.8 | 100.0 | - | - | 100.0 | 81.8 | 100.0 | - | 97.0 | 98.0 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| % Single-Unit Trucks | - | 0.0 | 0.7 | 0.0 | 0.7 | - | 0.0 | 1.4 | 0.0 | 1.2 | - | 0.0 | 10.0 | 0.0 | 1.3 | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.9 |
| Articulated Trucks | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 9 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| % Articulated Trucks | - | 0.0 | 0.3 | 0.0 | 0.3 | - | 0.0 | 1.4 | 1.7 | 1.3 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.8 |
| Bicycles on Road | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 4 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 20.0 | 0.0 | 2.6 | - | 0.0 | 18.2 | 0.0 | - | - | 0.0 | 18.2 | 0.0 | - | 3.0 | 0.3 |
| Pedestrians | - | - | - | - | 0 | - | - | - | 1 | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |



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Count Name: S Commons Dr with Stonehaven Cir
Site Code:
Start Date: 07/08/2021
Page No: 1

Turning Movement Data

| Start Time | Stonehaven Cir Eastbound | | | | S Commons Dr Northbound | | | | S Commons Dr Southbound | | | | Int. Total | | |
|----------------------|--------------------------|------|-------|-------|-------------------------|--------|------|------|-------------------------|------------|--------|------|------------|-------|------|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Thru | | Right | Peds |
| 7:00 AM | 0 | 3 | 1 | 0 | 4 | 0 | 0 | 6 | 2 | 6 | 0 | 11 | 0 | 1 | 11 |
| 7:15 AM | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 3 | 0 | 2 | 1 | 1 | 3 |
| 7:30 AM | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 3 | 0 | 4 | 0 | 0 | 4 |
| 7:45 AM | 0 | 3 | 2 | 4 | 5 | 0 | 2 | 11 | 3 | 13 | 0 | 5 | 1 | 1 | 6 |
| Hourly Total | 0 | 9 | 3 | 4 | 12 | 0 | 2 | 23 | 5 | 25 | 0 | 22 | 2 | 3 | 24 |
| 8:00 AM | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 7 | 1 | 7 | 0 | 5 | 0 | 3 | 5 |
| 8:15 AM | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 8 | 0 | 9 | 0 | 6 | 3 | 4 | 9 |
| 8:30 AM | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 3 | 4 |
| 8:45 AM | 0 | 1 | 2 | 2 | 3 | 0 | 1 | 6 | 0 | 7 | 0 | 7 | 1 | 4 | 8 |
| Hourly Total | 0 | 6 | 5 | 3 | 11 | 0 | 2 | 23 | 1 | 25 | 0 | 22 | 4 | 14 | 26 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 11 | 0 | 11 | 0 | 12 | 3 | 0 | 15 |
| 4:15 PM | 0 | 3 | 2 | 0 | 5 | 0 | 4 | 34 | 0 | 38 | 2 | 12 | 1 | 1 | 15 |
| 4:30 PM | 0 | 2 | 4 | 0 | 6 | 0 | 2 | 16 | 0 | 18 | 0 | 12 | 3 | 1 | 15 |
| 4:45 PM | 1 | 8 | 1 | 2 | 10 | 0 | 0 | 8 | 1 | 8 | 0 | 13 | 8 | 3 | 21 |
| Hourly Total | 1 | 13 | 9 | 2 | 23 | 0 | 6 | 69 | 1 | 75 | 2 | 49 | 15 | 5 | 66 |
| 5:00 PM | 0 | 8 | 1 | 0 | 9 | 0 | 5 | 14 | 0 | 19 | 1 | 13 | 3 | 2 | 17 |
| 5:15 PM | 0 | 5 | 1 | 2 | 6 | 0 | 2 | 22 | 0 | 24 | 2 | 17 | 10 | 2 | 29 |
| 5:30 PM | 0 | 4 | 2 | 3 | 6 | 0 | 0 | 13 | 0 | 13 | 1 | 11 | 6 | 0 | 18 |
| 5:45 PM | 0 | 6 | 1 | 0 | 7 | 0 | 1 | 50 | 2 | 51 | 0 | 10 | 8 | 1 | 18 |
| Hourly Total | 0 | 23 | 5 | 5 | 28 | 0 | 8 | 99 | 2 | 107 | 4 | 51 | 27 | 5 | 82 |
| Grand Total | 1 | 51 | 22 | 14 | 74 | 0 | 18 | 214 | 9 | 232 | 6 | 144 | 48 | 27 | 198 |
| Approach % | 1.4 | 68.9 | 29.7 | - | - | 0.0 | 7.8 | 92.2 | - | - | 3.0 | 72.7 | 24.2 | - | - |
| Total % | 0.2 | 10.1 | 4.4 | - | 14.7 | 0.0 | 3.6 | 42.5 | - | 46.0 | 1.2 | 28.6 | 9.5 | - | 39.3 |
| Lights | 1 | 46 | 21 | - | 68 | 0 | 16 | 203 | - | 219 | 6 | 140 | 47 | - | 193 |
| % Lights | 100.0 | 90.2 | 95.5 | - | 91.9 | - | 88.9 | 94.9 | - | 94.4 | 100.0 | 97.2 | 97.9 | - | 97.5 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 2 | 0 | 0 | 0 | - | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | - | 0.9 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 3 | - | 3 | 0 | 1 | 0 | - | 1 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.4 | - | 1.3 | 0.0 | 0.7 | 0.0 | - | 0.5 |
| Articulated Trucks | 0 | 0 | 1 | - | 1 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | - | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 4.5 | - | 1.4 | - | 0.0 | 0.5 | - | 0.4 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Bicycles on Road | 0 | 5 | 0 | - | 5 | 0 | 2 | 5 | - | 7 | 0 | 3 | 1 | - | 4 |
| % Bicycles on Road | 0.0 | 9.8 | 0.0 | - | 6.8 | - | 11.1 | 2.3 | - | 3.0 | 0.0 | 2.1 | 2.1 | - | 2.0 |
| Pedestrians | - | - | - | 14 | - | - | - | - | 9 | - | - | - | - | 27 | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - |



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Count Name: S Commons Dr with Stonehaven Cir
Site Code:
Start Date: 07/08/2021
Page No: 2

Turning Movement Peak Hour Data (8:00 AM)

| Start Time | Stonehaven Cir Eastbound | | | | S Commons Dr Northbound | | | | S Commons Dr Southbound | | | | | | | |
|----------------------|--------------------------|-------|-------|-------|-------------------------|--------|-------|-------|-------------------------|------------|--------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | Int. Total |
| 8:00 AM | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 7 | 1 | 7 | 0 | 5 | 0 | 3 | 5 | 14 |
| 8:15 AM | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 8 | 0 | 9 | 0 | 6 | 3 | 4 | 9 | 20 |
| 8:30 AM | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 3 | 4 | 10 |
| 8:45 AM | 0 | 1 | 2 | 2 | 3 | 0 | 1 | 6 | 0 | 7 | 0 | 7 | 1 | 4 | 8 | 18 |
| Total | 0 | 6 | 5 | 3 | 11 | 0 | 2 | 23 | 1 | 25 | 0 | 22 | 4 | 14 | 26 | 62 |
| Approach % | 0.0 | 54.5 | 45.5 | - | - | 0.0 | 8.0 | 92.0 | - | - | 0.0 | 84.6 | 15.4 | - | - | - |
| Total % | 0.0 | 9.7 | 8.1 | - | 17.7 | 0.0 | 3.2 | 37.1 | - | 40.3 | 0.0 | 35.5 | 6.5 | - | 41.9 | - |
| PHF | 0.000 | 0.750 | 0.625 | - | 0.688 | 0.000 | 0.500 | 0.719 | - | 0.694 | 0.000 | 0.786 | 0.333 | - | 0.722 | 0.775 |
| Lights | 0 | 6 | 5 | - | 11 | 0 | 1 | 22 | - | 23 | 0 | 20 | 4 | - | 24 | 58 |
| % Lights | - | 100.0 | 100.0 | - | 100.0 | - | 50.0 | 95.7 | - | 92.0 | - | 90.9 | 100.0 | - | 92.3 | 93.5 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | - | 1 | 0 | 1 | 0 | - | 1 | 2 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 4.3 | - | 4.0 | - | 4.5 | 0.0 | - | 3.8 | 3.2 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 0 | - | 1 | 2 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 50.0 | 0.0 | - | 4.0 | - | 4.5 | 0.0 | - | 3.8 | 3.2 |
| Pedestrians | - | - | - | 3 | - | - | - | - | 1 | - | - | - | - | 14 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

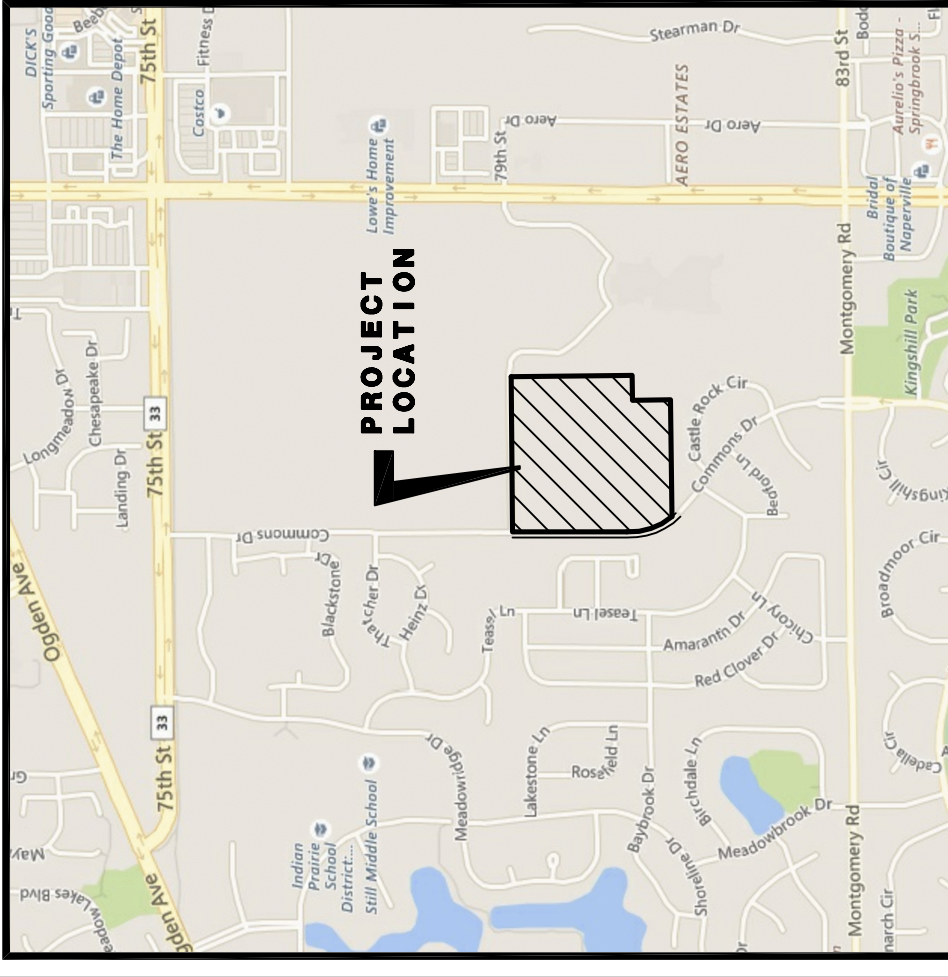
Rosemont, Illinois, United States 60018
(847)518-9990 kpachowicz@kloainc.com

Count Name: S Commons Dr with Stonehaven Cir
Site Code:
Start Date: 07/08/2021
Page No: 3

Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Stonehaven Cir Eastbound | | | | S Commons Dr Northbound | | | | S Commons Dr Southbound | | | | Int. Total | | |
|----------------------|--------------------------|-------|-------|-------|-------------------------|--------|-------|-------|-------------------------|------------|--------|-------|------------|-------|-------|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Right | | Thru | Peds |
| 4:30 PM | 0 | 2 | 4 | 0 | 6 | 0 | 2 | 16 | 0 | 18 | 0 | 3 | 12 | 1 | 15 |
| 4:45 PM | 1 | 8 | 1 | 2 | 10 | 0 | 0 | 8 | 1 | 8 | 0 | 8 | 13 | 3 | 21 |
| 5:00 PM | 0 | 8 | 1 | 0 | 9 | 0 | 5 | 14 | 0 | 19 | 1 | 3 | 13 | 2 | 17 |
| 5:15 PM | 0 | 5 | 1 | 2 | 6 | 0 | 2 | 22 | 0 | 24 | 2 | 10 | 17 | 2 | 29 |
| Total | 1 | 23 | 7 | 4 | 31 | 0 | 9 | 60 | 1 | 69 | 3 | 24 | 55 | 8 | 82 |
| Approach % | 3.2 | 74.2 | 22.6 | - | - | 0.0 | 13.0 | 87.0 | - | - | 3.7 | 29.3 | 67.1 | - | - |
| Total % | 0.5 | 12.6 | 3.8 | - | 17.0 | 0.0 | 4.9 | 33.0 | - | 37.9 | 1.6 | 13.2 | 30.2 | - | 45.1 |
| PHF | 0.250 | 0.719 | 0.438 | - | 0.775 | 0.000 | 0.450 | 0.682 | - | 0.719 | 0.375 | 0.600 | 0.809 | - | 0.707 |
| Lights | 1 | 18 | 7 | - | 26 | 0 | 8 | 58 | - | 66 | 3 | 24 | 53 | - | 80 |
| % Lights | 100.0 | 78.3 | 100.0 | - | 83.9 | - | 88.9 | 96.7 | - | 95.7 | 100.0 | 100.0 | 96.4 | - | 97.6 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | - | 0 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.7 | - | 1.4 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 |
| Bicycles on Road | 0 | 5 | 0 | - | 5 | 0 | 1 | 1 | - | 2 | 0 | 0 | 2 | - | 2 |
| % Bicycles on Road | 0.0 | 21.7 | 0.0 | - | 16.1 | - | 11.1 | 1.7 | - | 2.9 | 0.0 | 0.0 | 3.6 | - | 2.4 |
| Pedestrians | - | - | - | 4 | - | - | - | - | 1 | - | - | - | - | 8 | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - |

Site Plan



LOCATION MAP

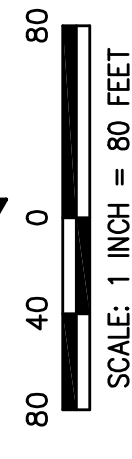
**PRELIMINARY ENGINEERING PLAN
FOR
CHELSEA MANOR
AURORA, ILLINOIS**

BENCHMARKS

ELEVATION REFERENCE MARKS:
RM-DUPAGE COUNTY BENCHMARK 0188.
STATION IS LOCATED ALONG THE SOUTH SIDE
OF FRONTENAC STREET, AT THE
INTERSECTION WITH FRONTENAC STREET. THE
STATION IS 30.6 FT WEST OF THE EXTENDED
CENTERLINE OF FRONTENAC STREET, 25.5 FT
NORTH OF THE CENTERLINE OF FRONTENAC
ROAD, 21.3 FT NORTHWEST OF A CATCH BASIN,
AND 2.6 FT SOUTHEAST OF A GAS POST.
MONUMENT IS A BRASS DISK ON THE NORTH
SIDE OF CONCRETE TRAFFIC SIGNAL BASE.
ELEV. = 712.15 NAVD88

PROJECT ELEVATION REFERENCE MARKS:
CP #105 = SET 'X' IN CONCRETE CURB ON
WEST SIDE OF COMMONS DRIVE ADJACENT TO
2ND LIGHT POLE SOUTH OF THATCHER DRIVE.
EASTING: 1016342.12
ELEV. = 713.98 NAVD88

CP #106 = SET 'X' IN CONCRETE CURB ON
SOUTH SIDE OF SOUTH CURB LINE AT
THATCHER DRIVE.
NORTHING: 1848206.37
EASTING: 1016341.61
ELEV. = 709.15 NAVD88

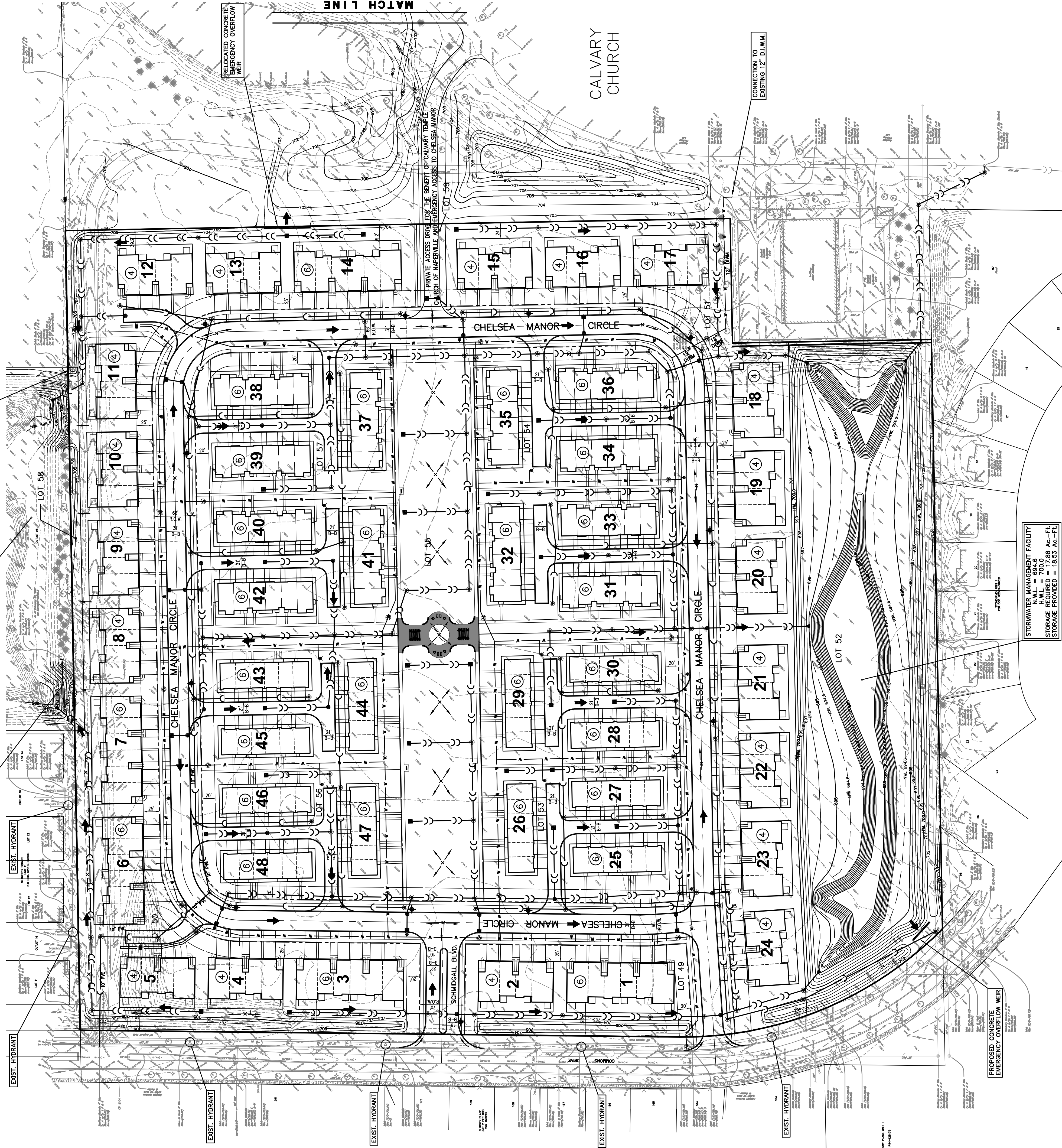


PARCEL DESCRIPTION:
THAT PART OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTHEAST CORNER OF LOT 97 IN THE FINAL PLAT OF SUBDIVISION FOR STRANAVEN UNIT 1, BEING A SUBDIVISION OF PART OF SAID
NORTHEAST QUARTER, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 13, 2003 AS DOCUMENT 22043-31662; THENCE NORTH 88 DEGREES 55 MINUTES 55 SECONDS
23 SECONDS WEST, 200.18 ALONG THE NORTH LINE OF SAID SUBDIVISION TO THE POINT OF BEGINNING; THENCE NORTH 88 DEGREES 55 MINUTES 23 SECONDS
WEST, 107.07 FEET ALONG SAID NORTH LINE TO THE EASTERLY LINE OF COMMONS AS DEDICATED TO THE CITY OF AURORA PER PLAT OF DEDICATION RECORDED
WEST, 107.07 FEET ALONG SAID NORTH LINE TO THE EASTERLY LINE OF COMMONS AS DEDICATED TO THE CITY OF AURORA PER PLAT OF DEDICATION RECORDED
A RADIUS OF 560.00 FEET WITH A CHORD BEARING NORTH 22 DEGREES 28 SECONDS WEST, 28 SECONDS WEST; THENCE NORTH 00 DEGREES 38 MINUTES 17 SECONDS
EAST, 922.18 FEET ALONG SAID EASTERLY LINE TO THE SOUTH LINE OF THE FINAL PLAT SUBDIVISION FOR GRAMERCY SQUARE, UNIT 1, BEING A SUBDIVISION OF
RECORDED JULY 26, 2018 AS DOCUMENT 22018-069195; THENCE NORTH 88 DEGREES 54 MINUTES 31 SECONDS EAST, 1230.43 FEET ALONG SAID SOUTH LINE TO THE
EAST, 922.18 FEET ALONG SAID EASTERLY LINE TO THE SOUTH LINE OF THE FINAL PLAT SUBDIVISION FOR GRAMERCY SQUARE, UNIT 1, BEING A SUBDIVISION OF
ALONG THE SOUTH LINE OF THE FINAL PLAT SUBDIVISION FOR GRAMERCY SQUARE, UNIT 2, BEING A SUBDIVISION OF SAME SECTION, TOWNSHIP AND RANGE,
ESTABLISHED BETWEEN THE SOUTHWEST CORNER OF SAID GRAMERCY SQUARE UNIT 1 AND THE SOUTHWEST CORNER OF SAID SOUTH EAST
QUARTER; THENCE SOUTH 01 DEGREES 03 MINUTES 29 SECONDS WEST, 1022.78 FEET PERPENDICULAR TO THE LAST DESCRIBED LINE; THENCE SOUTH 88 DEGREES
56 MINUTES 31 SECONDS EAST, 191.87 FEET PARALLEL WITH SAID SOUTH LINES; THENCE SOUTH 01 DEGREES 03 MINUTES 29 SECONDS EAST, 306.19 FEET
PARALLEL WITH THE PENULTIMATE COURSE TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS, (containing approximately 36.3 acres)

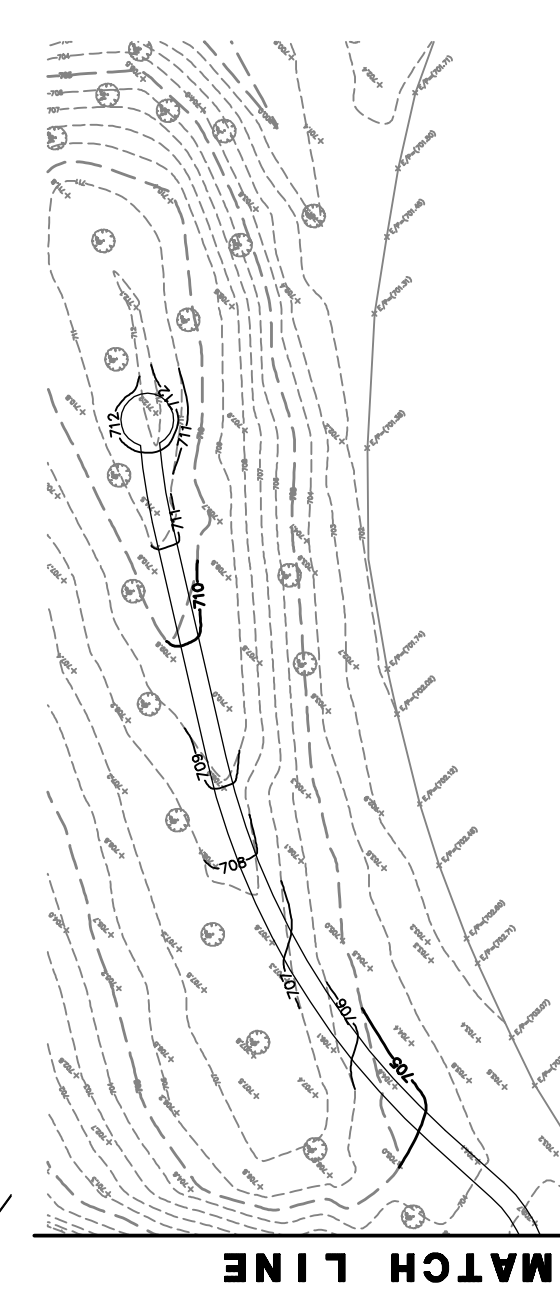
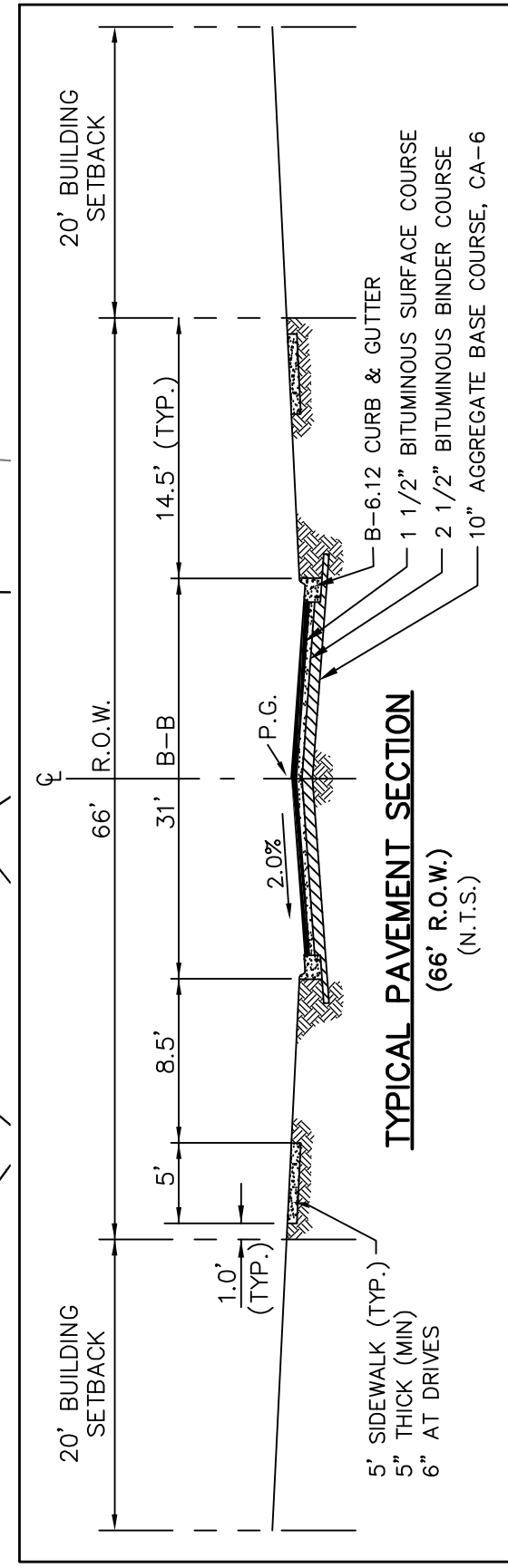
EXPANDED STORMWATER MANAGEMENT FACILITY
H.W.L. = 702.3
STORAGE REQUIRED (GRAMERCY SQUARE) = 12.24 AC.-Ft.
STORAGE PROVIDED (GRAND MANOR) = 10 AC.-Ft.
STORAGE PROVIDED = 13.43 AC.-Ft.

EXISTING CONCRETE OVERFLOW MER
TO BE RELOCATED

EXISTING RESTRICTED STRUCTURE TO REMAIN



STORMWATER MANAGEMENT FACILITY
H.W.L. = 694.6
N.W.L. = 697.88 AC.-Ft.
STORAGE REQUIRED = 18.53 AC.-Ft.
STORAGE PROVIDED = 18.53 AC.-Ft.



- UTILITY NOTES:**
1. ALL STORM SEWER TO BE SIZED AT THE TIME OF FINAL ENGINEERING.
 2. ALL WATERMAIN IS 8" D.I.W.M. UNLESS OTHERWISE NOTED.
 3. ALL SANITARY SEWER IS 8" P.V.C. UNLESS OTHERWISE NOTED.

LEGEND

| EXISTING | PROPOSED | DESCRIPTION |
|----------|----------|----------------------------|
| ○ | ○ | MANHOLE |
| □ | □ | CATCH BASIN |
| ○ | ○ | INLET |
| ○ | ○ | CLEANOUT |
| ○ | ○ | SLOPE INLET BOX |
| ○ | ○ | HEADWALL |
| ○ | ○ | END SECTION |
| ○ | ○ | STORM SEWER |
| ○ | ○ | SANITARY SEWER |
| ○ | ○ | WATERMAIN |
| ○ | ○ | VALVE & BOX |
| ○ | ○ | WATER VALVE IN VAULT |
| ○ | ○ | FIRE HYDRANT |
| ○ | ○ | CONTOURS |
| ○ | ○ | STREET LIGHT |
| ○ | ○ | WATERMAIN PROTECTION |
| ○ | ○ | SILT FENCE INLET PROTECTOR |
| ○ | ○ | TRIANGULAR SILT DIKE |
| ○ | ○ | SILT FENCE DITCH CHECK |
| ○ | ○ | SETBACK LINE |
| ○ | ○ | RIP-RAP |
| ○ | ○ | OVERFLOW ROUTE |

PREPARED FOR:
M/1 HOMES OF CHICAGO, LLC
400 EAST DIEHL ROAD, SUITE 230
NAPERVILLE, ILLINOIS 60563

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
E-Mail: cadd@cemcon.com
Webster: www.cemcon.com

DISC NO.: 743027
FILE NAME: PREOVER
DRAWN BY: JCC
F.L.D. BK. / PG. NO.: --
COMPLETION DATE: 05-28-21
JOB NO.: 743.027
PROJECT MANAGER: MAM

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |

CMAP 2050 Projections Letter



Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607
312-454-0400
cmap.illinois.gov

July 26, 2021

Kelly Pachowicz
Consultant
Kenig, Lindgren, O’Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: 75th Street - Montgomery Road
IDOT

Dear Ms. Pachowicz:

In response to a request made on your behalf and dated July 26, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

| ROAD SEGMENT | Current ADT | Year 2050 ADT |
|---------------------------------------|-------------|---------------|
| 75 th Street east of IL 59 | 15,600 | 20,900 |
| Montgomery Rd east of IL 59 | 12,200 | 14,000 |

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Rios (IDOT)
\\2021_CY_TrafficForecast\Aurora\du-35-21\du-35-21.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

| Signalized Intersections | | |
|----------------------------|--|---|
| Level of Service | Interpretation | Average Control Delay (seconds per vehicle) |
| A | Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping. | ≤10 |
| B | Good progression, with more vehicles stopping than for Level of Service A. | >10 - 20 |
| C | Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. | >20 - 35 |
| D | The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable. | >35 - 55 |
| E | Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent. | >55 - 80 |
| F | The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. | >80.0 |
| Unsignalized Intersections | | |
| Level of Service | Average Total Delay (SEC/VEH) | |
| A | 0 - 10 | |
| B | > 10 - 15 | |
| C | > 15 - 25 | |
| D | > 25 - 35 | |
| E | > 35 - 50 | |
| F | > 50 | |

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

HCM 6th TWSC
1: Commons Drive & 75th Street

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.6 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | ↑ | ↑↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 714 | 44 | 49 | 413 | 37 | 89 |
| Future Vol, veh/h | 714 | 44 | 49 | 413 | 37 | 89 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 140 | 210 | - | 0 | 180 |
| Veh in Median Storage, # | 0 | - | - | 0 | 2 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 5 | 3 | 9 | 7 | 6 | 6 |
| Mvmt Flow | 744 | 46 | 51 | 430 | 39 | 93 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 790 | 1061 |
| Stage 1 | - | - | - | 744 |
| Stage 2 | - | - | - | 317 |
| Critical Hdwy | - | - | 4.28 | 6.92 |
| Critical Hdwy Stg 1 | - | - | - | 5.92 |
| Critical Hdwy Stg 2 | - | - | - | 5.92 |
| Follow-up Hdwy | - | - | 2.29 | 3.56 |
| Pot Cap-1 Maneuver | - | - | 782 | 614 |
| Stage 1 | - | - | - | 420 |
| Stage 2 | - | - | - | 699 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 782 | 198 |
| Mov Cap-2 Maneuver | - | - | - | 370 |
| Stage 1 | - | - | - | 420 |
| Stage 2 | - | - | - | 654 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 1.1 | 13.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 370 | 614 | - | - | 782 | - |
| HCM Lane V/C Ratio | 0.104 | 0.151 | - | - | 0.065 | - |
| HCM Control Delay (s) | 15.9 | 11.9 | - | - | 9.9 | - |
| HCM Lane LOS | C | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.3 | 0.5 | - | - | 0.2 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | ↖ | | ↔ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 10 | 536 | 7 | 36 | 345 | 9 | 1 | 3 | 53 | 28 | 5 | 12 |
| Future Vol, veh/h | 10 | 536 | 7 | 36 | 345 | 9 | 1 | 3 | 53 | 28 | 5 | 12 |
| 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 | 95 | - | - | 150 | - | 85 | - | - | - | 0 | - | 135 |
| 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, % | 11 | 3 | 2 | 6 | 5 | 12 | 0 | 0 | 2 | 0 | 0 | 10 |
| Mvmt Flow | 11 | 583 | 8 | 39 | 375 | 10 | 1 | 3 | 58 | 30 | 5 | 13 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-------|--------|------|------|
| Conflicting Flow All | 385 | 0 | 0 | 591 | 0 | 0 | 1076 | 1072 | 587 | 1093 | 1066 | 375 |
| Stage 1 | - | - | - | - | - | - | 609 | 609 | - | 453 | 453 | - |
| Stage 2 | - | - | - | - | - | - | 467 | 463 | - | 640 | 613 | - |
| Critical Hdwy | 4.21 | - | - | 4.16 | - | - | 7.1 | 6.5 | 6.22 | 7.1 | 6.5 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.299 | - | - | 2.254 | - | - | 3.5 | 4 | 3.318 | 3.5 | 4 | 3.39 |
| Pot Cap-1 Maneuver | 1126 | - | - | 965 | - | - | 199 | 222 | 510 | 193 | 224 | 654 |
| Stage 1 | - | - | - | - | - | - | 486 | 488 | - | 590 | 573 | - |
| Stage 2 | - | - | - | - | - | - | 580 | 568 | - | 467 | 486 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1126 | - | - | 965 | - | - | 184 | 211 | 510 | 163 | 213 | 654 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 184 | 211 | - | 163 | 213 | - |
| Stage 1 | - | - | - | - | - | - | 481 | 483 | - | 584 | 550 | - |
| Stage 2 | - | - | - | - | - | - | 540 | 545 | - | 407 | 481 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|----|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0.8 | | | 14 | | | 25.4 | | |
| HCM LOS | | | | | | | B | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 461 | 1126 | - | - | 965 | - | - | 163 | 406 |
| HCM Lane V/C Ratio | 0.134 | 0.01 | - | - | 0.041 | - | - | 0.187 | 0.046 |
| HCM Control Delay (s) | 14 | 8.2 | - | - | 8.9 | - | - | 32.1 | 14.3 |
| HCM Lane LOS | B | A | - | - | A | - | - | D | B |
| HCM 95th %tile Q(veh) | 0.5 | 0 | - | - | 0.1 | - | - | 0.7 | 0.1 |

HCM 6th TWSC
3: Stonehaven Circle & Commons Drive

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | |
| Movement | SET | SER | NWL | NWT | NEL | NER |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 5 | 2 | 27 | 7 | 6 |
| Future Vol, veh/h | 25 | 5 | 2 | 27 | 7 | 6 |
| 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 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 0 | 4 | 4 | 0 |
| Mvmt Flow | 32 | 6 | 3 | 35 | 9 | 8 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 38 | 0 | 76 |
| Stage 1 | - | - | - | - | 35 |
| Stage 2 | - | - | - | - | 41 |
| Critical Hdwy | - | - | 4.1 | - | 6.44 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.536 |
| Pot Cap-1 Maneuver | - | - | 1585 | - | 922 |
| Stage 1 | - | - | - | - | 982 |
| Stage 2 | - | - | - | - | 976 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1585 | - | 920 |
| Mov Cap-2 Maneuver | - | - | - | - | 920 |
| Stage 1 | - | - | - | - | 982 |
| Stage 2 | - | - | - | - | 974 |

| Approach | SE | NW | NE |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 0.5 | 8.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|-----------------------|-------|-------|-----|-----|-----|
| Capacity (veh/h) | 973 | 1585 | - | - | - |
| HCM Lane V/C Ratio | 0.017 | 0.002 | - | - | - |
| HCM Control Delay (s) | 8.8 | 7.3 | 0 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | - |

HCM 6th TWSC
1: Commons Drive & 75th Street

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↗ | ↘ | ↑↑ | ↘ | ↗ |
| Traffic Vol, veh/h | 655 | 34 | 127 | 828 | 25 | 118 |
| Future Vol, veh/h | 655 | 34 | 127 | 828 | 25 | 118 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 140 | 210 | - | 0 | 180 |
| Veh in Median Storage, # | 0 | - | - | 0 | 2 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 1 | 0 | 1 | 1 | 0 | 2 |
| Mvmt Flow | 682 | 35 | 132 | 863 | 26 | 123 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 717 | 0 | 1378 |
| Stage 1 | - | - | - | - | 682 |
| Stage 2 | - | - | - | - | 696 |
| Critical Hdwy | - | - | 4.12 | - | 6.8 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.8 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.8 |
| Follow-up Hdwy | - | - | 2.21 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 886 | - | 138 |
| Stage 1 | - | - | - | - | 469 |
| Stage 2 | - | - | - | - | 461 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 886 | - | 117 |
| Mov Cap-2 Maneuver | - | - | - | - | 305 |
| Stage 1 | - | - | - | - | 469 |
| Stage 2 | - | - | - | - | 392 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 1.3 | 12.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 305 | 655 | - | - | 886 | - |
| HCM Lane V/C Ratio | 0.085 | 0.188 | - | - | 0.149 | - |
| HCM Control Delay (s) | 17.9 | 11.8 | - | - | 9.8 | - |
| HCM Lane LOS | C | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.3 | 0.7 | - | - | 0.5 | - |

HCM 6th TWSC

2: White Eagle Drive/Commons Drive & Montgomery Road

07/29/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 6 | 610 | 8 | 67 | 690 | 61 | 9 | 11 | 60 | 40 | 12 | 19 |
| Future Vol, veh/h | 6 | 610 | 8 | 67 | 690 | 61 | 9 | 11 | 60 | 40 | 12 | 19 |
| 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 | 95 | - | - | 150 | - | 85 | - | - | - | 0 | - | 135 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 10 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 7 | 685 | 9 | 75 | 775 | 69 | 10 | 12 | 67 | 45 | 13 | 21 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|-----|--------|---|--------|------|-----|------|------|-----|
| Conflicting Flow All | 844 | 0 | 0 | 694 | 0 | 0 | 1681 | 1698 | 690 | 1668 | 1633 | 775 |
| Stage 1 | - | - | - | - | - | - | 704 | 704 | - | 925 | 925 | - |
| Stage 2 | - | - | - | - | - | - | 977 | 994 | - | 743 | 708 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.6 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.6 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.6 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4.09 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 801 | - | - | 911 | - | - | 76 | 88 | 449 | 77 | 102 | 401 |
| Stage 1 | - | - | - | - | - | - | 431 | 428 | - | 325 | 351 | - |
| Stage 2 | - | - | - | - | - | - | 304 | 313 | - | 410 | 441 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 801 | - | - | 911 | - | - | 60 | 80 | 449 | 54 | 93 | 401 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 60 | 80 | - | 54 | 93 | - |
| Stage 1 | - | - | - | - | - | - | 427 | 424 | - | 322 | 322 | - |
| Stage 2 | - | - | - | - | - | - | 253 | 287 | - | 335 | 437 | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|------|--|-------|--|
| HCM Control Delay, s | 0.1 | | 0.8 | | 39.9 | | 123.9 | |
| HCM LOS | | | | | E | | F | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 190 | 801 | - | - | 911 | - | - | 54 | 176 |
| HCM Lane V/C Ratio | 0.473 | 0.008 | - | - | 0.083 | - | - | 0.832 | 0.198 |
| HCM Control Delay (s) | 39.9 | 9.5 | - | - | 9.3 | - | - | 196.4 | 30.4 |
| HCM Lane LOS | | E | A | - | - | A | - | F | D |
| HCM 95th %tile Q(veh) | 2.3 | 0 | - | - | 0.3 | - | - | 3.6 | 0.7 |

HCM 6th TWSC
3: Stonehaven Circle & Commons Drive

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.9 | | | | | |
| Movement | SET | SER | NWL | NWT | NEL | NER |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 61 | 25 | 9 | 66 | 25 | 7 |
| Future Vol, veh/h | 61 | 25 | 9 | 66 | 25 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 0 | 0 |
| Mvmt Flow | 79 | 32 | 12 | 86 | 32 | 9 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 111 | 0 | 205 |
| Stage 1 | - | - | - | - | 95 |
| Stage 2 | - | - | - | - | 110 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1492 | - | 788 |
| Stage 1 | - | - | - | - | 934 |
| Stage 2 | - | - | - | - | 920 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1492 | - | 782 |
| Mov Cap-2 Maneuver | - | - | - | - | 782 |
| Stage 1 | - | - | - | - | 934 |
| Stage 2 | - | - | - | - | 913 |

| Approach | SE | NW | NE |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 0.9 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|-----------------------|-------|-------|-----|-----|-----|
| Capacity (veh/h) | 816 | 1492 | - | - | - |
| HCM Lane V/C Ratio | 0.051 | 0.008 | - | - | - |
| HCM Control Delay (s) | 9.6 | 7.4 | 0 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | - |

HCM 6th TWSC
1: Commons Drive & 75th Street

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | ↑ | ↑↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 743 | 51 | 60 | 430 | 56 | 124 |
| Future Vol, veh/h | 743 | 51 | 60 | 430 | 56 | 124 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 140 | 210 | - | 0 | 180 |
| Veh in Median Storage, # | 0 | - | - | 0 | 2 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 5 | 3 | 9 | 7 | 6 | 6 |
| Mvmt Flow | 774 | 53 | 63 | 448 | 58 | 129 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 827 | 0 | 1124 |
| Stage 1 | - | - | - | - | 774 |
| Stage 2 | - | - | - | - | 350 |
| Critical Hdwy | - | - | 4.28 | - | 6.92 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.92 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.92 |
| Follow-up Hdwy | - | - | 2.29 | - | 3.56 |
| Pot Cap-1 Maneuver | - | - | 756 | - | 193 |
| Stage 1 | - | - | - | - | 405 |
| Stage 2 | - | - | - | - | 673 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 756 | - | 177 |
| Mov Cap-2 Maneuver | - | - | - | - | 352 |
| Stage 1 | - | - | - | - | 405 |
| Stage 2 | - | - | - | - | 617 |

| Approach | EB | WB | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 1.2 | 14 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 352 | 600 | - | - | 756 | - |
| HCM Lane V/C Ratio | 0.166 | 0.215 | - | - | 0.083 | - |
| HCM Control Delay (s) | 17.2 | 12.6 | - | - | 10.2 | - |
| HCM Lane LOS | C | B | - | - | B | - |
| HCM 95th %tile Q(veh) | 0.6 | 0.8 | - | - | 0.3 | - |

HCM 6th TWSC

2: White Eagle Drive/Commons Drive & Montgomery Road

07/29/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 15 | 557 | 7 | 37 | 359 | 16 | 1 | 3 | 55 | 51 | 5 | 29 |
| Future Vol, veh/h | 15 | 557 | 7 | 37 | 359 | 16 | 1 | 3 | 55 | 51 | 5 | 29 |
| 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 | 95 | - | - | 150 | - | 85 | - | - | - | 0 | - | 135 |
| 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, % | 11 | 3 | 2 | 6 | 5 | 12 | 0 | 0 | 2 | 0 | 0 | 10 |
| Mvmt Flow | 16 | 605 | 8 | 40 | 390 | 17 | 1 | 3 | 60 | 55 | 5 | 32 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-------|--------|------|------|
| Conflicting Flow All | 407 | 0 | 0 | 613 | 0 | 0 | 1138 | 1128 | 609 | 1143 | 1115 | 390 |
| Stage 1 | - | - | - | - | - | - | 641 | 641 | - | 470 | 470 | - |
| Stage 2 | - | - | - | - | - | - | 497 | 487 | - | 673 | 645 | - |
| Critical Hdwy | 4.21 | - | - | 4.16 | - | - | 7.1 | 6.5 | 6.22 | 7.1 | 6.5 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.299 | - | - | 2.254 | - | - | 3.5 | 4 | 3.318 | 3.5 | 4 | 3.39 |
| Pot Cap-1 Maneuver | 1105 | - | - | 947 | - | - | 180 | 206 | 495 | 179 | 210 | 641 |
| Stage 1 | - | - | - | - | - | - | 466 | 473 | - | 578 | 563 | - |
| Stage 2 | - | - | - | - | - | - | 559 | 554 | - | 448 | 471 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1105 | - | - | 947 | - | - | 160 | 195 | 495 | 149 | 198 | 641 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 160 | 195 | - | 149 | 198 | - |
| Stage 1 | - | - | - | - | - | - | 459 | 466 | - | 570 | 539 | - |
| Stage 2 | - | - | - | - | - | - | 504 | 531 | - | 385 | 464 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.8 | | | 14.5 | | | 30.9 | | |
| HCM LOS | | | | | | | B | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 444 | 1105 | - | - | 947 | - | - | 149 | 482 |
| HCM Lane V/C Ratio | 0.144 | 0.015 | - | - | 0.042 | - | - | 0.372 | 0.077 |
| HCM Control Delay (s) | 14.5 | 8.3 | - | - | 9 | - | - | 42.8 | 13.1 |
| HCM Lane LOS | B | A | - | - | A | - | - | E | B |
| HCM 95th %tile Q(veh) | 0.5 | 0 | - | - | 0.1 | - | - | 1.6 | 0.2 |

HCM 6th TWSC
 3: Stonehaven Circle & Commons Drive

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | |
| Movement | SET | SER | NWL | NWT | NEL | NER |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 65 | 5 | 2 | 39 | 7 | 6 |
| Future Vol, veh/h | 65 | 5 | 2 | 39 | 7 | 6 |
| 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 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 0 | 4 | 4 | 0 |
| Mvmt Flow | 83 | 6 | 3 | 50 | 9 | 8 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 0 | 0 | 89 | 0 | 142 |
| Stage 1 | - | - | - | - | 86 |
| Stage 2 | - | - | - | - | 56 |
| Critical Hdwy | - | - | 4.1 | - | 6.44 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.44 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.44 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.536 |
| Pot Cap-1 Maneuver | - | - | 1519 | - | 846 |
| Stage 1 | - | - | - | - | 932 |
| Stage 2 | - | - | - | - | 961 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1519 | - | 844 |
| Mov Cap-2 Maneuver | - | - | - | - | 844 |
| Stage 1 | - | - | - | - | 932 |
| Stage 2 | - | - | - | - | 959 |

| Approach | SE | NW | NE |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0 | 0.4 | 9.1 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|-----------------------|-------|-------|-----|-----|-----|
| Capacity (veh/h) | 901 | 1519 | - | - | - |
| HCM Lane V/C Ratio | 0.018 | 0.002 | - | - | - |
| HCM Control Delay (s) | 9.1 | 7.4 | 0 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | - |

HCM 6th TWSC
 4: Commons Drive & Chelsea Manor Circle

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 19 | 25 | 40 | 6 | 7 | 51 |
| Future Vol, veh/h | 19 | 25 | 40 | 6 | 7 | 51 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 20 | 26 | 42 | 6 | 7 | 54 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 113 | 45 | 0 | 0 | 48 | 0 |
| Stage 1 | 45 | - | - | - | - | - |
| Stage 2 | 68 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 884 | 1025 | - | - | 1559 | - |
| Stage 1 | 977 | - | - | - | - | - |
| Stage 2 | 955 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 880 | 1025 | - | - | 1559 | - |
| Mov Cap-2 Maneuver | 880 | - | - | - | - | - |
| Stage 1 | 977 | - | - | - | - | - |
| Stage 2 | 950 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 9 | 0 | 0.9 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 957 | 1559 |
| HCM Lane V/C Ratio | - | - | 0.048 | 0.005 |
| HCM Control Delay (s) | - | - | 9 | 7.3 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0 |

HCM 6th TWSC
5: Commons Drive & Schmidgall Boulevard

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.9 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 24 | 59 | 6 | 7 | 38 |
| Future Vol, veh/h | 20 | 24 | 59 | 6 | 7 | 38 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 25 | 62 | 6 | 7 | 40 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 119 | 65 | 0 | 0 | 68 |
| Stage 1 | 65 | - | - | - | - |
| Stage 2 | 54 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 877 | 999 | - | - | 1533 |
| Stage 1 | 958 | - | - | - | - |
| Stage 2 | 969 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 873 | 999 | - | - | 1533 |
| Mov Cap-2 Maneuver | 873 | - | - | - | - |
| Stage 1 | 958 | - | - | - | - |
| Stage 2 | 964 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 9 | 0 | 1.1 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 937 | 1533 |
| HCM Lane V/C Ratio | - | - | 0.049 | 0.005 |
| HCM Control Delay (s) | - | - | 9 | 7.4 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0 |

HCM 6th TWSC
1: Commons Drive & 75th Street

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑↑ | ↑ | ↓ | ↑↑ | ↓ | ↑ |
| Traffic Vol, veh/h | 681 | 52 | 161 | 861 | 36 | 140 |
| Future Vol, veh/h | 681 | 52 | 161 | 861 | 36 | 140 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 140 | 210 | - | 0 | 180 |
| Veh in Median Storage, # | 0 | - | - | 0 | 2 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 1 | 0 | 1 | 1 | 0 | 2 |
| Mvmt Flow | 709 | 54 | 168 | 897 | 38 | 146 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 763 | 0 |
| Stage 1 | - | - | - | 709 |
| Stage 2 | - | - | - | 785 |
| Critical Hdwy | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | - | - | - | 5.8 |
| Critical Hdwy Stg 2 | - | - | - | 5.8 |
| Follow-up Hdwy | - | - | 2.21 | - |
| Pot Cap-1 Maneuver | - | - | 852 | - |
| Stage 1 | - | - | - | 454 |
| Stage 2 | - | - | - | 415 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 852 | - |
| Mov Cap-2 Maneuver | - | - | - | 268 |
| Stage 1 | - | - | - | 454 |
| Stage 2 | - | - | - | 333 |

| Approach | EB | WB | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 1.6 | 14 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 268 | 641 | - | - | 852 | - |
| HCM Lane V/C Ratio | 0.14 | 0.228 | - | - | 0.197 | - |
| HCM Control Delay (s) | 20.6 | 12.3 | - | - | 10.3 | - |
| HCM Lane LOS | C | B | - | - | B | - |
| HCM 95th %tile Q(veh) | 0.5 | 0.9 | - | - | 0.7 | - |

HCM 6th TWSC

2: White Eagle Drive/Commons Drive & Montgomery Road

07/29/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 18 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | ↖ | | ↕ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 23 | 634 | 8 | 70 | 718 | 84 | 9 | 11 | 62 | 54 | 12 | 30 |
| Future Vol, veh/h | 23 | 634 | 8 | 70 | 718 | 84 | 9 | 11 | 62 | 54 | 12 | 30 |
| 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 | 95 | - | - | 150 | - | 85 | - | - | - | 0 | - | 135 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 10 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 26 | 712 | 9 | 79 | 807 | 94 | 10 | 12 | 70 | 61 | 13 | 34 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|------|-----|
| Conflicting Flow All | 901 | 0 | 0 | 721 | 0 | 0 | 1805 | 1828 | 717 | 1775 | 1738 | 807 |
| Stage 1 | - | - | - | - | - | - | 769 | 769 | - | 965 | 965 | - |
| Stage 2 | - | - | - | - | - | - | 1036 | 1059 | - | 810 | 773 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.6 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.6 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.6 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4.09 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 763 | - | - | 890 | - | - | 62 | 73 | 433 | 65 | 88 | 385 |
| Stage 1 | - | - | - | - | - | - | 397 | 399 | - | 309 | 336 | - |
| Stage 2 | - | - | - | - | - | - | 282 | 291 | - | 377 | 412 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 763 | - | - | 890 | - | - | 45 | 64 | 433 | ~ 42 | 77 | 385 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 45 | 64 | - | ~ 42 | 77 | - |
| Stage 1 | - | - | - | - | - | - | 384 | 385 | - | 298 | 306 | - |
| Stage 2 | - | - | - | - | - | - | 224 | 265 | - | 296 | 398 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|------|-------|
| HCM Control Delay, s | 0.3 | 0.8 | 54.9 | 265.5 |
| HCM LOS | | | F | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|----------|-------|
| Capacity (veh/h) | 159 | 763 | - | - | 890 | - | - | 42 | 180 |
| HCM Lane V/C Ratio | 0.579 | 0.034 | - | - | 0.088 | - | - | 1.445 | 0.262 |
| HCM Control Delay (s) | 54.9 | 9.9 | - | - | 9.4 | - | - | \$ 447.1 | 32 |
| HCM Lane LOS | F | A | - | - | A | - | - | F | D |
| HCM 95th %tile Q(veh) | 3 | 0.1 | - | - | 0.3 | - | - | 6.1 | 1 |

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

HCM 6th TWSC
3: Stonehaven Circle & Commons Drive

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.6 | | | | | |
| Movement | SET | SER | NWL | NWT | NEL | NER |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 85 | 26 | 9 | 104 | 26 | 7 |
| Future Vol, veh/h | 85 | 26 | 9 | 104 | 26 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 0 | 0 |
| Mvmt Flow | 110 | 34 | 12 | 135 | 34 | 9 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 0 | 0 | 144 | 0 | 286 |
| Stage 1 | - | - | - | - | 127 |
| Stage 2 | - | - | - | - | 159 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1451 | - | 709 |
| Stage 1 | - | - | - | - | 904 |
| Stage 2 | - | - | - | - | 875 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1451 | - | 703 |
| Mov Cap-2 Maneuver | - | - | - | - | 703 |
| Stage 1 | - | - | - | - | 904 |
| Stage 2 | - | - | - | - | 867 |

| Approach | SE | NW | NE |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.6 | 10.2 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NELn1 | NWL | NWT | SET | SER |
|-----------------------|-------|-------|-----|-----|-----|
| Capacity (veh/h) | 741 | 1451 | - | - | - |
| HCM Lane V/C Ratio | 0.058 | 0.008 | - | - | - |
| HCM Control Delay (s) | 10.2 | 7.5 | 0 | - | - |
| HCM Lane LOS | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | - |

HCM 6th TWSC
4: Commons Drive & Chelsea Manor Circle

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | W | T | T | T | T |
| Traffic Vol, veh/h | 11 | 14 | 111 | 19 | 23 | 100 |
| Future Vol, veh/h | 11 | 14 | 111 | 19 | 23 | 100 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 12 | 15 | 117 | 20 | 24 | 105 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 280 | 127 | 0 | 0 | 137 |
| Stage 1 | 127 | - | - | - | - |
| Stage 2 | 153 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 710 | 923 | - | - | 1447 |
| Stage 1 | 899 | - | - | - | - |
| Stage 2 | 875 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 697 | 923 | - | - | 1447 |
| Mov Cap-2 Maneuver | 697 | - | - | - | - |
| Stage 1 | 899 | - | - | - | - |
| Stage 2 | 859 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.6 | 0 | 1.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 808 | 1447 |
| HCM Lane V/C Ratio | - | - | 0.033 | 0.017 |
| HCM Control Delay (s) | - | - | 9.6 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0.1 |

HCM 6th TWSC
5: Commons Drive & Schmidgall Boulevard

07/29/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | R | T | R | L | T |
| Traffic Vol, veh/h | 11 | 13 | 106 | 19 | 23 | 112 |
| Future Vol, veh/h | 11 | 13 | 106 | 19 | 23 | 112 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 12 | 14 | 112 | 20 | 24 | 118 |

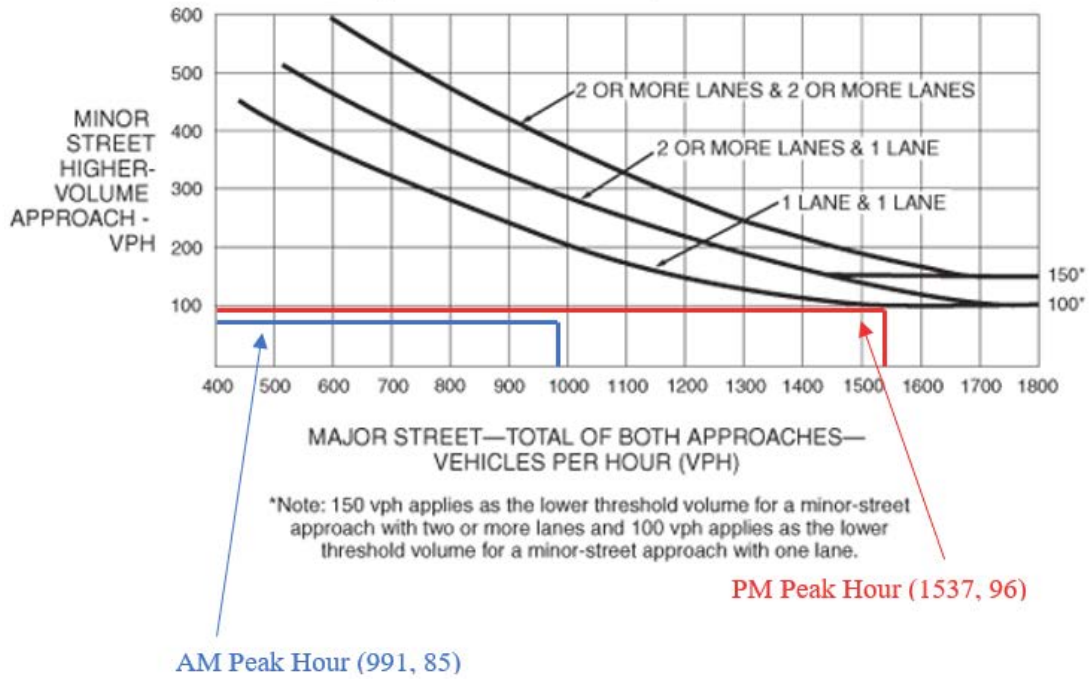
| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 288 | 122 | 0 | 0 | 132 | 0 |
| Stage 1 | 122 | - | - | - | - | - |
| Stage 2 | 166 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 702 | 929 | - | - | 1453 | - |
| Stage 1 | 903 | - | - | - | - | - |
| Stage 2 | 863 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 689 | 929 | - | - | 1453 | - |
| Mov Cap-2 Maneuver | 689 | - | - | - | - | - |
| Stage 1 | 903 | - | - | - | - | - |
| Stage 2 | 847 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.6 | 0 | 1.3 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 801 | 1453 |
| HCM Lane V/C Ratio | - | - | 0.032 | 0.017 |
| HCM Control Delay (s) | - | - | 9.6 | 7.5 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0.1 |

Peak Hour Traffic Signal Warrant

Figure 4C-3. Warrant 3, Peak Hour



Peak Hour Traffic Signal Warrant – Commons Drive with Montgomery Road