

---

# Transportation Impact Study

for

## Project Steel



*Prepared For:*

**Prologis**

**6250 N. River Road, Suite 1100**

**Rosemont (Chicago), IL 60018**

*Prepared By:*

**Langan Engineering, Environmental, Surveying,**

**Landscape Architecture and Geology, D.P.C.**

**200 W. Madison Street, Suite 2900**

**Chicago, IL 60606**

***LANGAN***

**November 2025**

**541061101**

---

# Transportation Impact Study

for

## Project Steel

*Prepared For:*

**Prologis**

**6250 N. River Road, Suite 1100  
Rosemont (Chicago), IL 60018**

*Prepared By:*

**Langan Engineering, Environmental, Surveying,  
Landscape Architecture and Geology, D.P.C.**

**Jason A. Puglisi, EIT**

Staff Engineer  
Langan Engineering  
200 W Madison Street,  
Suite 2900  
Chicago, IL 60606

Phone: 312.547.7740  
Email: jpuglisi@langan.com

**Christopher A. Prisk, P.E., PTOE**

Associate  
Langan Engineering  
200 W Madison Street,  
Suite 2900  
Chicago, IL 60606

Phone: 724.514.5154  
Email: cprisk@langan.com



*Chris Prisk*

**LANGAN**

**November 2025  
541061101**

**TABLE OF CONTENTS**

Section	Page
<b>I. EXECUTIVE SUMMARY.....</b>	<b>1</b>
OVERVIEW OF DEVELOPMENT .....	1
SITE TRIP GENERATION AND DISTRIBUTION .....	1
CONCLUSIONS .....	2
<b>II. INTRODUCTION / PROJECT SUMMARY.....</b>	<b>3</b>
PURPOSE OF REPORT .....	3
<b>III. EXISTING STUDY AREA CONDITIONS .....</b>	<b>3</b>
STUDY AREA ROADWAYS.....	3
DATA COLLECTION .....	4
<b>IV. FUTURE TRAFFIC VOLUMES WITHOUT DEVELOPMENT .....</b>	<b>5</b>
REGIONAL GROWTH .....	5
BACKGROUND DEVELOPMENTS .....	5
2034 PHASE 1 OPENING YEAR NO BUILD TRAFFIC VOLUMES .....	5
2039 PHASE 2 OPENING YEAR NO BUILD TRAFFIC VOLUMES .....	6
2044 FULL BUILD-OUT NO BUILD TRAFFIC VOLUMES .....	6
<b>V. DEVELOPMENT DESCRIPTION.....</b>	<b>6</b>
EAST BEECHER ROAD REALIGNMENT.....	6
PROPOSED SITE ACCESS.....	6
SITE TRIP GENERATION .....	6
SITE TRIP DISTRIBUTION .....	7
<b>VI. FUTURE TRAFFIC VOLUMES WITH DEVELOPMENT .....</b>	<b>7</b>
2034 PHASE 1 OPENING YEAR BUILD TRAFFIC VOLUMES .....	7
2039 PHASE 2 OPENING YEAR BUILD TRAFFIC VOLUMES.....	8
2044 FULL BUILD-OUT OPENING YEAR BUILD TRAFFIC VOLUMES.....	8
<b>VII. OPERATIONAL AND IMPROVEMENT ANALYSES.....</b>	<b>8</b>
CAPACITY AND LEVEL OF SERVICE ANALYSIS .....	8
QUEUE ANALYSIS .....	9
TRAFFIC SIGNAL WARRANT ANALYSES.....	10
<b>VIII. CONCLUSIONS .....</b>	<b>10</b>

## LIST OF FIGURES

Figure	Description
<b>Figure 1</b>	Site Location
<b>Figure 2A</b>	Conceptual Site Plan
<b>Figure 2B</b>	Proposed Driveway Spacing
<b>Figure 3</b>	2025 Existing Peak Hour Traffic Volumes
<b>Figure 4</b>	2034 No Build Peak Hour Traffic Volumes
<b>Figure 4A</b>	2034 Regional Growth
<b>Figure 4B</b>	Project Cardinal Background Site Trips
<b>Figure 5</b>	2039 No Build Peak Hour Traffic Volumes
<b>Figure 5A</b>	2039 Regional Growth
<b>Figure 6</b>	2044 No Build Peak Hour Traffic Volumes
<b>Figure 6A</b>	2044 Regional Growth
<b>Figure 7</b>	Beecher Road Rerouted Traffic Volumes
<b>Figure 8</b>	Phase 1 Site Trips
<b>Figure 9</b>	Phase 1+2 Site Trips
<b>Figure 10</b>	Phase 1+2+3 Site Trips
<b>Figure 11</b>	2034 Build Peak Hour Traffic Volumes
<b>Figure 12</b>	2039 Build Peak Hour Traffic Volumes
<b>Figure 13</b>	2044 Build Peak Hour Traffic Volumes

## LIST OF TABLES

Table	Description
<b>Table 1</b>	CMAP Growth Rate Calculations
<b>Table 2</b>	Site Trip Generation
<b>Table 3A</b>	AM Peak Hour Level of Service Comparison
<b>Table 3B</b>	PM Peak Hour Level of Service Comparison
<b>Table 4A</b>	AM Peak Hour Queue Comparison
<b>Table 4B</b>	PM Peak Hour Queue Comparison
<b>Table 5</b>	Crash Data Analysis

## LIST OF APPENDICES

Appendix	Description
<b>Appendix A</b>	Public Agency Correspondence / Preliminary Submission
<b>Appendix B</b>	Turning Movement Count Data
<b>Appendix C</b>	Field Inventory Sketches
<b>Appendix D</b>	Intersection Photo Log
<b>Appendix E</b>	CMAP Correspondence
<b>Appendix F</b>	Excerpts from Project Cardinal Traffic Impact Study
<b>Appendix G</b>	Level of Service Definitions
<b>Appendix H</b>	2025 Existing Capacity Analysis
<b>Appendix I</b>	2034 No Build Capacity Analysis
<b>Appendix J</b>	2034 Build Capacity Analysis
<b>Appendix K</b>	2039 No Build Capacity Analysis
<b>Appendix L</b>	2039 Build Capacity Analysis
<b>Appendix M</b>	2044 No Build Capacity Analysis
<b>Appendix N</b>	2044 Build Capacity Analysis
<b>Appendix O</b>	Crash Data and Correspondence
<b>Appendix P</b>	Signal Warrant Analysis
<b>Appendix Q</b>	Comment Response Letter

## I. EXECUTIVE SUMMARY

### Overview of Development

Langan has prepared the following Transportation Impact Study for the proposed Project Steel data center campus. The proposed development campus is anticipated to be constructed across three (3) phases with each phase consisting of six (6) two-story data centers. Each phase is proposing three (3) driveway connections, however, only one driveway is proposed to be used by development traffic while the other two driveways are for emergency access or substation access. This study assumes no traffic will enter or exit from the emergency and substation driveways during a typical day and these intersections were not analyzed in this study. The Phase 1 full access driveway is proposed along an extended East Becher Road that is proposed to connect to Corneils Road at a single lane roundabout. The Phase 2 full access driveway is proposed along Eldamain Road south of the Galena Road intersection and the Phase 3 full access driveway is proposed along Corneils Road west of the existing Beecher Road intersection. Phase one of the development is anticipated to be complete by 2034, Phase 2 by 2039, and full build-out is anticipated by 2044.

### Site Trip Generation and Distribution

Based on the consensus established during the scoping discussions with the city of Yorkville, client-provided data was used to estimate the trip generation of the proposed development. This data was then summarized for the AM peak hour of adjacent street (7:00 AM – 9:00 AM) and PM peak hour of adjacent street (4:00 PM – 6:00 PM).

The proposed full build-out is projected to generate 144 AM peak hour trips (0 In, 144 Out), 0 PM peak hour trips (0 In, 0 Out), and 1,080 daily trips.

Langan estimated preliminary employee trip distributions for the proposed development based on the location of the site, existing roadway volumes, and engineering judgement. Based on the surrounding roadway network, the following employee trip distributions are anticipated:

- 5% to / from the west along Galena Road (CO 9)
- 10% to / from the east along Galena Road (CO 9)
- 25% to / from the north via IL 47
- 30% to / from the south via IL 47
- 25% to / from the south along Eldamain Road (CO 7)
- 5% to / from the north along Ashe Road

This site traffic distribution in multiple directions will minimize site traffic impacts along the surrounding road network.

The proposed distributions were submitted to the city of Yorkville for review as part of the preliminary submissions on July 17<sup>th</sup>, 2025, and approved on July 29<sup>th</sup>, 2025.

## Conclusions

The results of this study provide a broad overview of the transportation impacts that are associated with the proposed Project Steel development. There is expected to be minimal increases in delay under the 2034 Build, 2039 Build, and 2044 Build conditions with the addition of the proposed site trips. The majority of study area intersections are projected to operate at an overall LOS D or better during the AM and PM peak hour of the Build conditions or operate similarly to the No Build conditions with the exception of Bridge Street (IL 47) & Corneils Road intersection.

The proposed modifications to the existing transportation network which are recommended regardless of whether the proposed data center development is constructed are listed below:

- Bridge Street (IL 47) & Corneils Road (Int #8)  
*(Improvements By Others)*
  - Signalizing this intersection is not currently recommended since it does not satisfy warrant criteria in the 2044 Build conditions. However, the intersection could meet at least one of the necessary warrants if development continues in the area. IDOT should continue to monitor the projected traffic volumes to determine if and when a traffic signal becomes warranted. Signalization of this intersection will not be warranted or required because of the traffic that is anticipated to be generated by Project Steel.

## II. INTRODUCTION / PROJECT SUMMARY

### Purpose of Report

Langan has prepared the following Transportation Impact Study (TIS) for the proposed Project Steel development. The proposed development campus is anticipated to be constructed across three (3) phases with each phase consisting of six (6) two-story data centers. Phase one of the development is anticipated to be complete by 2034, Phase 2 by 2039, and full build-out is anticipated by 2044. The site location and roadway network surrounding the proposed development is presented on **Figure 1**.

Each phase is proposing three (3) driveway connections, however, only one driveway is proposed to be used by development traffic while the other two driveways are for emergency access or substation access. This study assumes no traffic will enter or exit from the emergency and substation driveways during a typical day and these intersections were not analyzed in this study. The Phase 1 full access driveway is proposed along an extended East Beecher Road which will connect to Corneils Road at a proposed single lane roundabout. The Phase 2 full access driveway is proposed along Eldamain Road south of the Galena Road intersection and the Phase 3 full access driveway is proposed along Corneils Road west of the existing Beecher Road intersection. The conceptual site plan and proposed access locations are shown on **Figure 2A** and the driveway spacing is illustrated on **Figure 2B**.

A series of scoping emails and phone calls occurred with the city of Yorkville, to introduce the project and present the recommended scope of the TIS. As a result of this coordination, consensus was established related to the proposed study area intersections, trip generation, background growth rates, background developments & roadway improvements, as well as the scope of analyses required for the TIS. A copy of this correspondence and the preliminary submission have been included in **Appendix A**.

This report examines if there are any impacts from the proposed development on the surrounding intersections and roadways. Based on the results of the analyses, this report provides recommended improvements as needed.

## III. EXISTING STUDY AREA CONDITIONS

### Study Area Roadways

Galena Road (CO 9) is a county highway with a posted speed limit of 55 mph. The road has an east west orientation near the site with one (1) travel lane in each direction and is classified a minor arterial. Galena Road provides dedicated left turn and right turn lanes at the Eldamain Road/Ashe Road intersection.

Eldamain Road (CO 7) is a county highway with one (1) travel lane in each direction separated by a concrete median. The roadway runs in a north south orientation as a minor Arterial with a posted

speed limit of 45 MPH. Land use along this road is predominantly agricultural with some residential use.

Ashe Road is a minor arterial with a posted speed limit of 45 mph and runs in a north south direction. The road provides one (1) travel lane in each direction. Land use along Ashe Road is predominantly residential.

Corneils Road is a local road with a posted speed limit of 30 mph. The road runs in an east west orientation with one (1) travel lane in each direction. Land use along Corneils Road is generally agricultural, while providing direct access to residential communities.

Beecher Road is local road with a posted speed limit of 35 mph. The road provides one (1) travel lane in each direction with a north and south orientation. Land use is predominantly agricultural.

Bridge Street (IL 47) is a principal arterial with a posted speed limit of 55 mph which is under the jurisdiction of the Illinois Department of Transportation (IDOT), The road runs in the north south orientation and provides one (1) travel lane in each direction. Land use is generally agricultural and commercial.

## Data Collection

In accordance with the approved scoping discussions, the scope of the study included peak period turning movement counts and analyses at the following Ten (10) intersections:

1. Eldamain Road/Ashe Road & Galena Road (signalized)
2. Eldamain Road & Proposed Site Driveway B (unsignalized)<sup>1</sup>
3. Eldamain Road & Corneils Road (unsignalized)
4. Corneils Road & Proposed Site Driveway C (unsignalized)<sup>1</sup>
5. Corneils Road & Beecher Road (unsignalized)
6. Proposed East Beecher Road Extension & Proposed Site Driveway A (unsignalized)<sup>1</sup>
7. Corneils Road & Proposed East Beecher Road Extension (unsignalized)<sup>1</sup>
8. IL-47 & Corneils Road (unsignalized)
9. IL-47 & Galena Road (signalized)
10. Galena Road & East Beecher Road (unsignalized)

Turning movement counts were collected on a typical weekday in June 2025. These counts were collected during the AM peak period (6:00 AM – 9:00 AM) and PM peak period (3:00 PM – 6:00 PM).

The turning movement count data were used to determine the AM and PM network peak hours. The AM network peak hour (7:00 AM – 8:00 AM) and PM network peak hour (3:30 PM - 4:30 PM) are the 2025 Existing Peak Hour Traffic Volumes shown on **Figure 3**. These volumes were used to analyze existing conditions and develop future conditions for the study area. Copies of the turning movement counts and counts are included as **Appendix B**.

---

<sup>1</sup> Existing mainline volumes at these intersections were determined from turning movements at nearby intersections.

Langan conducted a virtual reconnaissance of the study area to obtain existing intersection geometry, turn lane lengths, lane widths, and posted speed limits. The field inventory sketches are included in **Appendix C**. The intersection photo log is included in **Appendix D**.

#### **IV. FUTURE TRAFFIC VOLUMES WITHOUT DEVELOPMENT**

##### **Regional Growth**

To account for potential background traffic growth, a linear growth rates were calculated based on Chicago Metropolitan Agency for Planning (CMAP) 2050 ADT projections. The growth rate calculations are provided in **Table 1**. These growth rates were applied to the 2025 Existing Peak Hour Traffic Volumes to project them to the 2034 Phase 1 Opening Year, 2039 Phase 2 Opening Year, and the 2044 Full Build-out. These growth rates were agreed upon with the city of Yorkville during the preliminary submission and scoping discussions which are included in **Appendix A**. Note that the growth rate was not applied to the trips associated with the proposed background developments. The CMAP correspondence is included in **Appendix E**.

The resulting 2034, 2039, and 2044 Regional Growth are illustrated on **Figures 4A, 5A & 6A** respectively.

##### **Background Developments**

As discussed during the TIS scoping process, the proposed Project Cardinal data center campus is located north of Galena Road and was required to be included in the background conditions for the Project Steel study. Project Cardinal includes 17.4 million SF of data center uses to be constructed over three (3) phases. All three phases are proposed to be constructed by 2031 which is prior to the completion of the first phase of Project Steel. The background development is projected to generate 2,169 AM peak hour trips (1,193 In, 976 Out) and 1,824 PM peak hour trips (545 In, 1,279 Out). These background trips were routed throughout the study area based on the distributions shown in the provided TIS. The Project Cardinal site trips that traverse the Project Steel study area are illustrated on **Figure 4B** and the Project Cardinal TIS is included as a reference in **Appendix F**.

Since the initial TIS submission, the Project Cardinal projected trip generation has decreased. This report references the higher initial trip generation projections to provide a conservative analysis. As such, it can be assumed that traffic conditions would operate better than what is reflected in this report.

##### **2034 Phase 1 Opening Year No Build Traffic Volumes**

The 2034 Regional Growth (**Figure 4A**) was added to the 2025 Existing Peak Hour Traffic Volumes (**Figure 3**) and the Project Cardinal Background Trips (**Figure 4B**). The resulting 2034 No Build Peak Hour Traffic Volumes are illustrated on **Figure 4**.

### **2039 Phase 2 Opening Year No Build Traffic Volumes**

The 2039 Regional Growth (**Figure 5A**) was added to the 2025 Existing Peak Hour Traffic Volumes (**Figure 3**) and the Project Cardinal Background Trips (**Figure 4B**). The resulting 2039 No Build Peak Hour Traffic Volumes are illustrated on **Figure 5**.

### **2044 Full Build-out No Build Traffic Volumes**

The 2044 Regional Growth (**Figure 6A**) was added to the 2025 Existing Peak Hour Traffic Volumes (**Figure 3**) and the Project Cardinal Background Trips (**Figure 4B**). The resulting 2044 No Build Peak Hour Traffic Volumes are illustrated on **Figure 6**.

## **V. DEVELOPMENT DESCRIPTION**

The proposed development campus is anticipated to be constructed across three (3) phases with each phase consisting of six (6) two-story data centers. Phase one of the development is anticipated to be complete by 2034, Phase 2 by 2039, and full build-out is anticipated by 2044.

### **East Beecher Road Realignment**

To accommodate the proposed development, the developer is proposing to relocate Beecher Road to the east and intersect with Corneils Road. The new connection will extend the existing East Beecher Road from Galena Road directly to Corneils Road. 2025 Existing Peak Hour Volumes traveling on Beecher Road were relocated to the proposed Beecher and Corneils Road intersection. These relocated trips are illustrated on **Figure 7**.

### **Proposed Site Access**

Each phase of the development is proposing three (3) driveway connections, however, only one driveway is proposed to be used by development traffic while the other two driveways are for emergency vehicles or substation access. This study assumes no traffic will enter or exit from the emergency and substation driveways during a typical day and these intersections were not analyzed in this study. The Phase 1 full access driveway is proposed along the proposed East Beecher Road Extension. The Phase 2 full access driveway is proposed along Eldamain Road south of the Galena Road intersection and the Phase 3 full access driveway is proposed along Corneils Road west of the Beecher Road intersection.

### **Site Trip Generation**

Based on the consensus established during the scoping discussions with the city of Yorkville, client-provided data was used to estimate the trip generation of the proposed development. This data was then summarized for the AM peak hour of adjacent street (7:00 AM – 9:00 AM) and PM peak hour of adjacent street (4:00 PM – 6:00 PM).

Trip generation for the proposed data center was calculated based on the projected number of employees for each phase of the development. Each data center building is anticipated to require a

staff of 30 people split amongst shifts to provide all day coverage. The first shift, the morning shift, is anticipated to contain 50% (15 people per building) of the staff and will run between 6:00 AM and 2:00 PM. The afternoon shift is anticipated to contain 25% (7 people per building) of the total employees and will run between 12:00 PM and 8:00 PM. Finally, the remaining 25% (8 people per building) of employees will work the night shift from 8:00 PM - 8:00 AM. Given these shift times, the majority of traffic generated by the campus will occur outside the AM and PM adjacent street peak hours. Assuming all staff trips will be made in single occupancy vehicles, the resulting trip generation for each phase is anticipated to be as follows:

- Phase 1 – Six Buildings
  - 48 AM Peak Hour trips (0 In, 48 Out)
  - 0 PM Peak Hour trips (0 In, 0 Out)
- Phase 1+2 – Twelve Buildings
  - 96 AM Peak Hour trips (0 In, 96 Out)
  - 0 PM Peak Hour trips (0 In, 0 Out)
- Full Build-out – Eighteen Buildings
  - 144 AM Peak Hour trips (0 In, 144 Out)
  - 0 PM Peak Hour trips (0 In, 0 Out)

The site trip generation has been summarized in **Table 2**.

### Site Trip Distribution

Langan estimated preliminary employee trip distributions for the proposed development based on the location of the site and existing roadway volumes, and engineering judgement. Based on the surrounding roadway network, the following employee trip distributions are anticipated:

- 5% to / from the west along Galena Road (CO 9)
- 10% to / from the east along Galena Road (CO 9)
- 25% to / from the north via IL 47
- 30% to / from the south via IL 47
- 25% to / from the south along Eldamain Road (CO 7)
- 5% to / from the north along Ashe Road

This site traffic distribution in multiple directions will minimize site traffic impacts along the surrounding road network. The resulting employee site-generated trips for Phase 1, Phase 1+2, and Full Build-out (Phase 1+2+3) are illustrated on **Figures 8, 9, & 10** respectively.

## VI. FUTURE TRAFFIC VOLUMES WITH DEVELOPMENT

### 2034 Phase 1 Opening Year Build Traffic Volumes

We developed 2034 Build traffic volumes by adding the Phase 1 Site Trips (**Figure 8**) to the 2034 No Build Peak Hour Traffic Volumes (**Figure 4**) and the Beecher Road Rerouted Volumes (**Figure**

7). The 2034 Build Peak Hour Traffic Volumes are illustrated on **Figure 11**. These volumes were used to evaluate the study area intersections under the 2034 Phase 1 Opening Year Build condition.

### **2039 Phase 2 Opening Year Build Traffic Volumes**

We developed 2039 Build traffic volumes by adding the Phase 1+2 Site Trips (**Figure 9**) to the 2039 No Build Peak Hour Traffic Volumes (**Figure 5**) and the Beecher Road Rerouted Volumes (**Figure 7**). The 2039 Build Peak Hour Traffic Volumes are illustrated on **Figure 12**. These volumes were used to evaluate the study area intersections under the 2039 Phase 2 Opening Year Build condition.

### **2044 Full Build-out Opening Year Build Traffic Volumes**

We developed 2044 Build traffic volumes by adding the Phase 1+2+3 Site Trips (**Figure 10**) to the 2044 No Build Peak Hour Traffic Volumes (**Figure 6**) and the Beecher Road Rerouted Volumes (**Figure 7**). The 2044 Build Peak Hour Traffic Volumes are illustrated on **Figure 13**. These volumes were used to evaluate the study area intersections under the 2044 Full Build-out Opening Year Build condition.

## **VII. OPERATIONAL AND IMPROVEMENT ANALYSES**

### **Capacity and Level of Service Analysis**

Langan utilized the collected turning movement count data and existing roadway geometry and characteristics to perform capacity analyses using Synchro 12 capacity analysis software.

These analyses calculate the delay experienced by an average motorist and assign the appropriate level of service (LOS). There are six levels of service that are defined for any intersection. They are given a letter designated from A to F, with LOS A representing the best operating conditions and LOS F the worst. Typically, review agencies consider LOS D or better acceptable for urban conditions. Table A & Table B in **Appendix G** depicts the level of service criteria for signalized and unsignalized intersections.

Levels of service (LOS) were calculated for the AM Network peak hour (7:00 AM – 8:00 AM) and PM Network peak hour (3:30 PM – 4:30 PM) under the following conditions:

- 2025 Existing
- 2034 Phase 1 Opening Year No Build
- 2034 Phase 1 Opening Year Build
- 2039 Phase 2 Opening Year No Build
- 2039 Phase 2 Opening Year Build
- 2044 Full Build-out Opening Year No Build
- 2044 Full Build-out Opening Year Build

Roadway grades and lane widths were obtained through a desktop reconnaissance which were incorporated into the calculations. Existing peak hour factors and heavy vehicle percentages from

the turning movement counts were also incorporated into the calculations. The level of service for each intersection are summarized in **Tables 3A – 3B** and the Synchro printouts for each analysis condition can be found in **Appendices H – N**, respectively. The proposed IDOT project along IL 47 consists of widening the roadway to provide two travel lanes in each direction and signal improvements. These improvements were incorporated into all No Build and Build analyses as the project is likely to be completed before the 2034 Phase 1 opening year.

As shown in the tables, there will be minimal increases in delay under the 2034 Build, 2039 Build, and 2044 Build conditions with the addition of the proposed site trips. The majority of study area intersections are projected to operate at an overall LOS D or better during the AM and PM peak hour of the Build conditions or operate similarly to the No Build conditions with the exception of Bridge Street (IL 47) & Corneils Road intersection. Additionally, it should be noted that westbound left at Eldamain Road & Cornelis Road intersection is anticipated to operate at an LOS E during the 2044 AM Build scenario. No improvements are anticipated at this intersection as the westbound left already has a dedicated turn lane, and the movement does not significantly impact intersection operations.

Analyses indicated that minor street approaches at the Bridge Street (IL 47) & Corneils Road fail under the 2034 No Build scenario with delay further increasing in subsequent No Build and Build scenarios. As such, it is evident that the degradation of operations at this intersection is not related to the traffic generated by the proposed Project Steel development.

### **Queue Analysis**

To determine any potential impacts to queuing throughout the study area, queue lengths were analyzed for the 2034, 2039, and 2044 Build condition and compared to the corresponding No Build conditions. At study intersections where queue lengths are expected to increase during the AM and PM peak hours, they generally only do so by one or two car lengths or are accommodated by the current storage bay lengths. We will also note that while there are some other instances where the Build queue lengths exceed the available storage lengths, they are also anticipated to do so in the No Build conditions. The No Build and Build 95<sup>th</sup> percentile queue lengths are summarized in the Queue Comparison **Tables 4A** and **4B** and the Synchro / HCM 7 Queue Report printouts can be found in **Appendices I – N**.

### **Turn Lane Warrant Analyses**

The majority of study area intersections currently have dedicated turn lanes or are receiving additional intersection modifications such as widening, or roundabouts. The remaining unmodified intersection are anticipated to see minimal turning movements in the proposed 2034, 2039, and 2044 Build scenarios. Additionally, at the request of the city of Yorkville, crash data<sup>2</sup> for the previous three

---

<sup>2</sup> DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the afore mentioned 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) yeah was obtained from the Illinois Department of Transportation. The provided data was summarized in **Table 5** to obtain crash rates for the existing intersections. Based on a review of the volumes and the crash data, additional turn lanes at existing intersections or proposed site driveways are not recommended to be constructed as part of this development.

Correspondence with IDOT and the provided crash data are included in **Appendix O**.

### **Traffic Signal Warrant Analyses**

Peak Hour and Four-Hour traffic signal warrants were evaluated at the Bridge Street (IL 47) & Corneils Road intersection for the 2025 Existing, No Build, and Build scenarios in accordance with the *Manual of Uniform Traffic Control Devices* and with minimal 20% right turn reductions. According to the analyses, none of analyzed scenarios meet the Peak Hour or Four-Hour Warrants.

All signal warrant analyses are included in **Appendix P**.

## **VIII. CONCLUSIONS**

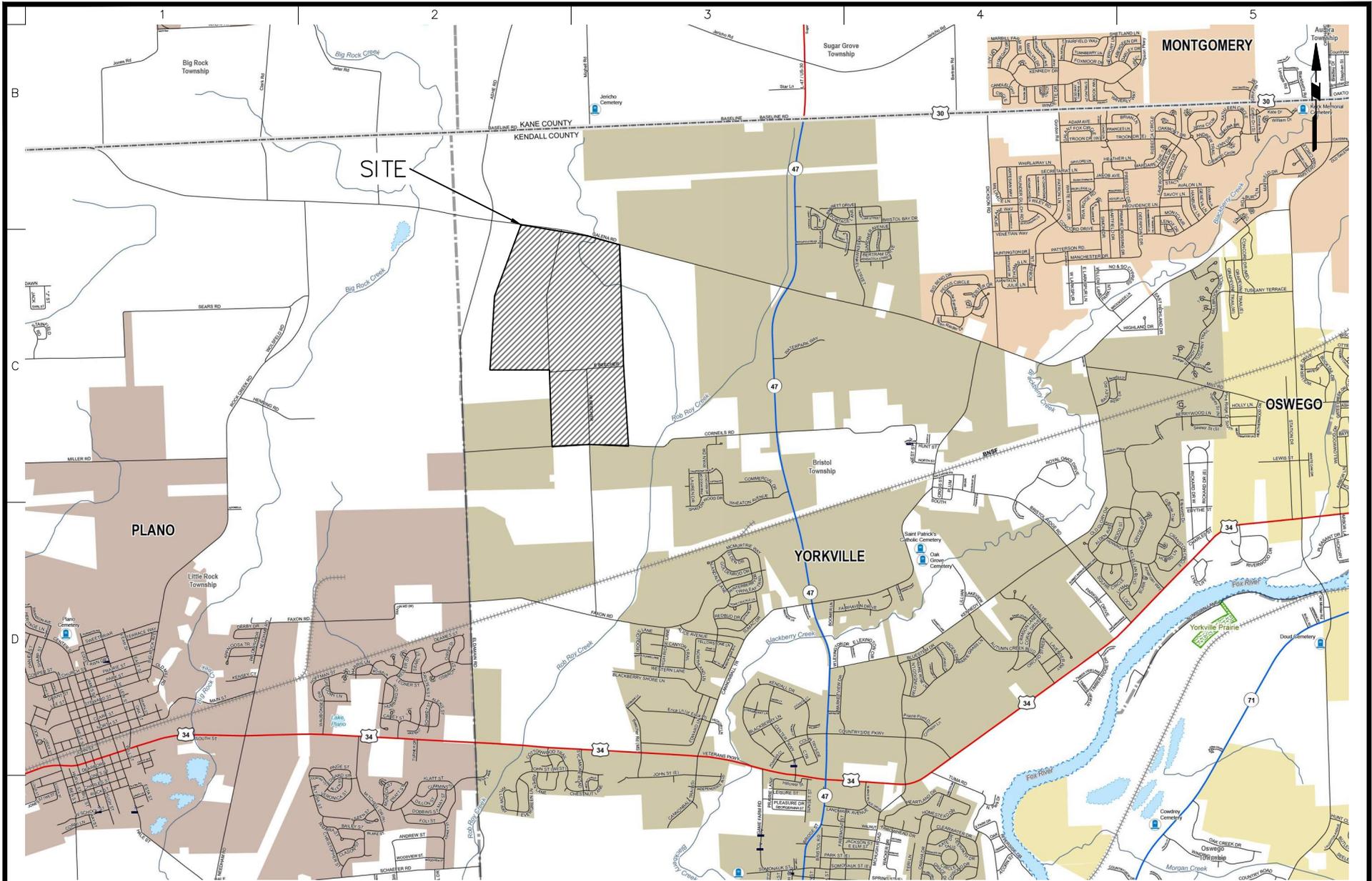
The results of this study provide a broad overview of the transportation impacts that are associated with the proposed Project Steel development. There is expected to be minimal increases in delay under the 2034 Build, 2039 Build, and 2044 Build conditions with the addition of the proposed site trips. The majority of study area intersections are projected to operate at an overall LOS D or better during the AM and PM peak hour of the Build conditions or operate similarly to the No Build conditions with the exception of Bridge Street (IL 47) & Corneils Road intersection.

The proposed modifications to the existing transportation network which are recommended regardless of whether the proposed data center development is constructed are listed below:

- Bridge Street (IL 47) & Corneils Road (Int #8)  
(Improvements By Others)
  - Signalizing this intersection is not currently recommended since it does not satisfy warrant criteria in the 2044 Build conditions. However, the intersection could meet at least one of the necessary warrants if development continues in the area. IDOT should continue to monitor the projected traffic volumes to determine if and when a traffic signal becomes warranted. Signalization of this intersection will not be warranted or required because of the traffic that is anticipated to be generated by Project Steel.

## **FIGURES**

- Figure 1** - Site Location
- Figure 2A** - Conceptual Site Plan
- Figure 2B** - Proposed Driveway Spacing
- Figure 3** - 2025 Existing Peak Hour Traffic Volumes
- Figure 4** - 2034 No Build Peak Hour Traffic Volumes
- Figure 4A** - 2034 Regional Growth
- Figure 4B** - Project Cardinal Background Site Trips
- Figure 5** - 2039 No Build Peak Hour Traffic Volumes
- Figure 5A** - 2039 Regional Growth
- Figure 6** - 2044 No Build Peak Hour Traffic Volumes
- Figure 6A** - 2044 Regional Growth
- Figure 7** - Beecher Road Rerouted Traffic Volumes
- Figure 8** - Phase 1 Site Trips
- Figure 9** - Phase 1+2 Site Trips
- Figure 10** - Phase 1+2+3 Site Trips
- Figure 11** - 2034 Build Peak Hour Traffic Volumes
- Figure 12** - 2039 Build Peak Hour Traffic Volumes
- Figure 13** - 2044 Build Peak Hour Traffic Volumes



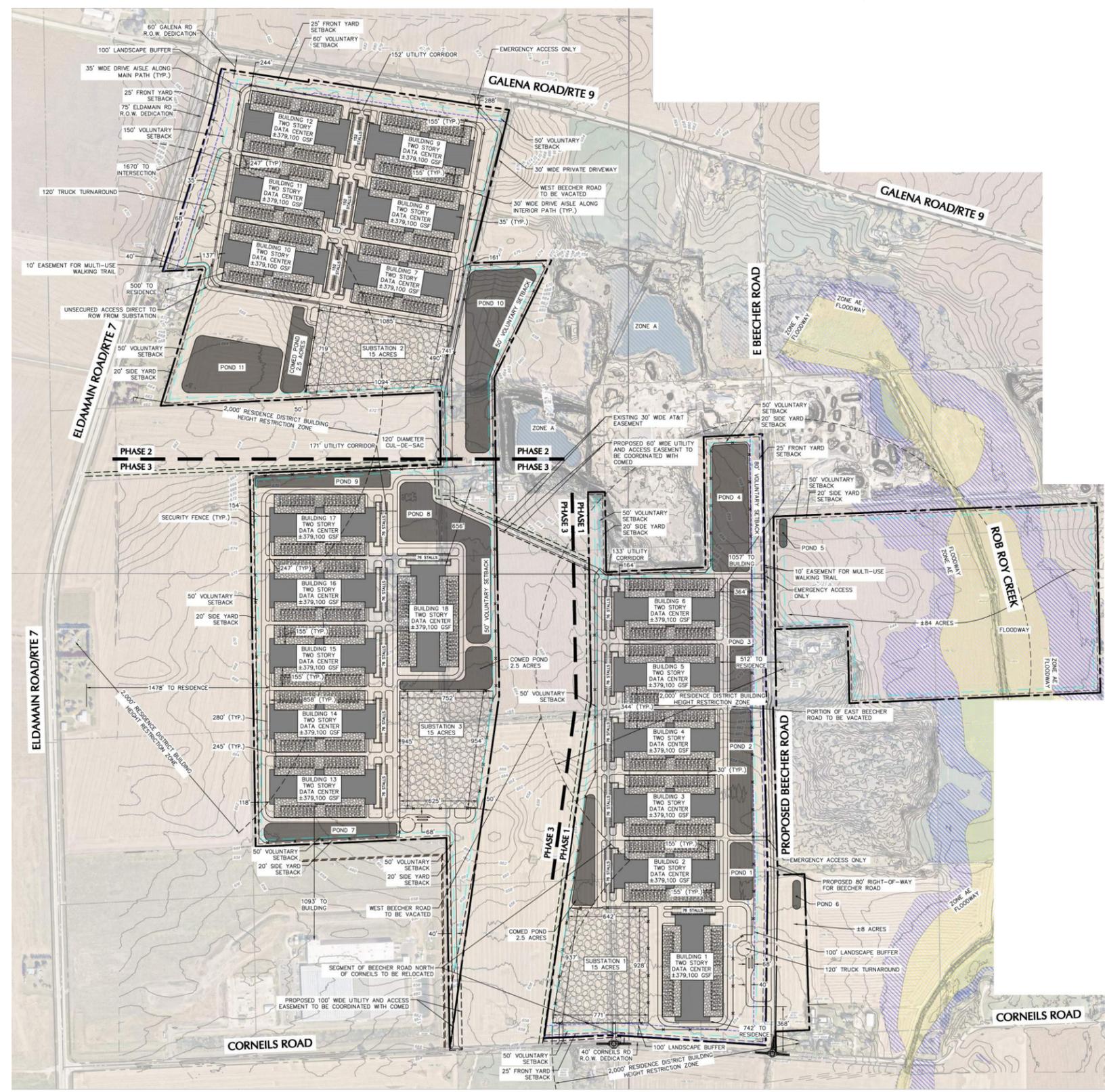
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

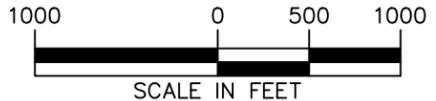
Drawing Title  
**SITE LOCATION**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

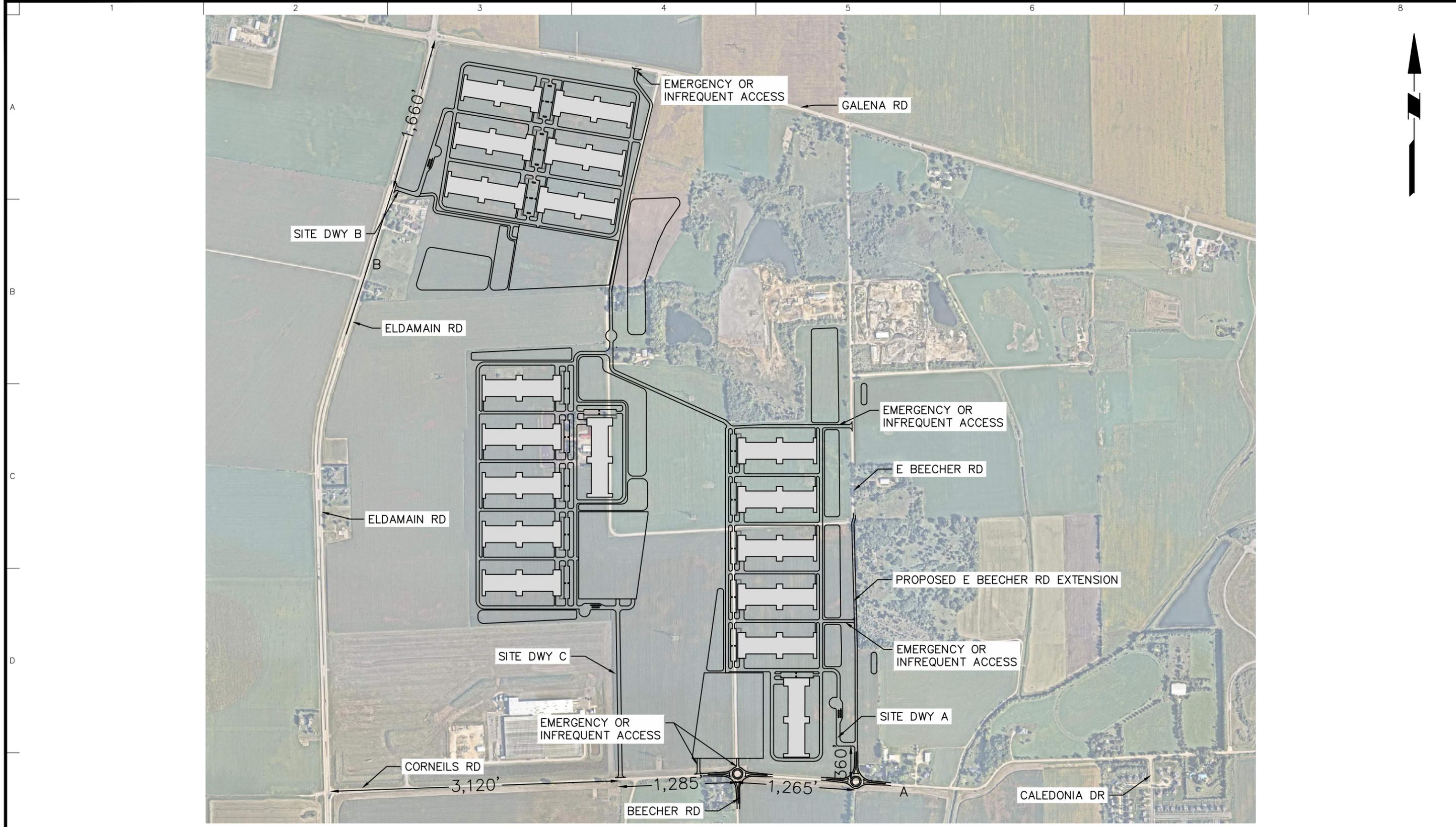
Figure  
**1**



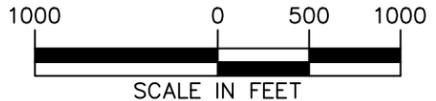
NOTE:  
 E (1) CONCEPTUAL SITE PLAN PROVIDED BY LANGAN ON 11/18/2025.



<b>LANGAN</b> Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 200 West Madison Street, Suite 2900 Chicago, IL 60606 T: 312.547.7700 F: 312.547.7701 www.langan.com	Project	Drawing Title	Project No.	Figure
	<b>PROJECT STEEL</b> YORKVILLE ILLINOIS	<b>CONCEPTUAL          SITE PLAN</b>	<b>541061101</b> Date <b>NOVEMBER 2025</b> Drawn By <b>SS</b> Checked By <b>CAP</b>	<b>2A</b>



NOTE:  
 (1) CONCEPTUAL SITE PLAN PROVIDED BY LANGAN ON 5/16/2025.  
 (2) A - TOTAL DISTANCE BETWEEN PROPOSED E BEECHER RD EXTENSION AND CALEDONIA DR MEASURED AS 3,350' ALONG CORNELLS RD.  
 (3) B - DISTANCE BETWEEN SITE DWY B AND CORNELLS RD MEASURED AS 6,620' ALONG ELDAMAIN RD.



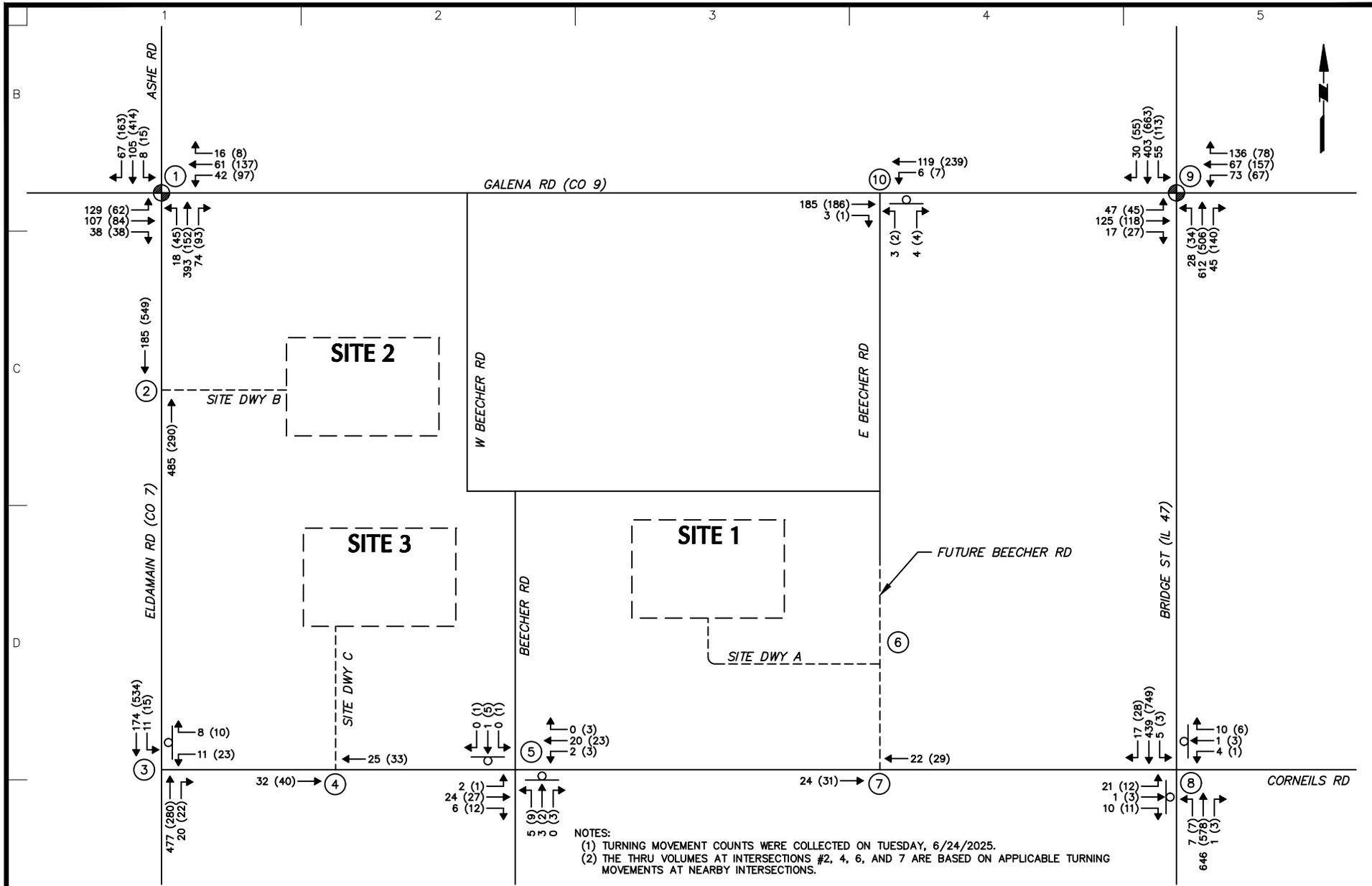
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 ILLINOIS

Drawing Title  
**PROPOSED DRIVEWAY SPACING**

Project No.	541061101
Date	NOVEMBER 2025
Drawn By	SS
Checked By	CAP

Figure  
**2B**



NOTES:  
 (1) TURNING MOVEMENT COUNTS WERE COLLECTED ON TUESDAY, 6/24/2025.  
 (2) THE THRU VOLUMES AT INTERSECTIONS #2, 4, 6, AND 7 ARE BASED ON APPLICABLE TURNING MOVEMENTS AT NEARBY INTERSECTIONS.

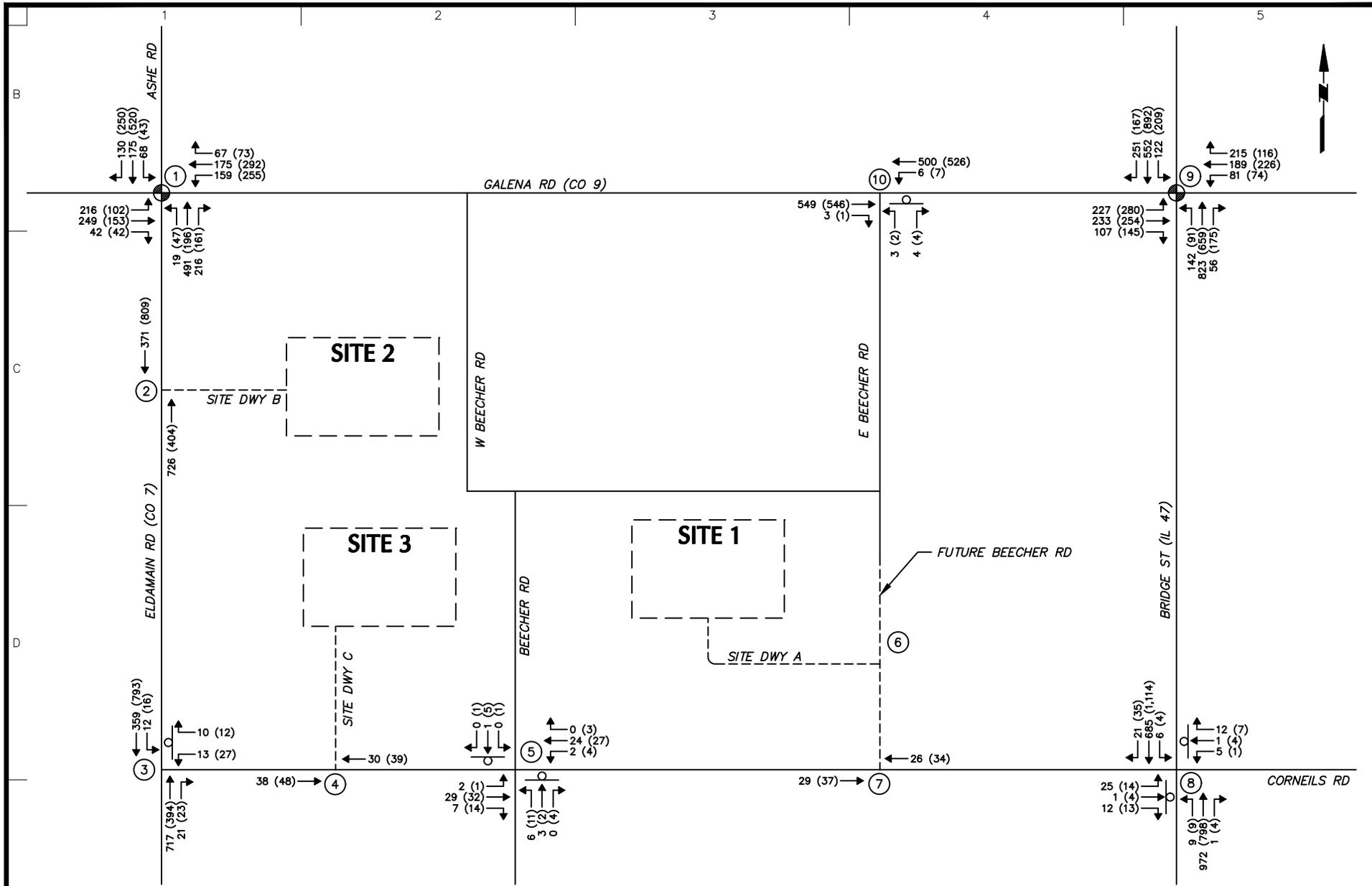
LEGEND	
xx	- AM PEAK HOUR
(xx)	- PM PEAK HOUR
⊕	- STOP SIGN
⊙	- TRAFFIC SIGNAL
⊗	- INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2025 EXISTING  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No.	Figure
541061101	3
Date NOVEMBER 2025	
Drawn By SS	
Checked By CAP	



**LEGEND**

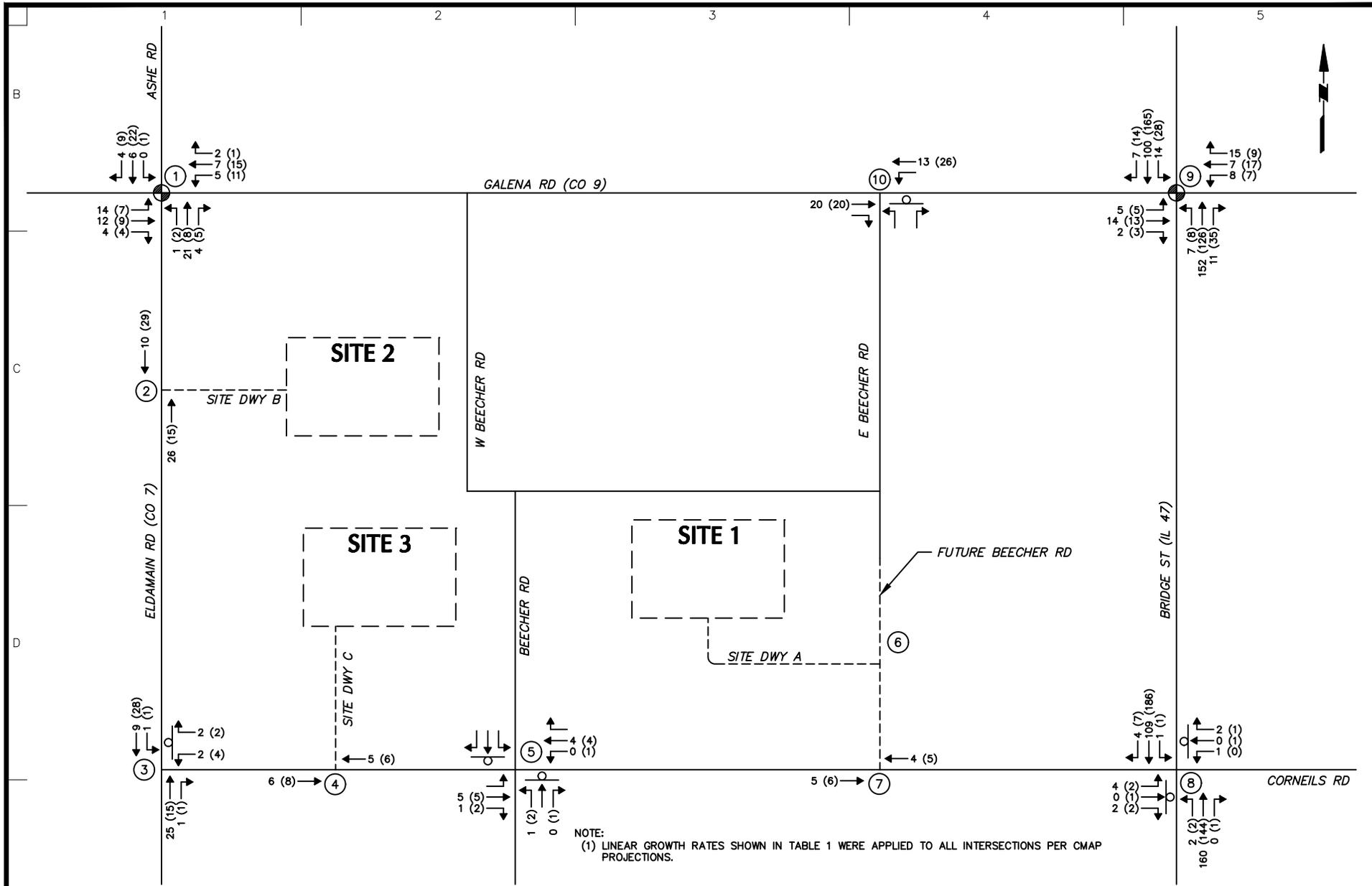
- xx - AM PEAK HOUR
- (xx) - PM PEAK HOUR
- ⊕ - STOP SIGN
- ⊙ - TRAFFIC SIGNAL
- ⊗ - INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2034 NO BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No. <b>541061101</b>	<b>4</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



NOTE:  
 (1) LINEAR GROWTH RATES SHOWN IN TABLE 1 WERE APPLIED TO ALL INTERSECTIONS PER CMAP PROJECTIONS.

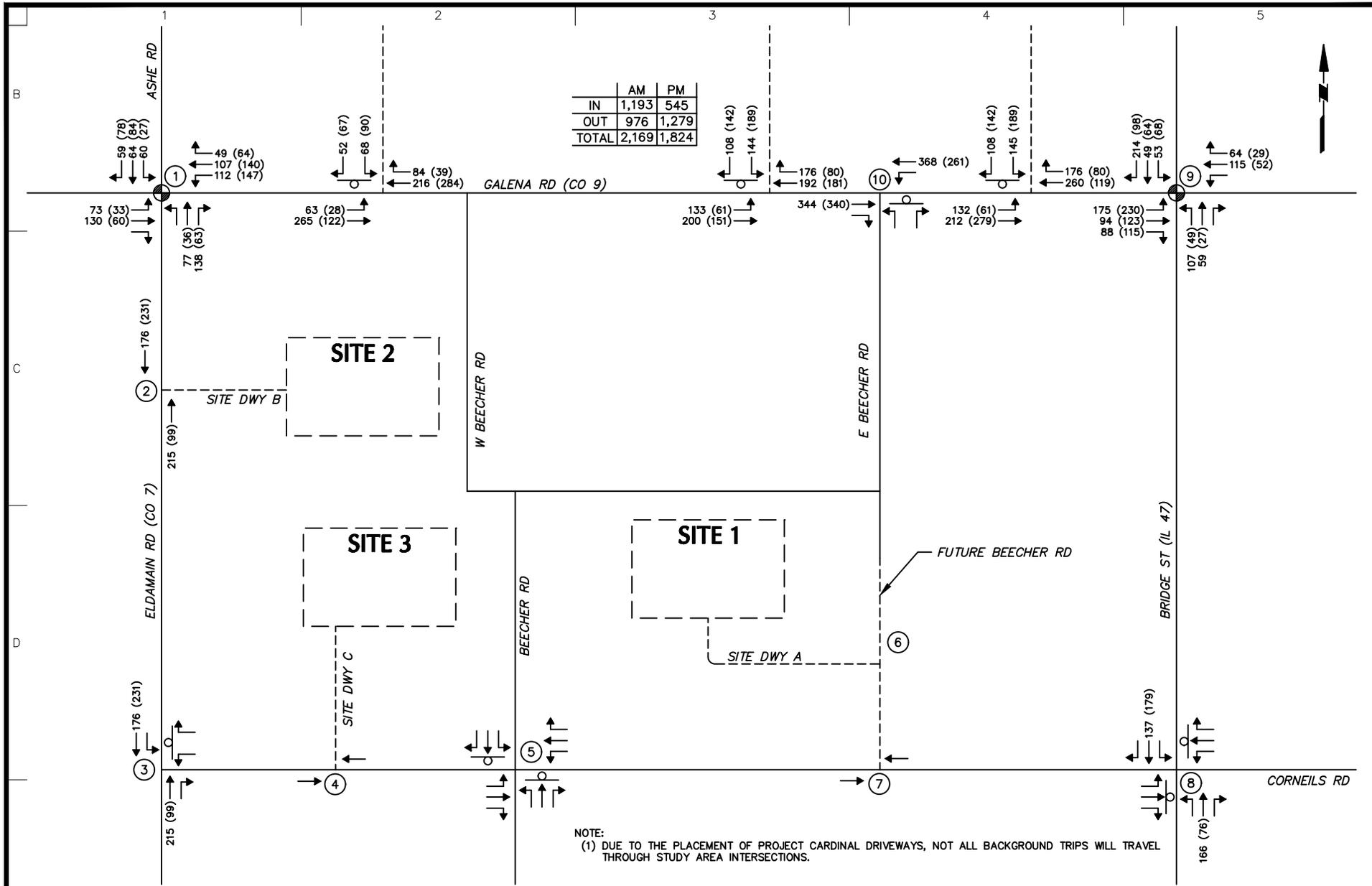
LEGEND	
xx	- AM PEAK HOUR
(xx)	- PM PEAK HOUR
⊕	- STOP SIGN
⊙	- TRAFFIC SIGNAL
⊗	- INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2034  
 REGIONAL  
 GROWTH**

Project No.	Figure
541061101	<b>4A</b>
Date NOVEMBER 2025	
Drawn By SS	
Checked By CAP	



**LEGEND**

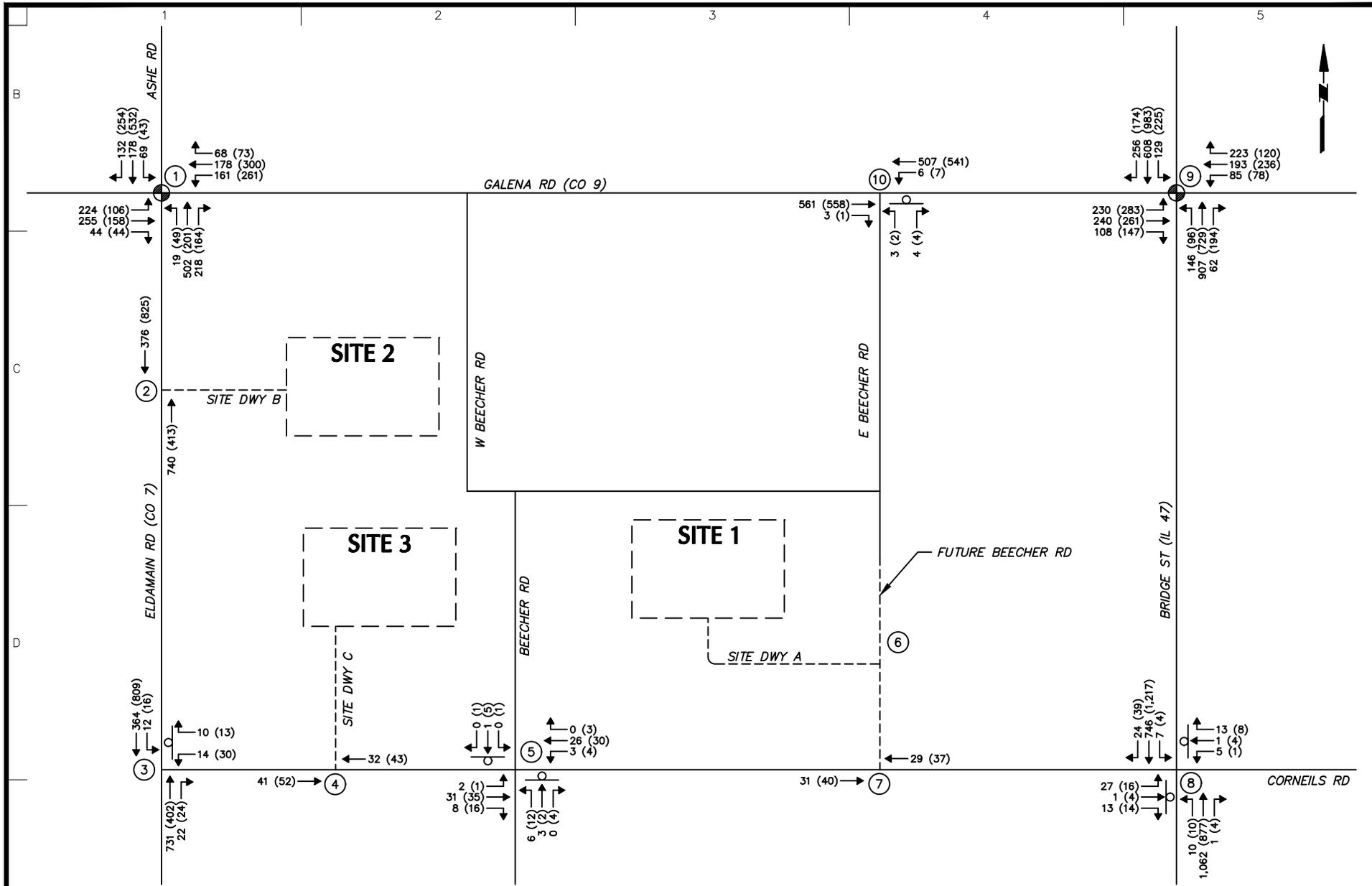
- xx - AM PEAK HOUR
- (xx) - PM PEAK HOUR
- ⊘ - STOP SIGN
- ⊙ - TRAFFIC SIGNAL
- ⊕ - INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**PROJECT CARDINAL  
 BACKGROUND  
 SITE TRIPS**

Project No. <b>541061101</b>	Figure <b>4B</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



**LEGEND**

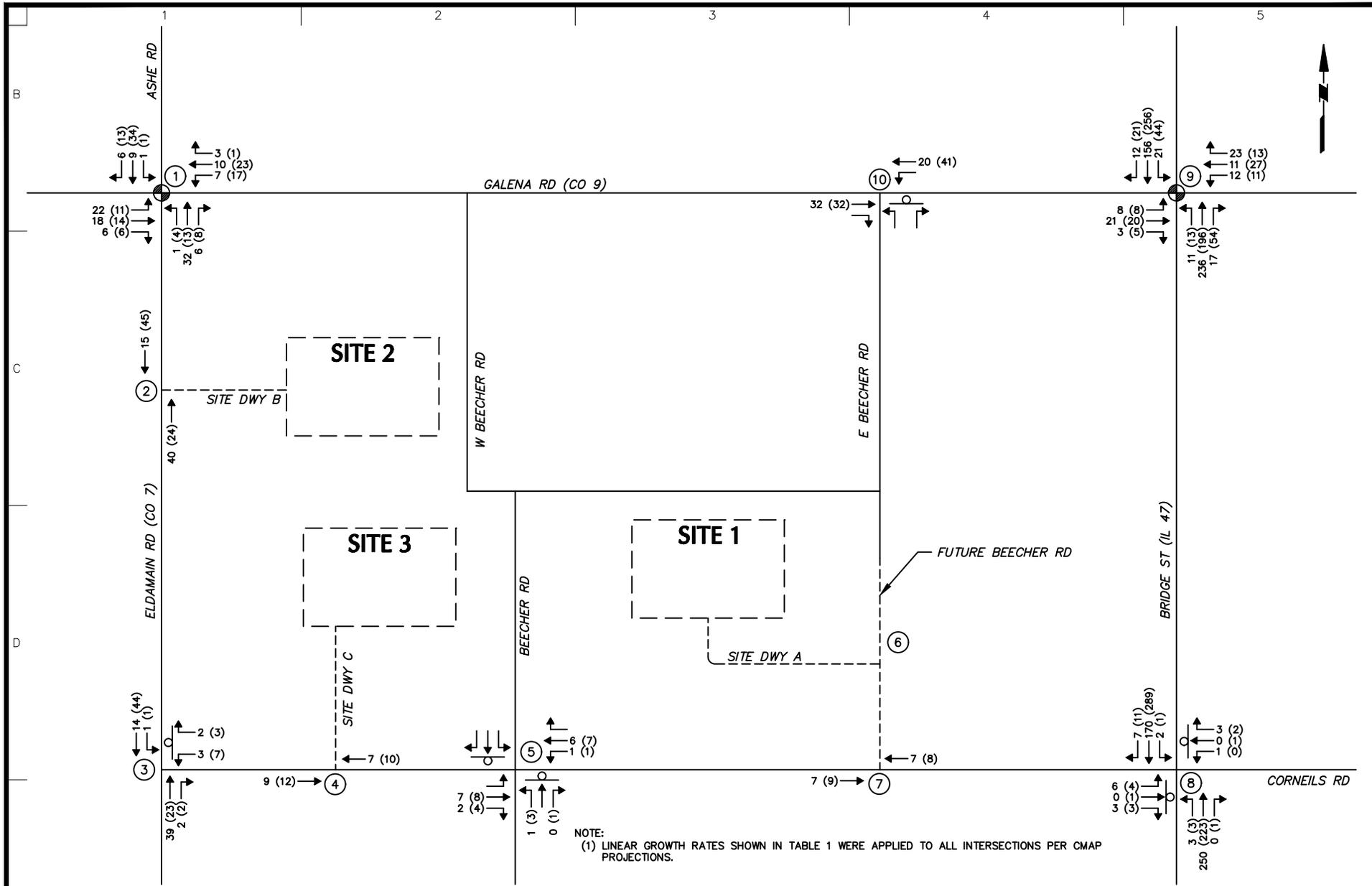
- xx - AM PEAK HOUR
- (xx) - PM PEAK HOUR
- ⊕ - STOP SIGN
- ⊙ - TRAFFIC SIGNAL
- ⊗ - INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2039 NO BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No. <b>541061101</b>	Figure <b>5</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



NOTE:  
 (1) LINEAR GROWTH RATES SHOWN IN TABLE 1 WERE APPLIED TO ALL INTERSECTIONS PER CMAP PROJECTIONS.

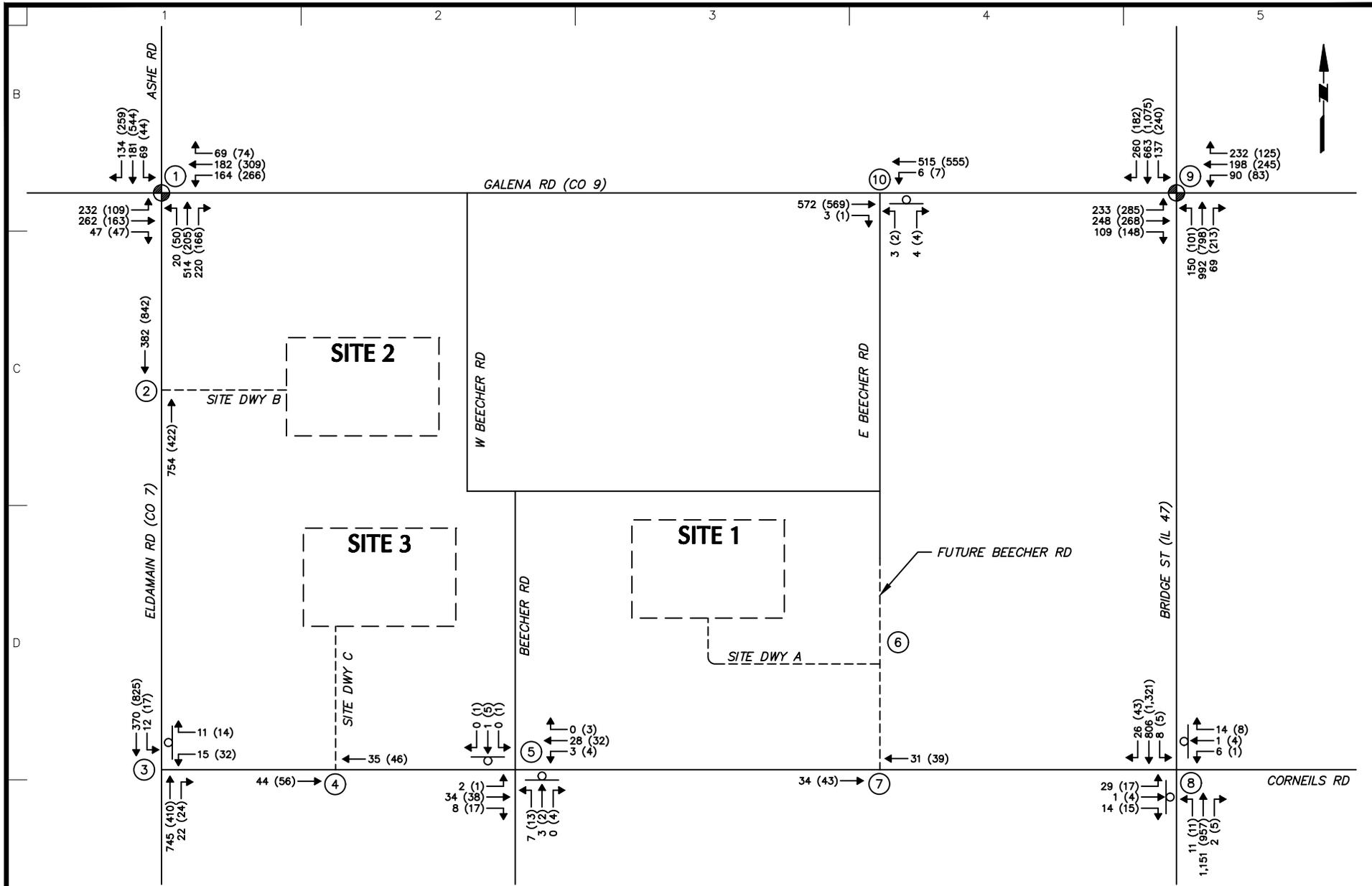
LEGEND	
xx	- AM PEAK HOUR
(xx)	- PM PEAK HOUR
⊕	- STOP SIGN
⊙	- TRAFFIC SIGNAL
⊗	- INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2039  
 REGIONAL  
 GROWTH**

Project No. <b>541061101</b>	Figure <b>5A</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



**LEGEND**

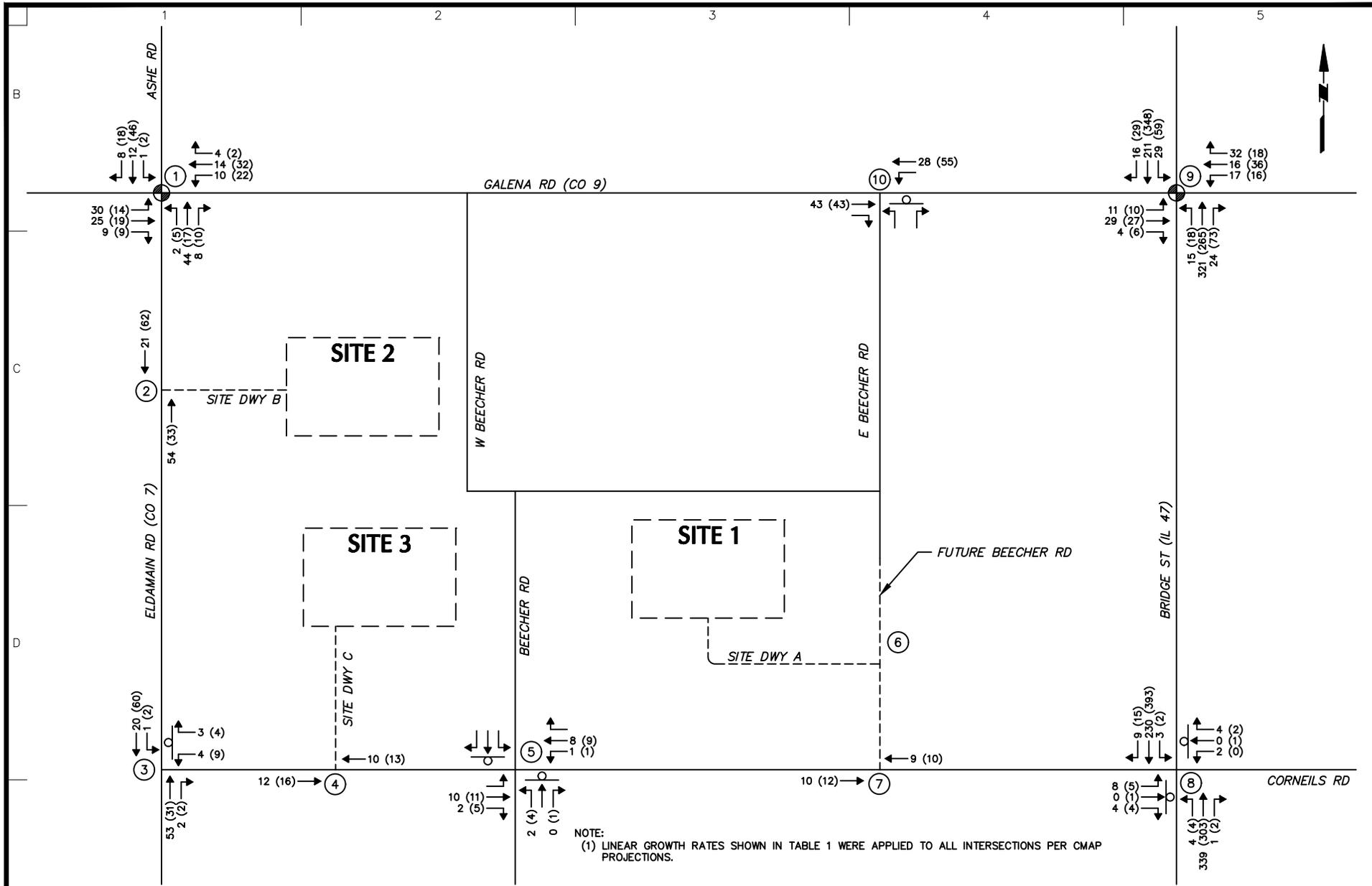
- xx - AM PEAK HOUR
- (xx) - PM PEAK HOUR
- ⊙ - STOP SIGN
- ⊕ - TRAFFIC SIGNAL
- ⊗ - INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2044 NO BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No. <b>541061101</b>	Figure <b>6</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



NOTE:  
 (1) LINEAR GROWTH RATES SHOWN IN TABLE 1 WERE APPLIED TO ALL INTERSECTIONS PER CMAP PROJECTIONS.

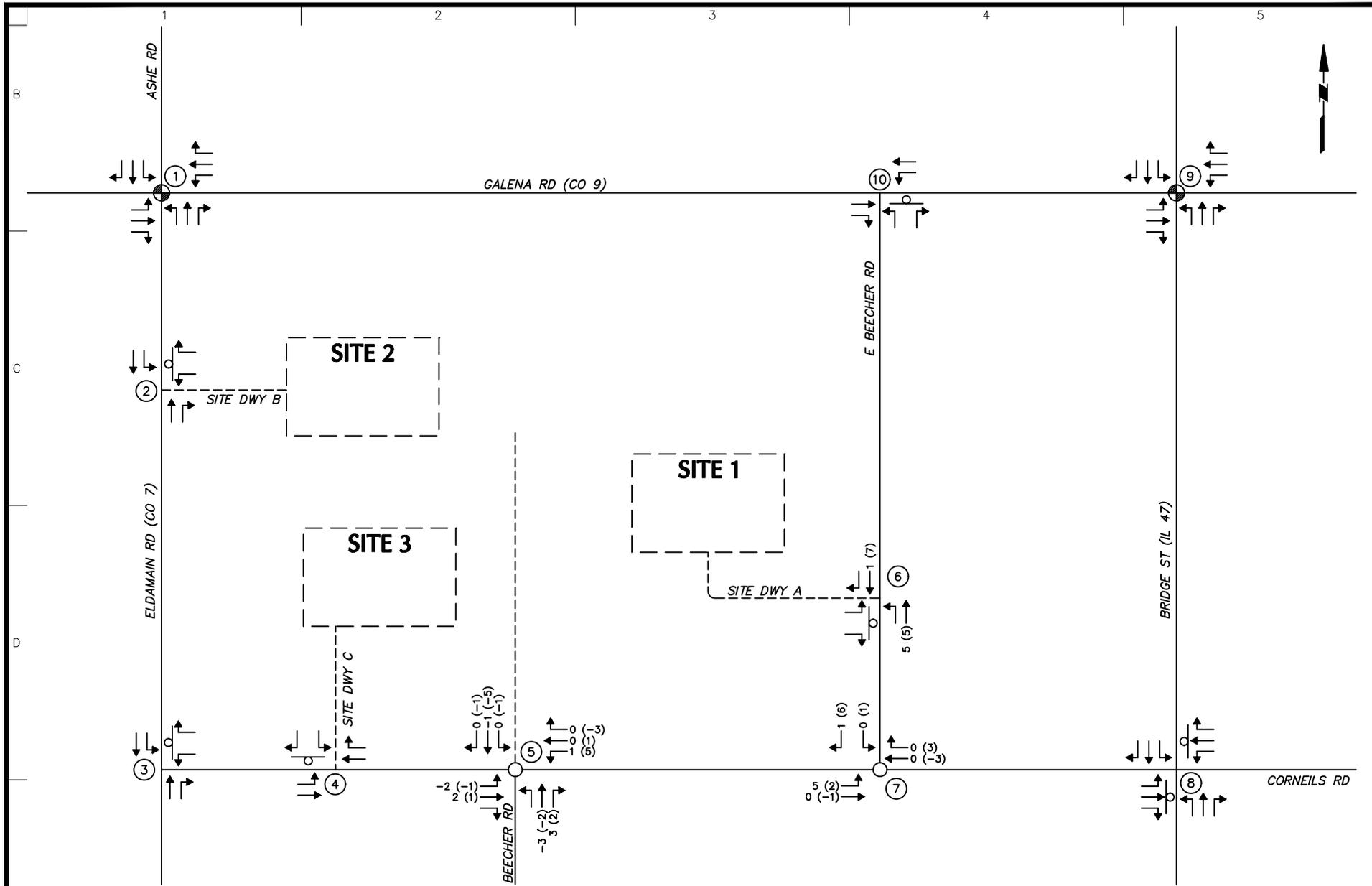
LEGEND	
xx	- AM PEAK HOUR
(xx)	- PM PEAK HOUR
⊕	- STOP SIGN
⊙	- TRAFFIC SIGNAL
⊗	- INTERSECTION ID

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2044  
 REGIONAL  
 GROWTH**

Project No. <b>541061101</b>	Figure <b>6A</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



**LEGEND**

- XX - AM PEAK HOUR
- (XX) - PM PEAK HOUR
- STOP SIGN
- ⊕ - TRAFFIC SIGNAL
- ⊙ - INTERSECTION ID
- - ROUNDABOUT

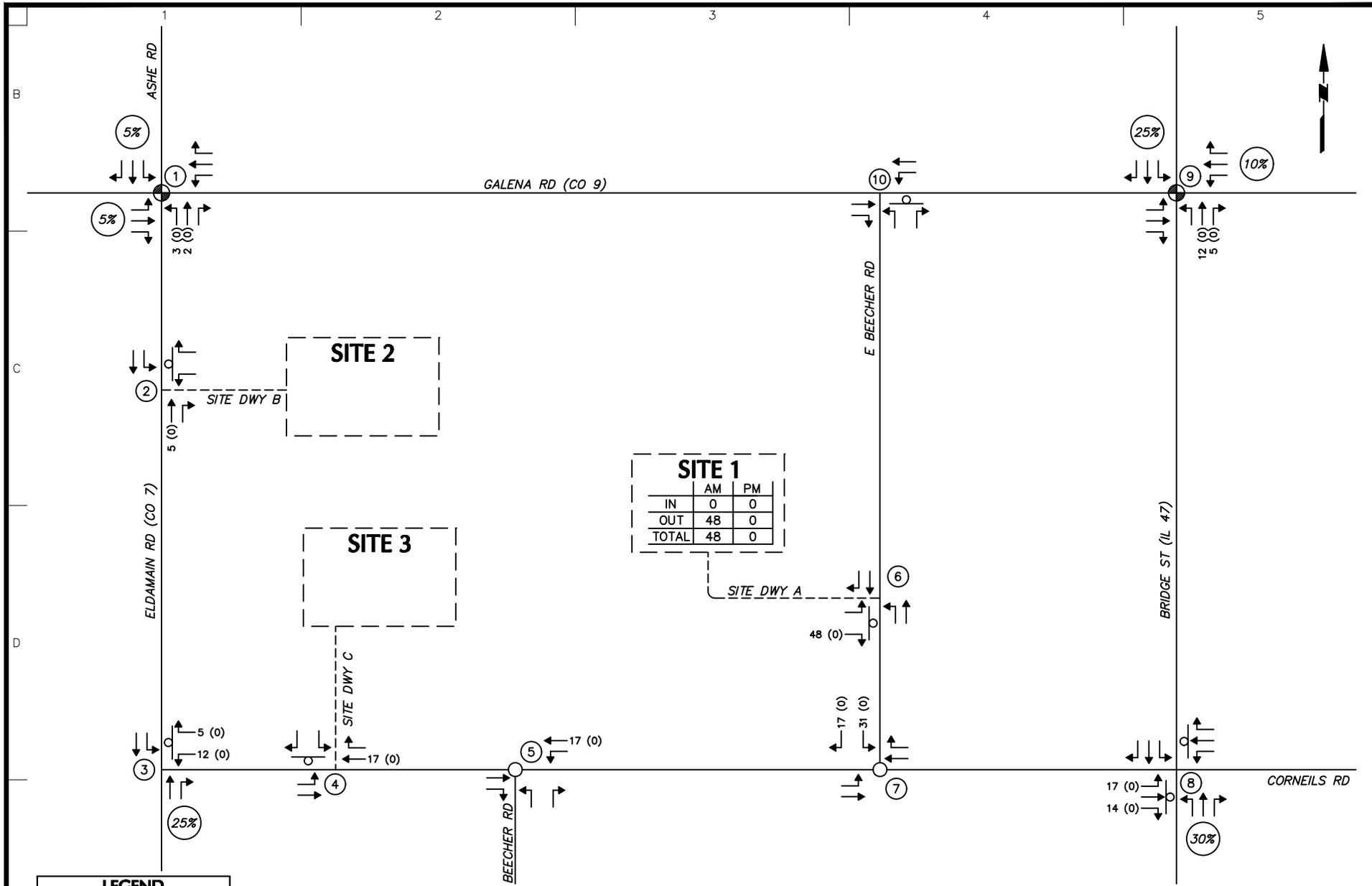
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**BEECHER ROAD  
 REROUTED  
 TRAFFIC VOLUMES**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**7**



**LEGEND**

- XX - AM PEAK HOUR
- (XX) - PM PEAK HOUR
- ⊖ - STOP SIGN
- ⊕ - TRAFFIC SIGNAL
- ⊙ - INTERSECTION ID
- (X%) - TRIP DISTRIBUTION
- - ROUNDABOUT

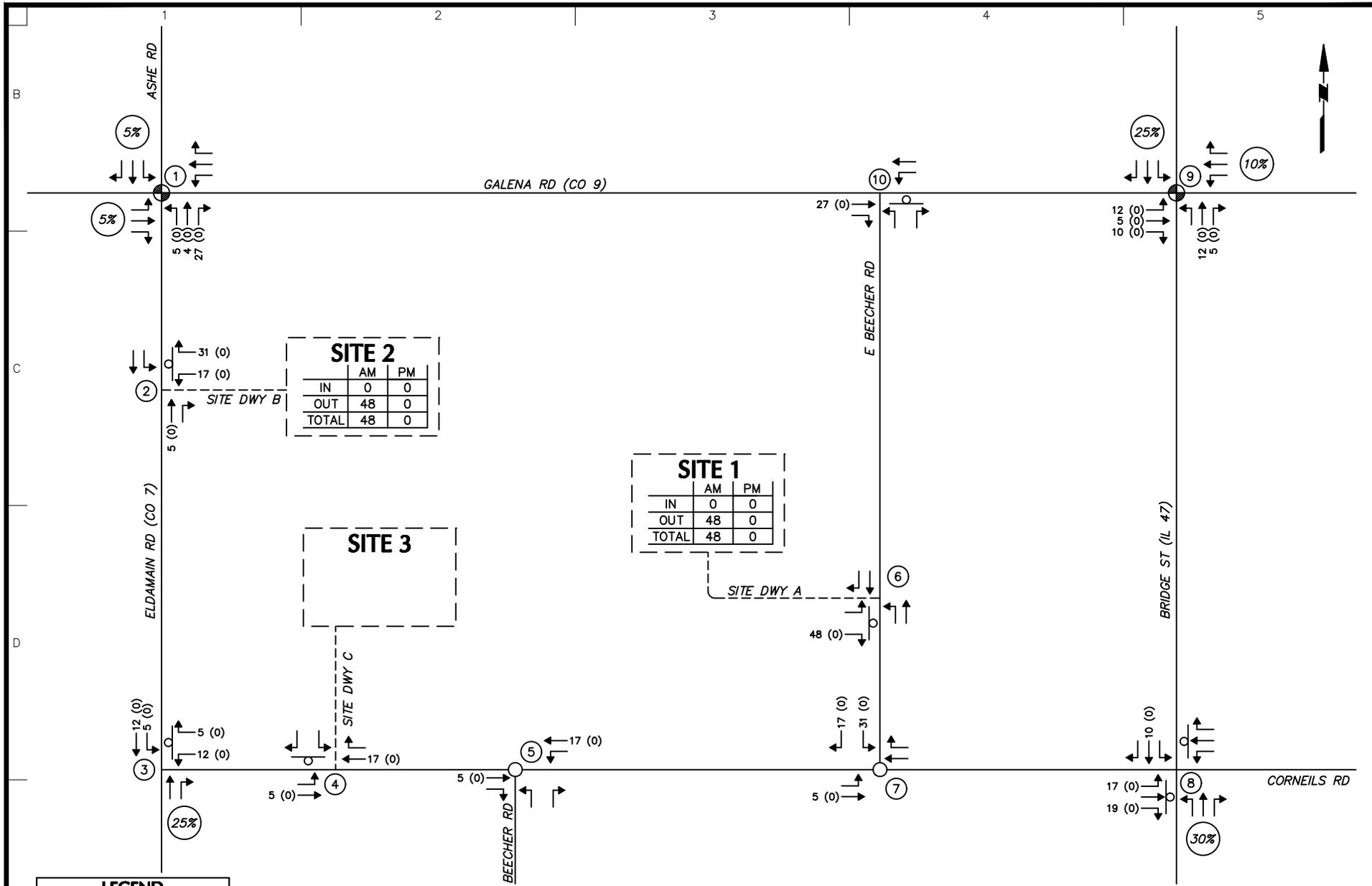
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**PHASE 1  
 SITE TRIPS**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**8**



**SITE 2**

	AM	PM
IN	0	0
OUT	48	0
TOTAL	48	0

**SITE 1**

	AM	PM
IN	0	0
OUT	48	0
TOTAL	48	0

**LEGEND**

- xx - AM PEAK HOUR
- (xx) - PM PEAK HOUR
- ⊕ - STOP SIGN
- ⊙ - TRAFFIC SIGNAL
- ⊗ - INTERSECTION ID
- (X%) - TRIP DISTRIBUTION
- - ROUNDABOUT

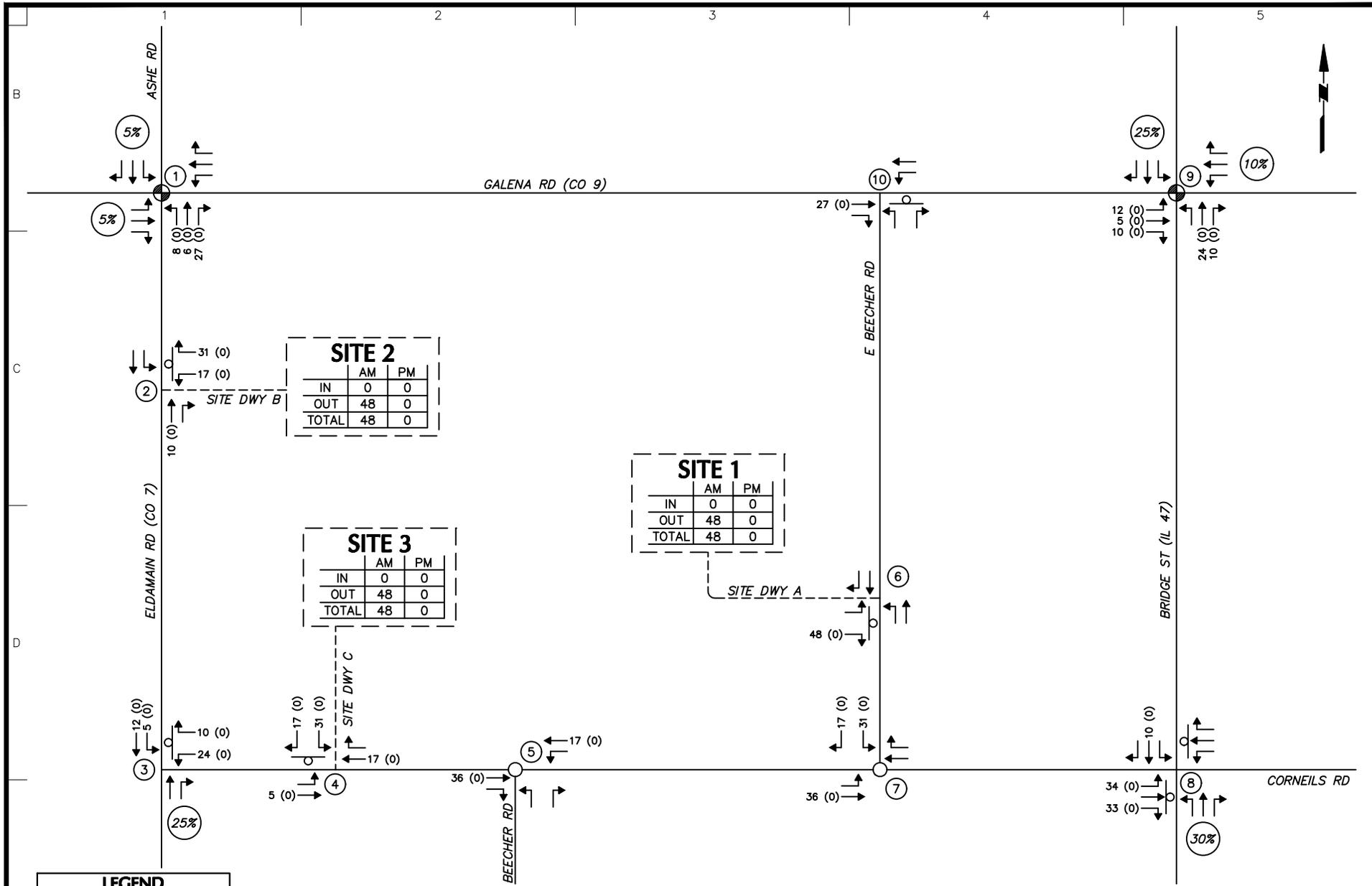
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**PHASE 1+2  
 SITE TRIPS**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**9**



**SITE 2**

	AM	PM
IN	0	0
OUT	48	0
TOTAL	48	0

**SITE 1**

	AM	PM
IN	0	0
OUT	48	0
TOTAL	48	0

**SITE 3**

	AM	PM
IN	0	0
OUT	48	0
TOTAL	48	0

**LEGEND**

- XX - AM PEAK HOUR
- (XX) - PM PEAK HOUR
- ⊖ - STOP SIGN
- ⦿ - TRAFFIC SIGNAL
- ⊕ - INTERSECTION ID
- (X%) - TRIP DISTRIBUTION
- - ROUNDABOUT

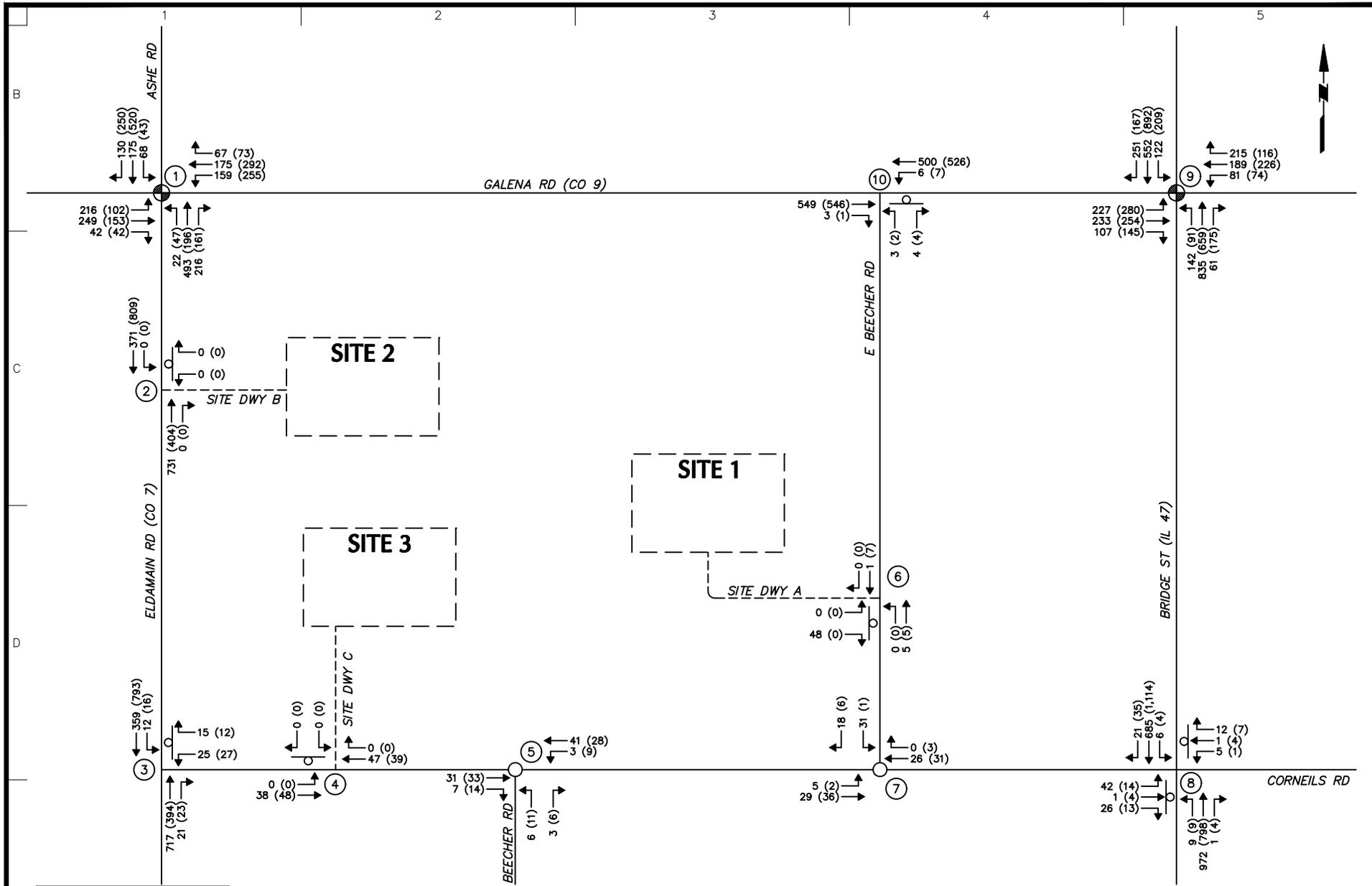
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**PHASE 1+2+3  
 SITE TRIPS**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**10**



**LEGEND**

- XX - AM PEAK HOUR
- (XX) - PM PEAK HOUR
- ⊕ - STOP SIGN
- ⊙ - TRAFFIC SIGNAL
- ⊕ - INTERSECTION ID
- - ROUNDABOUT

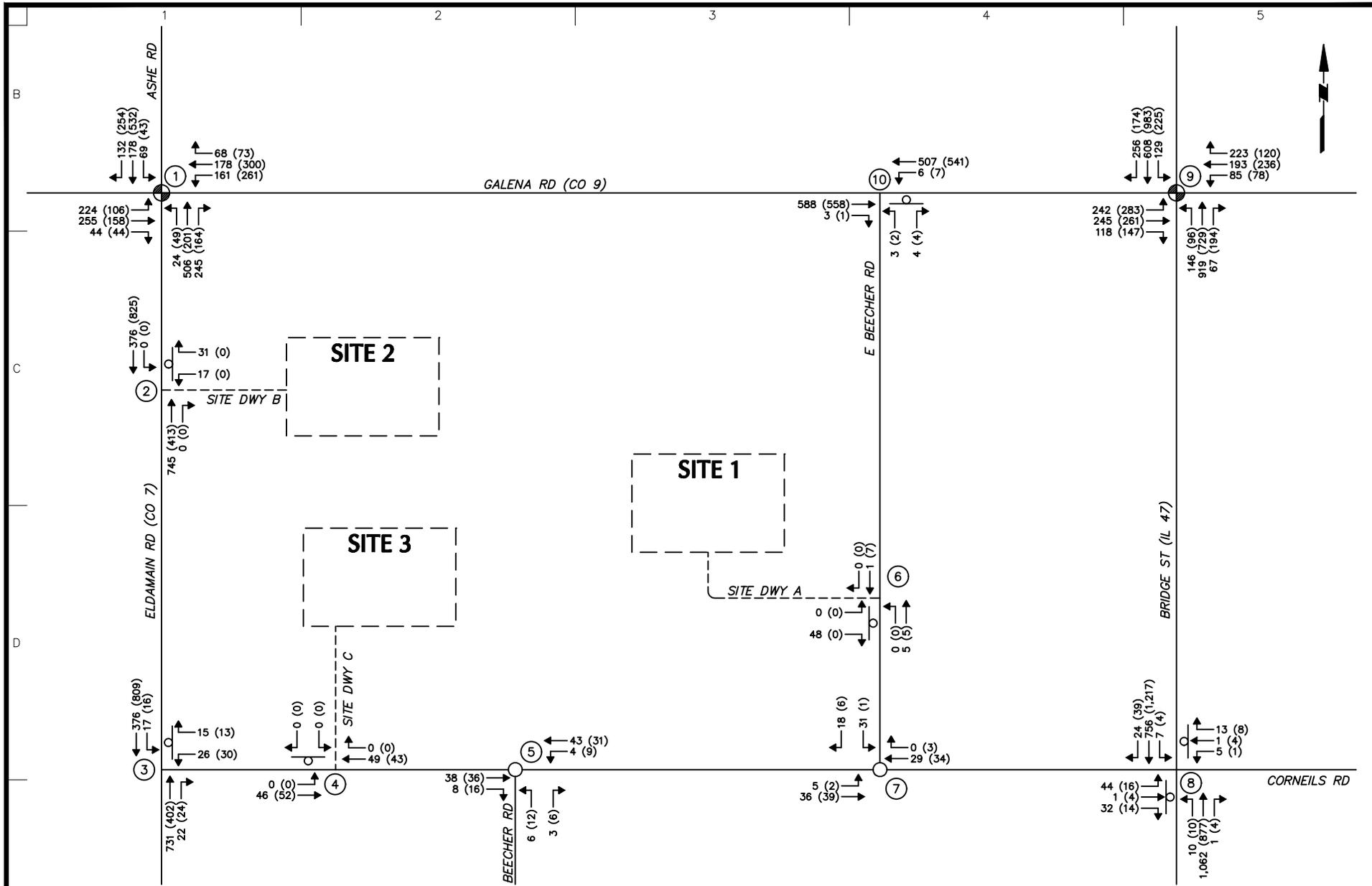
**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2034 BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**11**



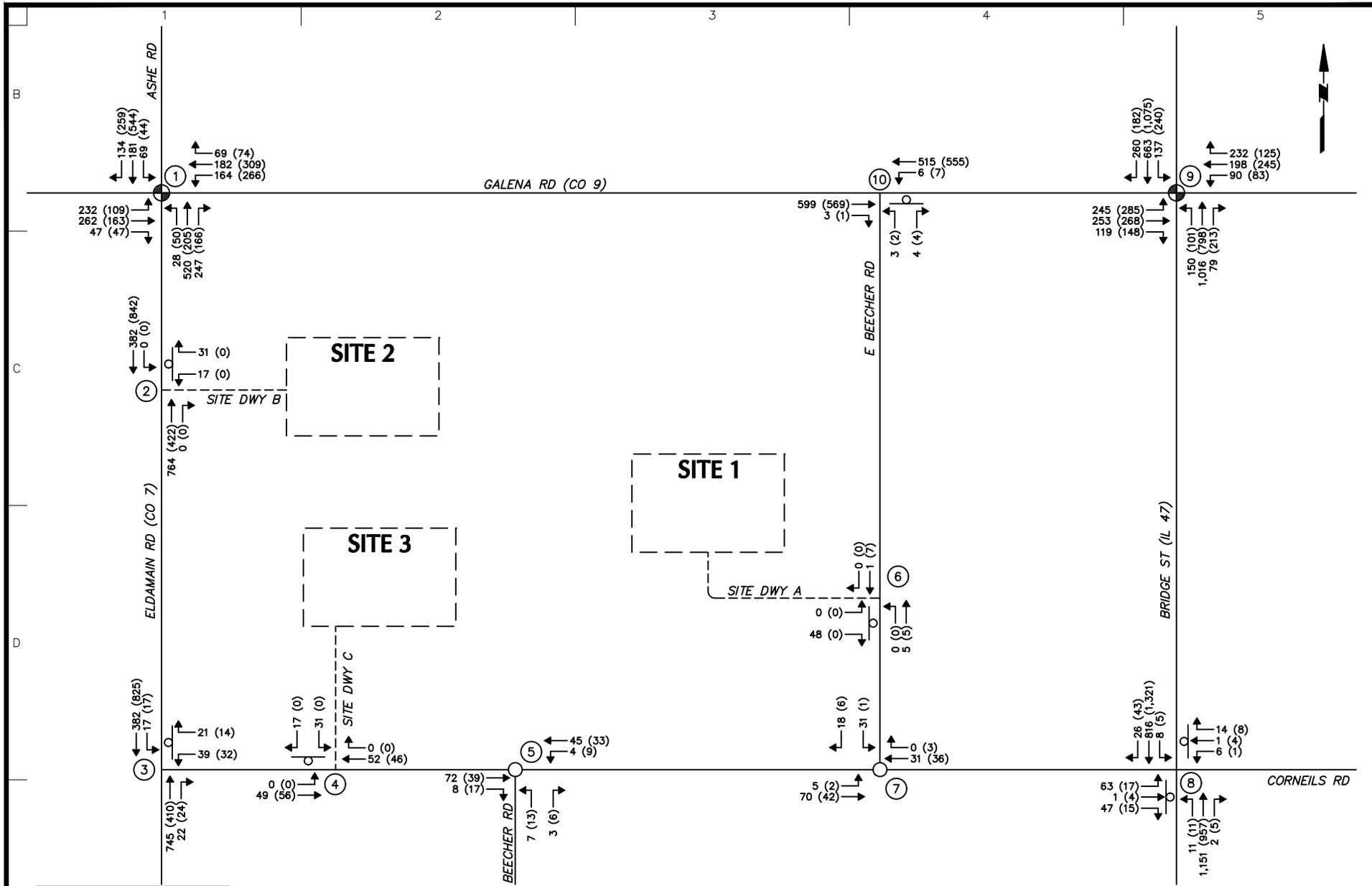
LEGEND	
XX	- AM PEAK HOUR
(XX)	- PM PEAK HOUR
○	- STOP SIGN
⊕	- TRAFFIC SIGNAL
⊙	- INTERSECTION ID
○	- ROUNDABOUT

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2039 BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No. <b>541061101</b>	Figure <b>12</b>
Date <b>NOVEMBER 2025</b>	
Drawn By <b>SS</b>	
Checked By <b>CAP</b>	



**LEGEND**

- XX - AM PEAK HOUR
- (XX) - PM PEAK HOUR
- ⊖ - STOP SIGN
- ⊕ - TRAFFIC SIGNAL
- ⊙ - INTERSECTION ID
- - ROUNDABOUT

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture and Geology, D.P.C.  
 200 West Madison Street, Suite 2900  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**PROJECT STEEL**  
 YORKVILLE  
 KENDALL COUNTY ILLINOIS

Drawing Title  
**2044 BUILD  
 PEAK HOUR  
 TRAFFIC VOLUMES**

Project No.  
**541061101**  
 Date  
**NOVEMBER 2025**  
 Drawn By  
**SS**  
 Checked By  
**CAP**

Figure  
**13**

## **TABLES**

- Table 1** – CMAP Growth Rate Calculations
- Table 2** – Site Trip Generation
- Table 3A** – AM Peak Hour Level of Service Comparison
- Table 3B** – PM Peak Hour Level of Service Comparison
- Table 4A** – AM Peak Hour Queue Comparison
- Table 4B** – PM Peak Hour Queue Comparison
- Table 5** – Crash Data Analysis

**Table 1**  
 CMAP Growth Rate Calculations  
 Project Steel

<b>ROAD SEGMENT</b>	<b>Current Year</b>	<b>Current ADT</b>	<b>Year 2050 ADT</b>	<b>Growth Rate Factor</b>	<b>2034</b>	<b>2039</b>	<b>2044</b>
Galena Road between IL 47 and Eldamain Road	2024	5,050	6,650	1.22%	0.110	0.171	0.232
Eldamain Road Between Galena and Corneils Road	2024	7,800	9,000	0.59%	0.053	0.083	0.112
Corneils Road between Eldamain Road and IL 47	2024	1,150	1,900	2.51%	0.226	0.351	0.477
IL 47 between Corneils Road and Galena Road	2023	15,300	26,700	2.76%	0.248	0.386	0.524

Notes:

Current year ADT information obtained from Getting Around Illinois Annual Average Daily Traffic interactive map.  
 2050 ADT projections provided by CMAP.

**Table 2**  
Site Trip Generation (Client Site-Specific)  
Project Steel

Land Use	ITE Code	Size	Units	AM Peak Hour			PM Peak Hour			Weekday
				IN	OUT	TOTAL	IN	OUT	TOTAL	ADT
<b>Phase 1 - 2,274,600 GSF</b>	---	6	Buildings	0	48	48	0	0	0	360
<b>Phase 2 - 2,274,600 GSF</b>	---	6	Buildings	0	48	48	0	0	0	360
<b>Phase 3 - 2,274,600 GSF</b>	---	6	Buildings	0	48	48	0	0	0	360
<b>Total Proposed Master Plan External Vehicular Site Trips</b>				<b>0</b>	<b>144</b>	<b>144</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,080</b>
Total Phase 1 Master Plan Site Trips				0	48	48	0	0	0	360
Total Phase 1+2 Master Plan Site Trips				0	96	96	0	0	0	720

Notes:

Trip generation calculations based on information provided by the client.

Each data center is assumed to need a staff of 30 employees

Day shift 50% of total employees (15 people per building): 6:00 AM - 2:00 PM

Afternoon shift 25% of the total employees (7 people per building): 12:00 PM - 8:00 PM

Night shift 25% of the total employees (8 people per building): 8:00 PM - 8:00 AM

Weekday ADT is a bi-directional traffic volume (In + Out).

Mode split reduction was not applied to the calculations due to a lack of multi-modal infrastructure in the study area.

AM Peak Hour of Adjacent Street 7:00 AM - 9:00 AM

PM Peak Hour of Adjacent Street 4:00 PM - 6:00 PM

**Table 3A  
Level of Service**

AM / PM PEAK		AM PEAK HOUR (LOS / Delay)										
Direction	Approach / Movement	2025		2034			2039			2044		
		Existing	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	
INTERSECTION		<b>1) Galena Road (CO 9) &amp; Ashe Road/Eldamain Road (CO 7)</b>										
<b>Galena Road (CO 9)</b>												
Eastbound	Left Turn	B (18.5)	C (26.6)	C (26.7)		C (28.0)	C (28.4)		C (29.6)	C (30.0)		
	Through	C (20.5)	D (39.0)	D (39.1)		D (39.6)	D (39.9)		D (40.0)	D (40.3)		
	Right Turn	B (18.8)	C (27.7)	C (27.6)		C (28.0)	C (28.0)		C (28.2)	C (28.1)		
	Approach	B (19.3)	C (32.8)	C (32.9)		C (33.6)	C (33.9)		C (34.5)	C (34.9)		
Westbound	Left Turn	C (20.2)	D (44.0)	D (44.2)		D (47.2)	D (48.3)		D (51.5)	D (52.8)		
	Through	C (22.2)	C (33.0)	C (33.0)		C (33.2)	C (33.5)		C (33.5)	C (33.7)		
	Right Turn	C (21.0)	C (26.2)	C (26.3)		C (26.4)	C (26.6)		C (26.6)	C (26.8)		
	Approach	C (21.3)	D (36.2)	D (36.3)		D (37.6)	D (38.2)		D (39.4)	D (40.1)		
<b>Ashe Road/Eldamain Road (CO 7)</b>												
Northbound	Left Turn	B (13.6)	B (15.1)	B (15.0)		B (15.2)	B (15.1)		B (15.3)	B (15.2)		
	Through	C (22.1)	C (28.4)	C (28.5)		C (29.2)	C (29.2)		C (30.1)	C (30.2)		
	Right Turn	B (14.0)	B (16.3)	B (16.3)		B (16.6)	B (17.7)		B (16.8)	B (18.0)		
	Approach	C (20.5)	C (24.5)	C (24.5)		C (25.1)	C (25.2)		C (25.9)	C (25.9)		
Southbound	Left Turn	B (14.9)	B (17.6)	B (17.6)		B (18.0)	B (18.1)		B (18.4)	B (18.5)		
	Through	B (15.4)	C (26.6)	B (16.7)		B (16.7)	B (16.8)		B (16.9)	B (17.1)		
	Right Turn	B (11.3)	B (10.8)	B (10.9)		B (10.9)	B (11.0)		B (11.1)	B (11.3)		
	Approach	B (13.8)	B (14.7)	B (14.8)		B (14.9)	B (15.0)		B (15.2)	B (15.3)		
<b>OVERALL</b>	<b>B (19.2)</b>	<b>C (27.1)</b>	<b>C (27.2)</b>		<b>C (27.9)</b>	<b>C (28.1)</b>		<b>C (28.8)</b>	<b>C (29.0)</b>			
INTERSECTION		<b>2) Eldamain Road (CO 7) &amp; Site Driveway B</b>										
<b>Site Driveway B</b>												
Westbound	Left Turn											
	Right Turn						C (21.3)			C (22.0)		
	Approach						C (21.3)			C (22.0)		
<b>Eldamain Road (CO 7)</b>												
Northbound	Through						A (0.0)			A (0.0)		
	Right Turn						A (0.0)			A (0.0)		
	Approach						A (0.0)			A (0.0)		
Southbound	Left Turn						A (0.0)			A (0.0)		
	Through						A (0.0)			A (0.0)		
	Approach						A (0.0)			A (0.0)		
<b>OVERALL</b>						<b>A (0.9)</b>			<b>A (0.9)</b>			
INTERSECTION		<b>3) Eldamain Road (CO 7) &amp; Corneils Road</b>										
<b>Corneils Road</b>												
Westbound	Left Turn	C (16.3)	D (29.3)	D (31.9)		D (30.4)	D (34.8)		D (31.6)	E (40.6)		
	Right Turn	B (12.2)	C (15.7)	C (15.9)		C (15.9)	C (16.1)		C (16.2)	C (16.6)		
	Approach	B (14.6)	C (23.4)	D (25.9)		C (24.4)	D (28.0)		D (25.1)	D (32.2)		
<b>Eldamain Road (CO 7)</b>												
Northbound	Through	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Right Turn	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Approach	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
Southbound	Left Turn	A (8.6)	A (9.7)	A (9.7)		A (9.7)	A (9.8)		A (9.8)	A (9.9)		
	Through	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Approach	A (0.5)	A (0.3)	A (0.3)		A (0.3)	A (0.4)		A (0.3)	A (0.4)		
<b>OVERALL</b>	<b>A (0.5)</b>	<b>A (0.6)</b>	<b>A (1.0)</b>		<b>A (0.6)</b>	<b>A (1.1)</b>		<b>A (0.7)</b>	<b>A (1.7)</b>			
INTERSECTION		<b>4) Corneils Road &amp; Site Driveway C</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn									A (0.0)		
	Through									A (0.0)		
	Approach									A (0.0)		
Westbound	Through									A (0.0)		
	Right Turn									A (0.0)		
	Approach									A (0.0)		
<b>Site Driveway C</b>												
Southbound	Left Turn									A (9.3)		
	Right Turn									A (9.3)		
	Approach									A (9.3)		
<b>OVERALL</b>										<b>A (3.0)</b>		
INTERSECTION		<b>5) Corneils Road &amp; Beecher Road</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn											
	Through	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.1)		A (7.3)	A (3.3)		
	Right Turn											
	Approach	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.1)		A (7.3)	A (3.3)		
Westbound	Left Turn											
	Through	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.0)		A (7.3)	A (3.0)		
	Right Turn											
	Approach	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.0)		A (7.3)	A (3.0)		
<b>Beecher Road</b>												
Northbound	Left Turn			A (2.8)							A (3.0)	
	Through	A (9.2)	A (9.2)			A (9.3)			A (9.3)			
	Right Turn			A (2.8)							A (3.0)	
	Approach	A (9.2)	A (9.2)	A (2.8)		A (9.3)	A (2.8)		A (9.3)	A (3.0)		
Southbound	Left Turn											
	Through	A (9.4)	A (9.5)			A (9.6)			A (9.6)			
	Approach	A (9.4)	A (9.5)			A (9.6)			A (9.6)			
<b>OVERALL</b>	<b>A (1.8)</b>	<b>A (1.6)</b>	<b>A (3.0)</b>		<b>A (1.6)</b>	<b>A (3.0)</b>		<b>A (1.6)</b>	<b>A (3.2)</b>			

**Table 3A  
Level of Service**

AM / PM PEAK		AM PEAK HOUR (LOS / Delay)										
Direction	Approach / Movement	2025		2034			2039			2044		
		Existing	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	
INTERSECTION		<b>6) Site Driveway A &amp; E Beecher Rd</b>										
<b>Site Driveway A</b>												
Eastbound	Left Turn			A (8.5)			A (8.5)			A (8.5)		
	Through											
	Approach			A (8.5)			A (8.5)			A (8.5)		
<b>E Beecher Rd</b>												
Northbound	Left Turn			A (0.0)			A (0.0)			A (0.0)		
	Through											
	Approach			A (0.0)			A (0.0)			A (0.0)		
Southbound	Through			A (0.0)			A (0.0)			A (0.0)		
	Right Turn											
	Approach			A (0.0)			A (0.0)			A (0.0)		
<b>OVERALL</b>				<b>A (7.5)</b>			<b>A (7.5)</b>			<b>A (7.5)</b>		
INTERSECTION		<b>7) Corneils Road &amp; E Beecher Road</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn			A (3.1)			A (3.1)			A (3.4)		
	Through											
	Approach			A (3.1)			A (3.1)			A (3.4)		
Westbound	Through			A (2.9)			A (2.9)			A (2.9)		
	Right Turn											
	Approach			A (2.9)			A (2.9)			A (2.9)		
<b>E Beecher Rd</b>												
Southbound	Left Turn			A (3.2)			A (3.2)			A (3.2)		
	Right Turn											
	Approach			A (3.2)			A (3.2)			A (3.2)		
<b>OVERALL</b>				<b>A (3.1)</b>			<b>A (3.1)</b>			<b>A (3.3)</b>		
INTERSECTION		<b>8) Bridge St (IL 47) &amp; Corneils Road</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn											
	Through	D (28.7)	E (44.2)	F (55.8)			F (62.5)	F (91.3)		F (96.5)	F (276.6)	
	Right Turn											
	Approach	D (28.7)	E (44.2)	F (55.8)			F (62.5)	F (91.3)		F (96.5)	F (276.6)	
Westbound	Left Turn											
	Through	C (21.4)	E (40.5)	E (41.2)			F (52.1)	F (54.3)		F (75.1)	F (81.4)	
	Right Turn											
	Approach	C (21.4)	E (40.5)	E (41.2)			F (52.1)	F (54.3)		F (75.1)	F (81.4)	
<b>Bridge St (IL 47)</b>												
Northbound	Left Turn		B (11.0)	B (11.0)			B (11.5)	B (11.6)		B (12.0)	B (12.1)	
	Through	A (9.1)	A (0.0)	A (0.0)			A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Right Turn											
	Approach	A (9.1)	A (0.1)	A (0.1)			A (0.1)	A (0.1)		A (0.1)	A (0.1)	
Southbound	Left Turn		B (10.6)	B (10.6)			B (11.1)	B (11.1)		B (11.7)	B (11.7)	
	Through	A (9.1)	A (0.0)	A (0.0)			A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Right Turn											
	Approach	A (9.1)	A (0.1)	A (0.1)			A (0.1)	A (0.1)		A (0.1)	A (0.1)	
<b>OVERALL</b>		<b>A (1.2)</b>	<b>A (1.5)</b>	<b>A (2.7)</b>			<b>A (2.0)</b>	<b>A (4.2)</b>		<b>A (2.9)</b>	<b>C (15.2)</b>	
INTERSECTION		<b>9) Bridge St (IL 47) &amp; Galena Road (CO 9)</b>										
<b>Galena Road (CO 9)</b>												
Eastbound	Left Turn		E (59.7)	E (59.7)			E (61.5)	E (70.7)		E (62.8)	E (73.2)	
	Through	D (42.7)	D (38.2)	D (38.2)			D (37.9)	D (38.1)		D (37.7)	D (37.8)	
	Right Turn		C (29.0)	C (29.0)			C (28.5)	C (28.8)		C (27.9)	C (28.2)	
	Approach	D (42.7)	D (45.1)	D (45.1)			D (45.6)	D (49.3)		D (45.8)	D (50.0)	
Westbound	Left Turn		D (43.8)	D (43.8)			D (43.5)	D (43.5)		D (43.2)	D (43.2)	
	Through	D (52.7)	E (58.2)	E (58.2)			E (57.8)	E (57.8)		E (57.5)	E (57.5)	
	Right Turn		D (44.6)	D (44.6)			D (44.7)	D (44.7)		D (44.8)	D (44.8)	
	Approach	D (52.7)	D (49.8)	D (49.8)			D (49.5)	D (49.5)		D (49.4)	D (49.4)	
<b>Bridge St (IL 47)</b>												
Northbound	Left Turn	A (8.8)	C (20.5)	C (20.5)			C (21.1)	C (21.1)		C (22.0)	C (22.0)	
	Through	B (16.2)	C (31.5)	C (31.7)			C (33.6)	C (33.9)		D (36.3)	D (37.0)	
	Right Turn	A (9.0)	B (19.5)	B (19.6)			B (19.9)	B (20.0)		C (20.4)	C (20.6)	
	Approach	B (15.4)	C (29.3)	C (29.5)			C (31.2)	C (31.4)		C (33.6)	C (34.1)	
Southbound	Left Turn	B (11.6)	C (23.0)	C (23.3)			C (26.1)	C (26.5)		C (30.7)	C (31.9)	
	Through	B (11.6)	C (24.4)	C (24.4)			C (25.6)	C (25.6)		C (27.0)	C (27.0)	
	Right Turn	A (8.2)	B (15.2)	B (15.2)			B (15.9)	B (15.9)		B (16.7)	B (16.7)	
	Approach	B (11.4)	C (21.7)	C (21.8)			C (23.2)	C (23.2)		C (25.0)	C (25.1)	
<b>OVERALL</b>		<b>C (23.6)</b>	<b>C (33.3)</b>	<b>C (33.3)</b>			<b>C (34.2)</b>	<b>D (35.1)</b>		<b>D (35.5)</b>	<b>D (36.5)</b>	
INTERSECTION		<b>10) Galena Road (CO 9) &amp; E Beecher Road</b>										
<b>Galena Road (CO 9)</b>												
Eastbound	Through											
	Right Turn	A (0.0)	A (0.0)	A (0.0)			A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Approach	A (0.0)	A (0.0)	A (0.0)			A (0.0)	A (0.0)		A (0.0)	A (0.0)	
Westbound	Left Turn	A (7.8)	A (9.1)	A (9.1)			A (9.1)	A (9.2)		A (9.2)	A (9.3)	
	Through		A (0.0)	A (0.0)			A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Approach	A (7.8)	A (0.1)	A (0.1)			A (0.1)	A (0.1)		A (0.1)	A (0.1)	
<b>E Beecher Rd</b>												
Northbound	Left Turn	B (10.8)	C (16.0)	C (16.0)			C (16.2)	C (16.6)		C (16.4)	C (16.8)	
	Right Turn											
	Approach	B (10.8)	C (16.0)	C (16.0)			C (16.2)	C (16.6)		C (16.4)	C (16.8)	
<b>OVERALL</b>		<b>A (0.4)</b>	<b>A (0.2)</b>	<b>A (0.2)</b>			<b>A (0.2)</b>	<b>A (0.2)</b>		<b>A (0.2)</b>	<b>A (0.2)</b>	

**Table 3B  
Level of Service**

AM / PM PEAK		PM PEAK HOUR (LOS / Delay)									
Direction	Approach / Movement	2025	2034			2039			2044		
		Existing	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements
INTERSECTION		<b>1) Galena Road (CO 9) &amp; Ashe Road/Eldamain Road (CO 7)</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Left Turn	C (20.3)	C (25.9)	C (25.9)		C (26.2)	C (26.2)		C (26.4)	C (26.4)	
	Through	C (23.4)	C (32.3)	C (32.3)		C (32.4)	C (32.4)		C (32.5)	C (32.6)	
	Right Turn	C (21.0)	C (26.6)	C (26.6)		C (26.7)	C (26.7)		C (26.8)	C (26.8)	
	Approach	C (21.8)	C (29.3)	C (29.3)		C (29.4)	C (29.4)		C (29.6)	C (29.6)	
Westbound	Left Turn	B (19.6)	C (34.0)	C (34.0)		D (36.0)	D (36.0)		D (37.7)	D (37.7)	
	Through	C (22.9)	D (35.4)	D (35.4)		D (36.2)	D (36.2)		D (37.0)	D (37.0)	
	Right Turn	B (19.6)	C (24.4)	C (24.4)		C (24.8)	C (24.8)		C (25.0)	C (25.0)	
	Approach	C (21.5)	C (33.5)	C (33.5)		C (34.8)	C (34.8)		D (35.9)	D (35.9)	
<b>Ashe Road/Eldamain Road (CO 7)</b>											
Northbound	Left Turn	B (13.7)	B (16.2)	B (16.2)		B (16.8)	B (16.8)		B (17.3)	B (17.3)	
	Through	B (14.2)	B (16.6)	B (16.6)		B (16.9)	B (16.9)		B (17.3)	B (17.3)	
	Right Turn	B (11.2)	B (11.6)	B (11.6)		B (12.0)	B (12.0)		B (12.3)	B (12.3)	
	Approach	B (13.1)	B (14.6)	B (14.6)		B (14.9)	B (14.9)		B (15.3)	B (15.3)	
Southbound	Left Turn	B (12.7)	B (13.5)	B (13.5)		B (13.8)	B (13.8)		B (14.1)	B (14.1)	
	Through	C (21.1)	C (25.8)	C (25.8)		C (26.9)	C (26.9)		C (28.0)	C (28.0)	
	Right Turn	B (13.6)	B (14.5)	B (14.5)		B (14.8)	B (14.8)		B (15.1)	B (15.1)	
	Approach	B (18.9)	C (21.7)	C (21.7)		C (22.5)	C (22.5)		C (23.3)	C (23.3)	
<b>OVERALL</b>	<b>B (18.5)</b>	<b>C (24.8)</b>	<b>C (24.8)</b>		<b>C (25.6)</b>	<b>C (25.6)</b>		<b>C (26.4)</b>	<b>C (26.4)</b>		
INTERSECTION		<b>2) Eldamain Road (CO 7) &amp; Site Driveway B</b>									
<b>Site Driveway B</b>											
Westbound	Left Turn										
	Right Turn						A (0.0)			A (0.0)	
	Approach						A (0.0)			A (0.0)	
<b>Eldamain Road (CO 7)</b>											
Northbound	Through						A (0.0)			A (0.0)	
	Right Turn						A (0.0)			A (0.0)	
	Approach						A (0.0)			A (0.0)	
Southbound	Left Turn						A (0.0)			A (0.0)	
	Through						A (0.0)			A (0.0)	
	Approach						A (0.0)			A (0.0)	
<b>OVERALL</b>						<b>A (0.0)</b>			<b>A (0.0)</b>		
INTERSECTION		<b>3) Eldamain Road (CO 7) &amp; Corneils Road</b>									
<b>Corneils Road</b>											
Westbound	Left Turn	C (17.1)	D (27.4)	D (27.4)		D (28.8)	D (28.8)		D (30.3)	D (30.3)	
	Right Turn	A (9.8)	B (10.7)	B (10.7)		B (10.7)	B (10.7)		B (10.8)	B (10.8)	
	Approach	B (14.9)	C (22.3)	C (22.3)		C (23.4)	C (23.4)		C (24.4)	C (24.4)	
<b>Eldamain Road (CO 7)</b>											
Northbound	Through	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Right Turn	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Approach	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)	
Southbound	Left Turn	A (7.9)	A (8.2)	A (8.2)		A (8.2)	A (8.2)		A (8.3)	A (8.3)	
	Through	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)	
	Approach	A (0.2)	A (0.2)	A (0.2)		A (0.2)	A (0.2)		A (0.2)	A (0.2)	
<b>OVERALL</b>	<b>A (0.7)</b>	<b>A (0.8)</b>	<b>A (0.8)</b>		<b>A (0.9)</b>	<b>A (0.9)</b>		<b>A (1.0)</b>	<b>A (1.0)</b>		
INTERSECTION		<b>4) Corneils Road &amp; Site Driveway C</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn									A (0.0)	
	Through									A (0.0)	
	Approach									A (0.0)	
Westbound	Through									A (0.0)	
	Right Turn									A (0.0)	
	Approach									A (0.0)	
<b>Site Driveway C</b>											
Southbound	Left Turn									A (0.0)	
	Right Turn									A (0.0)	
	Approach									A (0.0)	
<b>OVERALL</b>										<b>A (0.0)</b>	
INTERSECTION		<b>5) Corneils Road &amp; Beecher Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn										
	Through	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.0)		A (7.3)	A (3.1)	
	Right Turn										
	Approach	A (7.3)	A (7.3)	A (3.0)		A (7.3)	A (3.0)		A (7.3)	A (3.1)	
Westbound	Left Turn										
	Through	A (7.3)	A (7.3)	A (2.9)		A (7.3)	A (3.0)		A (7.3)	A (3.0)	
	Right Turn										
	Approach	A (7.3)	A (7.3)	A (2.9)		A (7.3)	A (3.0)		A (7.3)	A (3.0)	
<b>Beecher Road</b>											
Northbound	Left Turn			A (2.9)			A (2.9)			A (2.9)	
	Through	A (9.1)	A (9.2)			A (9.2)			A (9.3)		
	Right Turn			A (2.9)			A (2.9)			A (2.9)	
	Approach	A (9.1)	A (9.2)	A (2.9)		A (9.2)	A (2.9)		A (9.3)	A (2.9)	
Southbound	Left Turn										
	Through	A (9.5)	A (9.6)			A (9.6)			A (9.7)		
	Right Turn										
	Approach	A (9.5)	A (9.6)			A (9.6)			A (9.7)		
<b>OVERALL</b>	<b>A (2.5)</b>	<b>A (2.5)</b>	<b>A (2.2)</b>		<b>A (2.4)</b>	<b>A (3.0)</b>		<b>A (2.3)</b>	<b>A (3.0)</b>		

**Table 3B  
Level of Service**

AM / PM PEAK		PM PEAK HOUR (LOS / Delay)										
Direction	Approach / Movement	2025		2034			2039			2044		
		Existing	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	
INTERSECTION		<b>6) Site Driveway A &amp; E Beecher Rd</b>										
<b>Site Driveway A</b>												
Eastbound	Left Turn			A (0.0)			A (0.0)			A (0.0)		
	Through											
	Approach			A (0.0)			A (0.0)			A (0.0)		
<b>E Beecher Rd</b>												
Northbound	Left Turn			A (0.0)			A (0.0)			A (0.0)		
	Through											
	Approach			A (0.0)			A (0.0)			A (0.0)		
Southbound	Through			A (0.0)			A (0.0)			A (0.0)		
	Right Turn											
	Approach			A (0.0)			A (0.0)			A (0.0)		
<b>OVERALL</b>				<b>A (0.0)</b>			<b>A (0.0)</b>			<b>A (0.0)</b>		
INTERSECTION		<b>7) Corneils Road &amp; E Beecher Road</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn			A (2.9)			A (3.0)			A (3.0)		
	Through											
	Approach			A (2.9)			A (3.0)			A (3.0)		
Westbound	Through			A (2.9)			A (2.9)			A (3.0)		
	Right Turn											
	Approach			A (2.9)			A (2.9)			A (3.0)		
<b>E Beecher Rd</b>												
Southbound	Left Turn			A (2.8)			A (2.8)			A (2.8)		
	Right Turn											
	Approach			A (2.8)			A (2.8)			A (2.8)		
<b>OVERALL</b>				<b>A (2.9)</b>			<b>A (3.0)</b>			<b>A (3.0)</b>		
INTERSECTION		<b>8) Bridge St (IL 47) &amp; Corneils Road</b>										
<b>Corneils Road</b>												
Eastbound	Left Turn											
	Through	D (32.9)	F (67.1)	F (67.1)		F (110.4)	F (110.4)		F (194.7)	F (194.7)		
	Right Turn											
	Approach	D (32.9)	F (67.1)	F (67.1)		F (110.4)	F (110.4)		F (194.7)	F (194.7)		
Westbound	Left Turn											
	Through	C (21.8)	E (38.5)	E (38.5)		E (47.4)	E (47.4)		F (64.0)	F (64.0)		
	Right Turn											
	Approach	C (21.8)	E (38.5)	E (38.5)		E (47.4)	E (47.4)		F (64.0)	F (64.0)		
<b>Bridge St (IL 47)</b>												
Northbound	Left Turn		B (11.3)	B (11.3)		B (11.9)	B (11.9)		B (12.7)	B (12.7)		
	Through	A (9.4)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Right Turn											
	Approach	A (0.1)	A (0.1)	A (0.1)		A (0.1)	A (0.1)		A (0.1)	A (0.1)		
Southbound	Left Turn		A (9.5)	A (9.5)		A (9.9)	A (9.9)		B (10.2)	B (10.2)		
	Through	A (8.7)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Right Turn											
	Approach	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
<b>OVERALL</b>		<b>A (0.8)</b>	<b>A (1.3)</b>	<b>A (1.3)</b>		<b>A (2.1)</b>	<b>A (2.1)</b>		<b>A (3.4)</b>	<b>A (3.4)</b>		
INTERSECTION		<b>9) Bridge St (IL 47) &amp; Galena Road (CO 9)</b>										
<b>Galena Road (CO 9)</b>												
Eastbound	Left Turn		E (68.1)	E (68.1)		E (70.1)	E (70.1)		E (71.5)	E (71.5)		
	Through	D (43.5)	D (39.0)	D (39.0)		D (38.9)	D (38.9)		D (38.6)	D (38.6)		
	Right Turn		C (32.4)	C (32.4)		C (32.0)	C (32.0)		C (31.4)	C (31.4)		
	Approach	D (43.5)	D (49.6)	D (49.6)		D (50.2)	D (50.2)		D (50.4)	D (50.4)		
Westbound	Left Turn		D (45.3)	D (45.3)		D (44.7)	D (44.7)		D (44.4)	D (44.4)		
	Through	D (52.2)	E (68.5)	E (68.5)		E (69.2)	E (69.2)		E (69.9)	E (69.9)		
	Right Turn		D (38.3)	D (38.3)		D (38.0)	D (38.0)		D (37.7)	D (37.7)		
	Approach	D (52.2)	E (56.0)	E (56.0)		E (56.2)	E (56.2)		E (56.3)	E (56.3)		
<b>Bridge St (IL 47)</b>												
Northbound	Left Turn	A (9.9)	C (22.5)	C (22.5)		C (23.5)	C (23.5)		C (24.8)	C (24.8)		
	Through	B (12.7)	C (29.8)	C (29.8)		C (31.3)	C (31.3)		C (32.8)	C (32.8)		
	Right Turn	A (9.3)	C (23.2)	C (23.2)		C (23.9)	C (23.9)		C (24.7)	C (24.7)		
	Approach	B (11.8)	C (27.8)	C (27.8)		C (29.1)	C (29.1)		C (30.5)	C (30.5)		
Southbound	Left Turn	A (9.6)	C (21.2)	C (21.2)		C (24.0)	C (24.0)		C (27.7)	C (27.7)		
	Through	B (13.6)	C (24.4)	C (24.4)		C (26.2)	C (26.2)		C (28.2)	C (28.2)		
	Right Turn	A (7.9)	A (8.5)	A (8.5)		A (9.0)	A (9.0)		A (9.4)	A (9.4)		
	Approach	B (12.7)	C (21.8)	C (21.8)		C (23.7)	C (23.7)		C (25.8)	C (25.8)		
<b>OVERALL</b>		<b>C (21.3)</b>	<b>C (33.6)</b>	<b>C (33.6)</b>		<b>C (34.5)</b>	<b>C (34.5)</b>		<b>D (35.5)</b>	<b>D (35.5)</b>		
INTERSECTION		<b>10) Galena Road (CO 9) &amp; E Beecher Road</b>										
<b>Galena Road (CO 9)</b>												
Eastbound	Through											
	Right Turn	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Approach	A (0.0)	A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
Westbound	Left Turn	A (8.8)	B (10.6)	B (10.6)		B (10.7)	B (10.7)		B (10.7)	B (10.7)		
	Through		A (0.0)	A (0.0)		A (0.0)	A (0.0)		A (0.0)	A (0.0)		
	Approach	A (8.8)	A (0.1)	A (0.1)		A (0.1)	A (0.1)		A (0.1)	A (0.1)		
<b>E Beecher Rd</b>												
Northbound	Left Turn	A (10.0)	B (13.1)	B (13.1)		B (13.2)	B (13.2)		B (13.4)	B (13.4)		
	Right Turn											
	Approach	A (10.0)	B (13.1)	B (13.1)		B (13.2)	B (13.2)		B (13.4)	B (13.4)		
<b>OVERALL</b>		<b>A (0.3)</b>	<b>A (0.1)</b>	<b>A (0.1)</b>		<b>A (0.1)</b>	<b>A (0.1)</b>		<b>A (0.1)</b>	<b>A (0.1)</b>		

**Table 4A  
Queue Comparison**

AM / PM PEAK		AM PEAK HOUR (Queue Length)									
Direction	Approach / Movement	Storage Length	2034			2039			2044		
			No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements
INTERSECTION		<b>1) Galena Road (CO 9) &amp; Ashe Road/Eldamain Road (CO 7)</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Left Turn	295'	178'	178'		185'	185'		192'	192'	
	Through	>1,000'	253'	253'		260'	260'		267'	267'	
	Right Turn	265'	9'	9'		10'	10'		13'	13'	
Westbound	Left Turn	145'	195'	195'		205'	205'		215'	215'	
	Through	>1,000'	179'	179'		181'	181'		184'	184'	
	Right Turn	155'	26'	26'		27'	27'		28'	28'	
<b>Ashe Road/Eldamain Road (CO)</b>											
Northbound	Left Turn	145'	21'	23'		21'	25'		21'	27'	
	Through	>1,000'	527'	531'		544'	553'		568'	577'	
	Right Turn	155'	61'	61'		63'	71'		67'	76'	
Southbound	Left Turn	230'	53'	53'		54'	54'		54'	54'	
	Through	>1,000'	152'	153'		154'	155'		156'	158'	
	Right Turn	230'	30'	30'		30'	31'		31'	32'	
INTERSECTION		<b>2) Eldamain Road (CO 7) &amp; Site Driveway B</b>									
<b>Site Driveway B</b>											
Westbound	Left Turn	400'					18'			18'	
	Right Turn										
<b>Eldamain Road (CO 7)</b>											
Northbound	Through	>1,000'					0'			0'	
	Right Turn										
Southbound	Left Turn	>1,000'					0'			0'	
	Through										
INTERSECTION		<b>3) Eldamain Road (CO 7) &amp; Corneils Road</b>									
<b>Corneils Road</b>											
Westbound	Left Turn	245'	8'	15'		8'	18'		10'	33'	
	Right Turn	>1,000'	3'	5'		3'	5'		3'	5'	
<b>Eldamain Road (CO 7)</b>											
Northbound	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn	240'	0'	0'		0'	0'		0'	0'	
Southbound	Left Turn	185'	3'	3'		3'	3'		3'	3'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
INTERSECTION		<b>4) Corneils Road &amp; Site Driveway C</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'								0'	
	Through										
Westbound	Through	>1,000'								0'	
	Right Turn										
<b>Site Driveway C</b>											
Southbound	Left Turn	>1,000'								5'	
	Right Turn										
INTERSECTION		<b>5) Corneils Road &amp; Beecher Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'	0'			0'			0'		
	Through			0'			0'			0'	
	Right Turn										
Westbound	Left Turn	>1,000'	0'			0'			0'		
	Through			0'			0'			0'	
	Right Turn										
<b>Beecher Road</b>											
Northbound	Left Turn	>1,000'	0'			0'			3'		
	Through			0'			0'			0'	
	Right Turn										
Southbound	Left Turn	>1,000'	0'			0'			0'		
	Through										
	Right Turn										

**Table 4A  
Queue Comparison**

AM / PM PEAK		AM PEAK HOUR (Queue Length)									
Direction	Approach / Movement	Storage Length	2034			2039			2044		
			No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements
<b>INTERSECTION</b>		<b>6) Site Driveway A &amp; E Beecher Rd</b>									
<b>Site Driveway A</b>											
Eastbound	Left Turn	>1,000'		5'			5'			5'	
	Through										
<b>E Beecher Rd</b>											
Northbound	Left Turn	650'		0'			0'			0'	
	Through										
Southbound	Left Turn	650'		0'			0'			0'	
	Right Turn										
<b>INTERSECTION</b>		<b>7) Corneils Road &amp; E Beecher Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'		0'			0'			0'	
	Through										
Westbound	Through	>1,000'		0'			0'			0'	
	Right Turn										
<b>E Beecher Rd</b>											
Southbound	Left Turn	>1,000'		0'			0'			0'	
	Right Turn										
<b>INTERSECTION</b>		<b>8) Bridge St (IL 47) &amp; Corneils Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'		33'	65'		45'	100'		65'	220'
	Through										
	Right Turn										
Westbound	Left Turn	>1,000'		15'	15'		20'	20'		30'	33'
	Through										
	Right Turn										
<b>Bridge St (IL 47)</b>											
Northbound	Left Turn	205'	0'	0'		3'	3'		3'	3'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn										
Southbound	Left Turn	215'	0'	0'		0'	0'		0'	0'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn										
<b>INTERSECTION</b>		<b>9) Bridge St (IL 47) &amp; Galena Road (CO 9)</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Left Turn	215'	257'	257'		267'	291'		278'	307'	
	Through	>1,000'	248'	248'		255'	261'		265'	269'	
	Right Turn	210'	35'	35'		35'	37'		35'	37'	
Westbound	Left Turn	215'	81'	81'		85'	85'		89'	89'	
	Through	>1,000'	246'	246'		249'	249'		257'	257'	
	Right Turn	210'	132'	134'		151'	156'		169'	176'	
<b>Bridge St (IL 47)</b>											
Northbound	Left Turn	300'	100'	100'		102'	102'		105'	105'	
	Through	>1,000'	383'	389'		434'	442'		488'	505'	
	Right Turn	185'	15'	18'		18'	22'		23'	29'	
Southbound	Left Turn	290'	89'	89'		100'	103'		134'	147'	
	Through	>1,000'	233'	233'		260'	260'		288'	288'	
	Right Turn	175'	30'	30'		31'	31'		31'	31'	
<b>INTERSECTION</b>		<b>10) Galena Road (CO 9) &amp; E Beecher Road</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Through	>1,000'		0'	0'		0'	0'		0'	0'
	Right Turn										
Westbound	Left Turn	75'	0'	0'		0'	0'		0'	0'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
<b>E Beecher Rd</b>											
Northbound	Left Turn	>1,000'		3'	3'		3'	3'		3'	3'
	Right Turn										

**Table 4B  
Queue Comparison**

AM / PM PEAK		PM PEAK HOUR (Queue Length)									
Direction	Approach / Movement	Storage Length	No Build			Build			Build with Improvements		
			No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements
INTERSECTION		<b>1) Galena Road (CO 9) &amp; Ashe Road/Eldamain Road (CO 7)</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Left Turn	295'	87'	87'		90'	90'		92'	92'	
	Through	>1,000'	153'	153'		158'	158'		161'	161'	
	Right Turn	265'	8'	8'		9'	9'		11'	11'	
Westbound	Left Turn	145'	228'	228'		245'	245'		257'	257'	
	Through	>1,000'	291'	291'		300'	300'		309'	309'	
	Right Turn	155'	29'	29'		29'	29'		30'	30'	
<b>Ashe Road/Eldamain Road (CO 7)</b>											
Northbound	Left Turn	145'	39'	39'		41'	41'		41'	41'	
	Through	>1,000'	168'	168'		171'	171'		175'	175'	
	Right Turn	155'	35'	35'		36'	36'		36'	36'	
Southbound	Left Turn	230'	36'	36'		36'	36'		37'	37'	
	Through	>1,000'	532'	532'		552'	552'		574'	574'	
	Right Turn	230'	42'	42'		42'	42'		43'	43'	
INTERSECTION		<b>2) Eldamain Road (CO 7) &amp; Site Driveway B</b>									
<b>Site Driveway B</b>											
Westbound	Left Turn	400'					0'			0'	
	Right Turn										
<b>Eldamain Road (CO 7)</b>											
Northbound	Through	>1,000'					0'			0'	
	Right Turn										
Southbound	Left Turn	>1,000'					0'			0'	
	Through										
INTERSECTION		<b>3) Eldamain Road (CO 7) &amp; Corneils Road</b>									
<b>Corneils Road</b>											
Westbound	Left Turn	245'	13'	13'		15'	15'		18'	18'	
	Right Turn	>1,000'	3'	3'		3'	3'		3'	3'	
<b>Eldamain Road (CO 7)</b>											
Northbound	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn	240'	0'	0'		0'	0'		0'	0'	
Southbound	Left Turn	185'	0'	0'		0'	0'		0'	0'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
INTERSECTION		<b>4) Corneils Road &amp; Site Driveway C</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'								0'	
	Through										
Westbound	Through	>1,000'								0'	
	Right Turn										
<b>Site Driveway C</b>											
Southbound	Left Turn	>1,000'								0'	
	Right Turn										
INTERSECTION		<b>5) Corneils Road &amp; Beecher Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'	0'	0'		0'	0'		0'	0'	
	Through										
	Right Turn										
Westbound	Left Turn	>1,000'	0'	0'		0'	0'		0'	0'	
	Through										
	Right Turn										
<b>Beecher Road</b>											
Northbound	Left Turn	>1,000'	3'	3'		3'	0'		3'	0'	
	Through										
	Right Turn						0'			0'	
Southbound	Left Turn	>1,000'	0'	0'		0'	0'		0'	0'	
	Through										
	Right Turn										

**Table 4B  
Queue Comparison**

AM / PM PEAK		PM PEAK HOUR (Queue Length)									
Direction	Approach / Movement	Storage Length	No Build			Build			Build with Improvements		
			No Build	Build	Build with Improvements	No Build	Build	Build with Improvements	No Build	Build	Build with Improvements
INTERSECTION		<b>6) Site Driveway A &amp; E Beecher Rd</b>									
<b>Site Driveway A</b>											
Eastbound	Left Turn	>1,000'		0'			0'			0'	
	Through										
<b>E Beecher Rd</b>											
Northbound	Left Turn	650'		0'			0'			0'	
	Through										
Southbound	Through	650'		0'			0'			0'	
	Right Turn										
INTERSECTION		<b>7) Corneils Road &amp; E Beecher Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'		0'			0'			0'	
	Through										
Westbound	Through	>1,000'		0'			0'			0'	
	Right Turn										
<b>E Beecher Rd</b>											
Southbound	Left Turn	>1,000'		0'			0'			0'	
	Right Turn										
INTERSECTION		<b>8) Bridge St (IL 47) &amp; Corneils Road</b>									
<b>Corneils Road</b>											
Eastbound	Left Turn	>1,000'		35'	35'		55'	55'		78'	78'
	Through										
	Right Turn										
Westbound	Left Turn	>1,000'		8'	8'		13'	13'		15'	15'
	Through										
	Right Turn										
<b>Bridge St (IL 47)</b>											
Northbound	Left Turn	205'	0'	0'		3'	3'		3'	3'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn										
Southbound	Left Turn	215'	0'	0'		0'	0'		0'	0'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
	Right Turn										
INTERSECTION		<b>9) Bridge St (IL 47) &amp; Galena Road (CO 9)</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Left Turn	215'	320'	320'		335'	335'		347'	347'	
	Through	>1,000'	248'	248'		255'	255'		262'	262'	
	Right Turn	210'	52'	52'		62'	62'		70'	70'	
Westbound	Left Turn	215'	70'	70'		73'	73'		77'	77'	
	Through	>1,000'	273'	273'		284'	284'		295'	295'	
	Right Turn	210'	41'	41'		42'	42'		52'	52'	
<b>Bridge St (IL 47)</b>											
Northbound	Left Turn	300'	68'	68'		72'	72'		75'	75'	
	Through	>1,000'	297'	297'		334'	334'		372'	372'	
	Right Turn	185'	42'	42'		44'	44'		49'	49'	
Southbound	Left Turn	290'	145'	145'		156'	156'		193'	193'	
	Through	>1,000'	383'	383'		433'	433'		490'	490'	
	Right Turn	175'	25'	25'		25'	25'		26'	26'	
INTERSECTION		<b>10) Galena Road (CO 9) &amp; E Beecher Road</b>									
<b>Galena Road (CO 9)</b>											
Eastbound	Through	>1,000'		0'			0'			0'	
	Right Turn										
Westbound	Left Turn	75'	0'	0'		0'	0'		0'	0'	
	Through	>1,000'	0'	0'		0'	0'		0'	0'	
<b>E Beecher Rd</b>											
Northbound	Left Turn	>1,000'		0'			0'			0'	
	Right Turn										

**Table 5**  
Crash Data Analysis  
Project Steel - Data Center Campus

<b>Intersection/Segment</b>	<b>No. Crashes</b>	<b>AADT</b>	<b>Crash Rate</b>
Galena Rd & Eldamain Rd	17	13,200	<b>0.71</b>
Eldamain Rd & Corneils Rd	3	8,550	<b>0.19</b>
Corneils Rd & Beecher Rd	1	1,000	<b>0.55</b>
IL 47 & Corneils Rd	6	16,100	<b>0.20</b>

Notes:

AADT data sourced from Illinois Department of Transportation (IDOT).

Crash Data provided by IDOT Bureau of Data Collection.

Crash rate for intersections is per 1 million vehicles.

DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the afore mentioned 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.