CITY OF ST. CHARLES ILLINOIS • 1834	**PLAN COMMISSION AGENDA ITEM EXECUTIVE SUMMARY**			
	Project Title/Address:	Zen Leaf St. Charles, 3691 E Main Street		
	City Staff:	Ciara Miller, Economic Development Planner		
	PUBLIC HEARING 03/02/2021	X	**MEETING 03/02/2021**	X

APPLICATION:	Special Use
ATTACHMENTS AND SUPPORTING DOCUMENTS:	
Staff Report	Application for Special Use

SUMMARY:

Healthway Services of West Illinois, LLC, the operator of Zen Leaf St. Charles, has filed an application requesting Special Use approval to establish a Recreational Cannabis Dispensing Organization at 3691 E Main Street, the former Jared Jewelers. Zen Leaf's proposal requires no exterior alterations and site exceeds the minimum parking requirement for this use.

The 6,153sf building is located within the BR-Regional Business zoning district and is in the Main Street Commons PUD. A Recreational Cannabis Dispensing Organization is a Special Use in the BR zoning district and staff has confirmed with the City Attorney that no PUD Amendment is required.

To satisfy the Use Standards of a Recreational Cannabis Dispensing Organization, Zen Leaf would need to cease operations at their current establishment (3714 Illinois Ave.) in order to operate at 3691 E Main Street since both locations are on the east side of St. Charles and located within 1,500 feet of each other (requirements per Ch. 17.20 - Use Standards).

SUGGESTED ACTION:

Conduct the public hearing and close if all testimony has been taken.

The Plan Commission may vote on the item should they determine that they have enough information to make a recommendation.

INFO / PROCEDURE – SPECIAL USE APPLICATIONS:

- Per **Sec. 17.04.330,** the purpose of a Special Use is as follows: "Special Uses listed within the various zoning districts include those uses that may be acceptable if established in an appropriate manner and location within a zoning district, but may not be acceptable if established in a different manner or location. Special Uses may include, but are not limited to, public and quasi-public uses affected with the public interest, and uses that may have a unique, special or unusual impact upon the use or enjoyment of neighboring property."
- Public hearing is required, with a mailed notice to surrounding property owners.
- 6 findings of fact – ALL findings must be in the affirmative to recommend approval.

Community & Economic Development
Planning Division
Phone: (630) 377-4443
Fax: (630) 377-4062

CITY OF ST. CHARLES
ILLINOIS • 1834

Staff Report

TO: Chairman Todd Wallace
And the Members of the Plan Commission

FROM: Ciara Miller, Economic Development Planner

RE: Special Use for a Recreational Cannabis Dispensing Organization at 3691 E Main Street. (Zen Leaf)

DATE: February 26, 2021

I. GENERAL INFORMATION

Project Name: Zen Leaf – 3691 E Main Street

Applicant: Healthway Services of West Illinois, LLC

Purpose: Grant a Special Use for a Recreational Cannabis Dispensing Organization at 3691 E Main Street

General Information:

Site Information	
Location	3691 E Main Street
Acres	1.036 acres (46,327 SF)

Application:	Special Use
Applicable City Code Sections	Ch. 17.14 Business and Mixed-Use Districts Ch. 17.20 Use Standards Ch. 17.30 Definitions Ordinance 2001-Z-1 "An Ordinance Rezoning Property from M-1 to B-3 and Amending a Special Use as a Planned Unit Development Granted by Ordinance No. 1979-Z-6 (Main Street Commons PUD)"

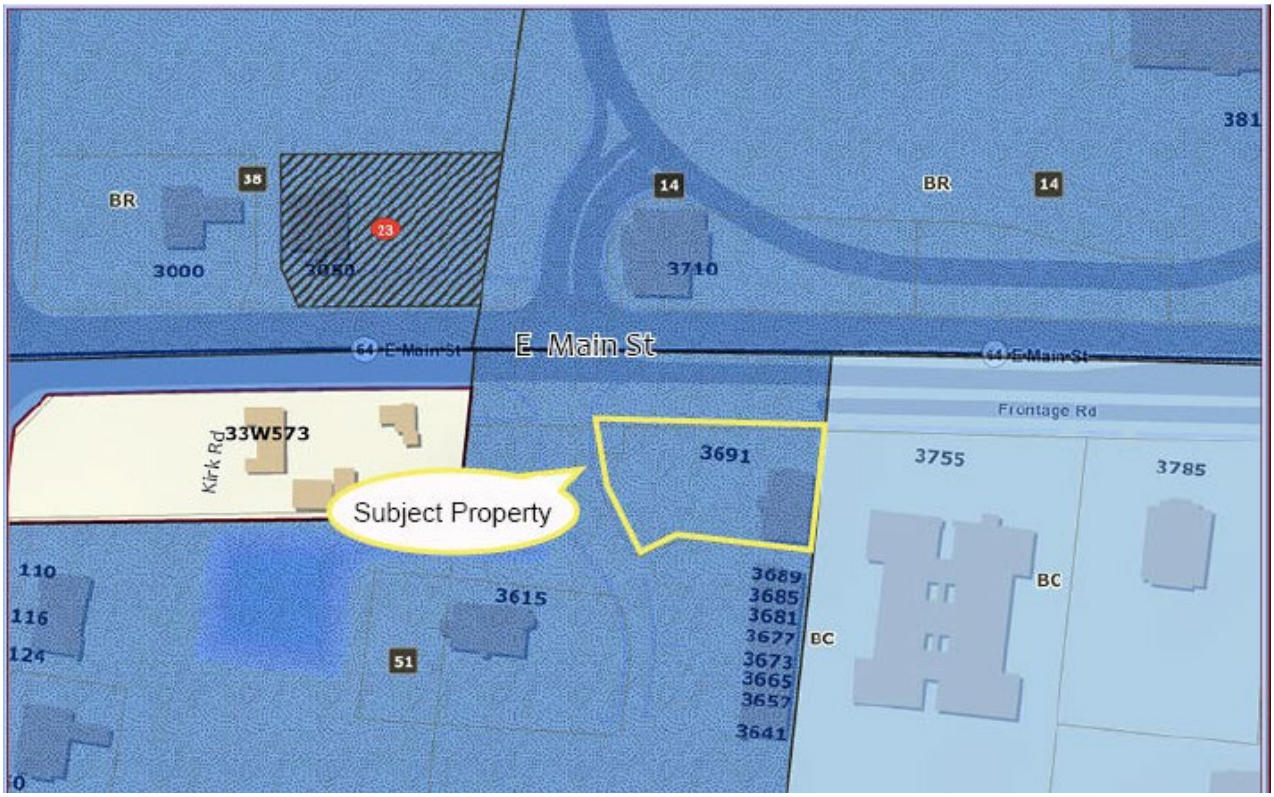
Existing Conditions	
Land Use	Commercial
Zoning	BR- Regional Business

Zoning Summary		
North	BR- Regional Business	St. Charles Mall/Cooper's Hawk
East	BC- Commercial Business	Multi-tenant
South	BR- Regional Business	Multi-Tenant
West	BR- Regional Business	Restaurant

Comprehensive Plan Designation
Corridor/Regional Commercial

Aerial

Zoning



II. BACKGROUND

The subject property, 3691 E Main Street, is located in the Main Street Commons Shopping Center and is developed with a 6,153ft^2 building and parking lot. The property is located in the BR- Regional Business district which allows Recreational Cannabis Dispensing Organizations as a Special Use.

Zen Leaf St. Charles has operated a Medical Cannabis Dispensing Organization at 3714 Illinois Avenue since 2015 and was granted a Special Use for a Recreational Cannabis Dispensing Organization in 2020 per Ordinance #2020-Z-10. The Special Use will expire on November 18, 2021.

To satisfy the Use Standards (Ch. 17.20) to establish a new Recreational Cannabis Dispensing Organization, Zen Leaf would need to cease operations at the current establishment at 3714 Illinois Avenue in order to operate at 3691 E Main Street since both locations are on the east side of St. Charles and located within 1,500 feet of each other.

Zen Leaf St. Charles is currently operating under an "Early Approval Adult Use Dispensing Organization License" issued by the State of Illinois Department of Financial and Professional Regulation (IDFPR). This license was available to preexisting Medical Cannabis Dispensaries. To date, IDFPR has not permitted an "Early Approval Adult Use Dispensing Organization License" holder to relocate their dispensary.

III. PROPOSAL

Healthway Services of West Illinois, LLC, the operator of Zen Leaf St. Charles, has filed an application requesting Special Use approval to establish a Recreational Cannabis Dispensing Organization at 3691 E Main Street. This would allow Zen Leaf to sell both medical and recreational cannabis at the proposed location, subject to receipt of a dispensing organization license for this location being granted by IDFPR.
The applicant has submitted information about the floor plan and operations of the business (see the proposed floor plan and project narrative documents provided with the application).

No exterior alterations are proposed to the building or site.

IV. ANALYSIS

A. <u>ZONING</u>
The subject property is zoned BR-Regional Business District. The applicant has submitted a Special Use application to open a Recreational Cannabis Dispensing Organization which is considered a Special Use in the BR district. The property is located in the Main Street Commons PUD, per Ordinance #2000-Z-1. Staff has confirmed with the City Attorney that no PUD Amendment is necessary for this Special Use to be granted.

B. <u>USE</u>
"Recreational Cannabis Dispensing Organization" was added as a zoning use category under Ordinance 2019-Z-19. The use is defined as follows:

> *A facility operated by an organization or business that is licensed by the Illinois Department of Financial and Professional Regulation to acquire cannabis from licensed cannabis business establishments for the purpose of selling or dispensing cannabis, cannabis-infused products, cannabis seeds, paraphernalia, or related supplies to purchasers or to qualified registered medical cannabis patients and caregivers, per the*

Cannabis Regulation and Tax Act. A facility that only acquires and dispenses medical cannabis to registered medical cannabis patients shall be considered a Medical Cannabis Dispensing Organization, as defined herein.

According to this definition, a Recreational Cannabis Dispensing Organization can sell both recreational and medical cannabis. The proposed use meets this definition, subject to receipt of a dispensing organization license from the State.

C. USE STANDARDS

Several Use Standards per Section 17.20.030 apply to Recreational Cannabis Uses:

1. The number of Recreational Cannabis Dispensing Organizations shall be limited to no more than two (2). Only one (1) Recreational Cannabis Dispensing Organization shall operate on the east side of the Fox River and only one (1) Recreational Cannabis Dispensing Organization shall operate on the west side of the Fox River. No Recreational Cannabis Dispensing Organization shall operate without written authorization from the Director of Community and Economic Development.
   If the Special Use is approved, Zen Leaf would need to cease operations at their current location (3714 Illinois Ave.) in order to comply with the Use Standard that only one (1) Recreational Cannabis Dispensing Organization shall operate on the east side of the Fox River in St. Charles. This would be a condition of approval of the Special Use.

2. One of the two Recreational Cannabis Dispensing Organizations shall have operated as a Medical Cannabis Dispensing Organization licensed by the State of Illinois within the St. Charles corporate limits for a minimum consecutive period of one (1) year. One of the two Recreational Cannabis Dispensing Organizations shall have operated as a Medical Cannabis Dispensing Organization licensed by the State of Illinois within the State of Illinois for a minimum consecutive period of one (1) year.
   Zen Leaf has operated as a medical cannabis dispensary in their current location for five years. This would meet the standard for one of the two recreational cannabis dispensaries to have operated as a medical dispensary for one year in St. Charles.

3. A Recreational Cannabis Dispensing Organization shall not be located on a parcel that is within 250 ft. of a parcel containing a pre-existing Primary or Secondary School, Private Boarding School, Day Care Center, Day Care Home, Church, or a parcel within a single-family residential zoning district, specifically the RE-1, RE-2, RS-1, RS-2, RS-3, RS-4, RT-1, RT-2, RT-3, and RT-4 districts.
   The proposed location, 3691 E Main St., is not located within 250 ft. of the applicable land uses. (See attached buffer map)

4. A Recreational Cannabis Dispensing Organization shall not be located within 1,500 ft. of the property line of another Recreational Cannabis Dispensing Organization or Medical Cannabis Dispensing Organization.
   The existing Zen Leaf dispensary at 3714 Illinois Ave. is less than 1,500 ft from the property line of 3691 E Main. However, as long as the dispensary at 3714 E Main is closed before the 3691 E Main location opens for business this condition will be met. This would be a condition of approval of the Special Use.

5. City approval of a Special Use for Recreational Cannabis Dispensing Organization shall be conditional upon the applicant providing the City with documentation proving receipt of a valid Adult Use Dispensing Organization License, as defined in the Cannabis

Regulation and Tax Act, granted from the State of Illinois Department of Financial and Professional Regulation.
This would be a condition of approval of the Special Use.

6. Consumption of cannabis and cannabis-infused products on the premises of any cannabis business establishment as defined in the Cannabis Regulation and Tax Act shall be prohibited.
This requirement would apply to Zen Leaf.

D. PARKING

The existing parking on site meets the parking requirement for a Recreational Cannabis Dispensing Organization.

The parking requirement for Recreational Cannabis Dispensing Organization is 4 spaces per 1,000 sf of Gross Floor Area. Based on information provided by the applicant, the subject unit is 6,153 sf, which means a minimum of 25 parking spaces would be required.

The existing parking as configured, provides a total of 38 parking spaces (35 standard and 3 accessible spaces) designated solely to the proposed use, exceeding the parking requirement by 13 spaces.

E. TRAFFIC STUDY

The applicant has submitted a traffic impact study prepared by Gewalt Hamilton Associates. The key conclusions of the study are summarized as follows:

- The projected increase in traffic will have little effect upon the operations of the area roadway network.
- Employees should be encouraged to park in remote spaces (furthest from the site entrance) to provide convenient parking for customers.
- Arrangements should be made on special occasions, such as opening day, when additional parking may be needed.
- Deliveries, to the extent feasible, should occur during off-peak hours.

The traffic study was reviewed by the City's Traffic Engineer, Hampton Lenzini Renwick (HLR). HLR noted a few minor corrections and questioned whether the study considered the following:

- Counting existing site traffic at Zen Leaf, as there is limited traffic data in the ITE traffic projections for this land use.
- Capacity analysis of the Kirk Rd./Main St. and 38th Ave./Main St. intersections.

Staff has provided the HLR comments to the applicant.

IV. SUGGESTED ACTION

Conduct the public hearing on the Special Use and close if all the testimony has been taken.

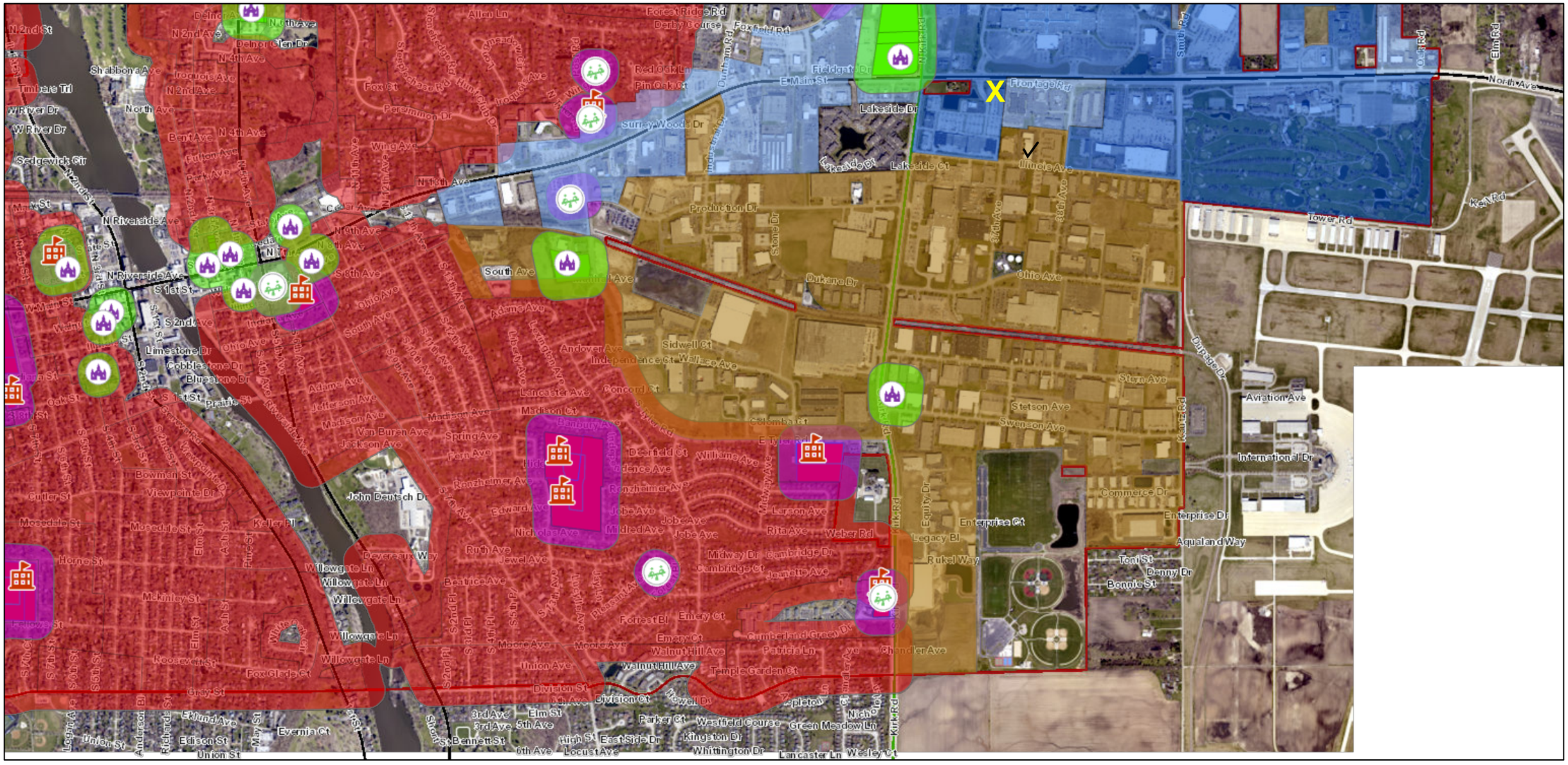
The applicant has provided responses to the Findings of Fact for Special Use. All six findings must be in the affirmative for the Commission to recommend approval.

Staff has determined the application materials to be complete. The Plan Commission may vote on the item should they determine that they have enough information to make a recommendation.

V. ATTACHMENTS

- Buffer Map for east side of St. Charles
- Application for Special Use, received 02/01/2121

M-2, BR, BC Zoning w/ Required Buffers for Rec. Cannabis Dispensaries



November 15, 2019

1:16,000

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Zoning

- BC
- BR
- M-2

- School/Day Care Properties
- Church Properties
- Church
- Day Care
- School

- 250' buffer: single-family residential
- 250' buffer: schools/day cares
- 250' buffer: churches

Johnson, Ellen

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES SINCE 1834

COMMUNITY DEVELOPMENT/PLANNING DIVISION PHONE: (630) 377-4443 FAX: (630) 377-4062

SPECIAL USE APPLICATION

Received Date
RECEIVED
FEB - 1 2021
City of St. Charles
Community Development

CITYVIEW	
Project Name:	Zen Leaf
Project Number:	2019 -PR- 023
Application Number:	PLSU202100004

To request a Special Use for a property, or to request to amend an existing Special Use Ordinance for a property, complete this application and submit it with all required attachments to the Planning Division.

City staff will review submittals for completeness and for compliance with applicable requirements prior to establishing a public hearing date for an application.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Parcel Number (s): 09-25-327-004	
	Street Address (or common location if no address is assigned): 3691 E Main St, St Charles, IL 60174	
2. Applicant Information:	Name Healthway Services of West Illinois, LLC	Phone (312) 819-4859
	Address 415 N. DearbornSt., 4th Floor, Chicago, IL 60654	Fax
		Email chris@verano.holdings
3. Record Owner Information:	Name St. Charles Holding Corp.	Phone
	Address 23 The Moor, East Islip, New York 11730	Fax
		Email
4. Billing: *To whom should costs for this application be billed?*	Name Healthway Services of West Illinois, LLC	Phone (312) 819-4859
	Address 415 N. DearbornSt., 4th Floor, Chicago, IL 60654	Fax
		Email chris@verano.holdings

Information Regarding Proposed Special Use:

Comprehensive Plan designation of the property: Corridor/Regional Commercial

Is the property a designated Landmark or in a Historic District? No

What is the property's current zoning? BR - Regional Business

What is the property currently used for? Vacant Retail Sales

What Special Use(s) are you applying for? Please select from the list of Special Uses in the Zoning Ordinance for the appropriate zoning district.

Recreational Cannabis Dispensing Organization

If the proposed Special Use is approved, what improvements or construction are planned?

The proposes special use can be accomodated within the existing building with only minor interior renovations.

For Special Use Amendments only:

What Special Use ordinance do you want to amend? Ordinance No. N/A

Why is the proposed change necessary?

N/A

What are the proposed amendments? (Attach proposed language if necessary)

N/A

Note for existing buildings:

If your project involves using an existing building, whether you plan to alter it or not, please contact the St. Charles Fire Department (630-377-4458) and the Building and Code Enforcement Division (630-377-4406) for information on building, life safety and other code requirements. Depending on the proposed use, size of structure and type of construction, these requirements can result in substantial costs.

Attachment Checklist

- ❑ **APPLICATION:** Completed application form signed by the applicant
- ❑ **APPLICATION FEE:** Application fee in accordance with Appendix B of the Zoning Ordinance.
- ❑ **REIMBURSEMENT OF FEES AGREEMENT:** An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.
- ❑ **PROOF OF OWNERSHIP and DISCLOSURE:**
  - a) A current title policy report; or
  - b) A deed and a current title search.

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

- ❑ **LEGAL DESCRIPTION:** For entire subject property, on 8 1/2 x 11 inch paper

- ❑ **PLAT OF SURVEY:**

  A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

- ❑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:**

  Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

- ❑ **ENDANGERED SPECIES REPORT:**

  Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnrecocat.state.il.us/ecopublic/

- ❑ **TRAFFIC STUDY:** If requested by the Director of Community Development.

- ❑ **PLANS:**

  All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

  Copies of Plans:

  - Initial Submittal - Fifteen (15) full size copies, Three (3) 11" by 17", and a PDF electronic file on a CD-ROM.
  - Revision Submittal for Plan Commission - Twenty-Two (22) full size copies, Three (3) 11" by 17" and a PDF electronic file on a CD-ROM.

- ❑ **SITE PLAN (Note: For a Special Use for PUD, submit PUD Preliminary Plan Application in lieu of Site Plan)**

  A plan or plans showing the following information:

  1. Accurate boundary lines with dimensions
  2. Streets on and adjacent to the tract: Name and right-of-way width
  3. Location, size, shape, height, and use of existing and proposed structures
  4. Location and description of streets, sidewalks, and fences
  5. Surrounding land uses
  6. Date, north point, and scale
  7. Ground elevation contour lines
  8. Building/use setback lines
  9. Location of any significant natural features
  10. Location of any 100-year recurrence interval floodplain and floodway boundaries
  11. Location and classification of wetland areas as delineated in the National Wetlands Inventory
  12. Existing zoning classification of property
  13. Existing and proposed land use
  14. Area of property in square feet and acres
  15. Proposed off-street parking and loading areas
  16. Number of parking spaces provided, and number required by ordinance

17. Angle of parking spaces
18. Parking space dimensions and aisle widths
19. Driveway radii at the street curb line
20. Width of driveways at sidewalk and street curb line
21. Provision of handicapped parking spaces
22. Dimensions of handicapped parking spaces
23. Depressed ramps available to handicapped parking spaces
24. Location, dimensions and elevations of freestanding signs
25. Location and elevations of trash enclosures
26. Provision for required screening, if applicable
27. Exterior lighting plans showing:
    a. Location, height, intensity and fixture type of all proposed exterior lighting
    b. Photometric information pertaining to locations of proposed lighting fixtures

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

Anne L Kerl — 1/20/2021

Record Owner — Date

1/20/2021

Applicant or Authorized Agent — Date

FINDINGS OF FACT SHEET – SPECIAL USE

The St. Charles Zoning Ordinance requires the Plan Commission to consider the factors listed below in making a recommendation to the City Council.

As the applicant, the "burden of proof" is on you to show how your proposed Special Use will comply with each of the applicable standards. Therefore, you need to "make your case" by explaining specifically how your project meets each of the following standards.

3691 E Main St — *Project Name or Address*

1/27/21 — *Date*

From the Charles Zoning Ordinance, Section 17.04.430.C.2:
No Special Use or amendment to Special Use shall be recommended by the Plan Commission unless it finds that the proposed Special Use or amendment to Special Use will conform with each of these standards. The Plan Commission shall submit its written findings together with its recommendations to the City Council after the conclusion of the Public Hearing, and also may recommend such conditions as it may deem necessary to ensure conformance with these standards.

On the basis of the evidence presented at the public hearing, the Plan Commission shall record its reasons for recommending approval or denial of the petition (findings of fact) in accordance with the following standards:

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

See attached extended answers.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

See attached extended answers.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

FINDINGS OF FACT - SPECIAL USE

From the St. Charles Zoning Ordinance, Section 17.04.330.C:

No special use or amendment to special use shall be recommended by the Plan Commission unless it finds that the proposed special use or amendment to special use will conform to each of these standards. The Plan Commission shall submit its written findings together with its recommendations to the City Council after the conclusion of the Public Hearing, and also may recommend such conditions as it may deem necessary to ensure conformance with these standards.

On the basis of the evidence presented at the public hearing, the Plan Commission shall record its reasons for recommending approval or denial of the petition (findings of fact) in accordance with the following standards: (The below findings of fact were made in reliance on the professional opinions of Urban Planners from WBK Engineering. This includes Adam Rak, who's CV is attached hereto).

A. Public Convenience: The special use will serve the public convenience at the proposed location.
A Recreational Cannabis Dispensing Organization will serve the public convenience at the proposed location (3691 E. Main Street) in the following ways:

1. *The proposed special use would provide critical tax revenue dollars to utilize towards its capital expenditures.* The proposed Recreational Cannabis Dispensing Organization would continue to provide substantial tax revenues critical to filling existing budget deficits which have been compounded by COVID-19 and its impact to consumers at traditional brick & mortar retailers.
2. *The proposed special use will revitalize a dormant, vacant retail space with a new use.* The proposed Recreational Cannabis Dispensing Organization will inhabit a space which has been vacant. Both exterior façade improvements and floor plan improvements are planned for the existing facility which will help activate a key corner in the Main Street Commons Shopping Center with a new a retail use, to replace the existing Recreational Cannabis Dispensing Organization currently operated by the Applicant, in a nearby district.
3. *The existing road network, as it is configured, provides safe and convenient access to the property.* Access to the property occurs directly off IL Route 64 (E. Main Street), a primary arterial road with a six-lane cross section at an existing four-way signalized intersection. A shared driveway off the primary commercial collector provides direct access to a parking lot, designated solely for use by the proposed Recreational Cannabis Dispensing Organization. The proposed development is expected to have minimal impact on the existing traffic operations of the area roadway network.
4. *The proposed building offers greater commercial floor space.* The proposed Recreational Cannabis Dispensing Organization will occupy an existing, 6,153 sq. ft. building compared to the existing facility which is 3,768 sq. ft. The proposed building will allow more space for product inventory and safe space, a larger order fulfillment area, and a more generous retail sales floor which ultimately will accommodate more comfortably, the larger crowds that typically visit the businesses on specific peak business days.
5. *Adequate parking for the proposed Recreational Cannabis Dispending Organization will be provided in a parking lot designated solely for use by the Applicant.* The City's parking standards require a minimum of four (4) parking spaces for every 1,000 sq. ft. of Gross Floor Area (GFA). The proposed Recreational Cannabis Dispensing

Organization is approximately 6,153 sq. ft. in GFA. The minimum required number of parking spaces per the ordinance is 25 parking spaces. The existing parking as configured, provides a total of 38 parking spaces (35 standard and three (3) accessible spaces) designated solely to the proposed use. Employees will be encouraged to park in spaces furthest from the entrance to reserve those spaces closest to the entrance for customers.

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

1. *The existing road network, as it is configured, provides safe and convenient access to the property.* Access to the property occurs directly off IL Route 64, a primary arterial road with a six-lane cross section at an existing four-way signalized intersection. A shared driveway off the primary commercial collector provides direct access to a parking lot, designated solely for use by the proposed Recreational Cannabis Dispensing Organization. The proposed development is expected to have minimal impact on the existing traffic operations of the area roadway network.
2. *There are no known drainage issues at the site.* The proposed Recreational Cannabis Dispensing Operation is planned for a site already improved and formerly occupied by a traditional retail sales business. The proposed Recreational Cannabis Dispensing Operation can be accommodated with no additional changes to the design or layout of the site. Therefore, there will be no change to existing grades or increases to impervious surface area which would modify or increase stormwater runoff.
3. *Adequate parking for the proposed Recreational Cannabis Dispending Organization will be provided in a parking lot designated solely for use by the Applicant.* The City's parking standards require a minimum of four (4) parking spaces for every 1,000 sq. ft. of Gross Floor Area (GFA). The proposed Recreational Cannabis Dispensing Organization is approximately 6,153 sq. ft. in GFA. The minimum required number of parking spaces per the ordinance is 25 parking spaces. The existing parking as configured, provides a total of 38 parking spaces (35 standard and three (3) accessible spaces) designated solely to the proposed use. Employees will be encouraged to park in spaces furthest from the entrance to reserve those spaces closest to the entrance for customers.
4. *The site provides adequate access to all utility providers and first responders.* Primary access to the property occurs via a shared driveway off a commercial collector which forms a signalized four-way intersection with IL Route 64. The driveway provides both ingress and egress to the subject property and adjacent commercial strip center to the south. Existing and adjacent parking areas provide 360° access to the building for utility providers, emergency services, and first responders.
5. *The building/site is connected to City of St. Charles sanitary and water services.*

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

The proposed Recreational Cannabis Dispensing Organization will be situated within a large-scale development of compatible land uses with shared access, a connected network of vehicular circulation, shared stormwater management and common area landscaping. The property is zoned to allow these retail uses and historically has operated as such. The Applicant has operated a Medical Cannabis Dispensing Organization at 3714 E. Illinois, without issues, for years. In 2020, the Applicant received a special use to allow co-location of its Recreational Cannabis Dispensing Organization at its current location and has continued to operate responsibly with respect to its neighbors

and residents of the City of St. Charles. As such, the Applicant proposes to relocate its existing facilities, in accordance with interpretation by the Illinois Department of Professional and Financial Regulation (IDFPR), as the proposed location is better suited for its business operations.

The City requires a minimum 250-foot separation distances from sensitive uses including pre-existing School, Primary or Secondary, School, Private Boarding, Day Care Center, Day Care Home, or other residential zoning parcels. The proposed special use meets these distance requirements.

In addition, the proposed Recreational Cannabis Dispensing Organization will continue to strictly enforce rules banning on-site consumption. The proposed special use will also continue to comply with all other local and State regulations. These measures and other zoning and use standards, including parking requirements, are in place to ensure that no impacts to the use and enjoyment of other properties, or affect or impairment on property values within the development occur. Introduction of a new retailer with a unique product to the Main Street Commons Shopping Center could result in enhanced property values due to the attraction of new customers to the area and potential consumers of goods and services for other properties within the shopping center.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.
The proposed special use is located on a site that is already developed and where comparable retail uses are in operation on surrounding properties. The proposed Recreational Cannabis Dispensing Organization will reuse an existing, vacant retail building. Granting a special use to allow sales of adult-use cannabis products will not materially change the use of the property for which it has historically been utilized. The City has adopted proposed use standards for Recreational Cannabis Dispensing Organizations and the proposed special use complies with each of the standards. Through compatibility with surrounding retail uses and compliance with adopted zoning ordinance use standards, the proposed special use will not impede the normal and orderly development or improvement of the surrounding property for uses permitted in the district.

E. Effect on General Welfare: That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort, or general welfare.
The Applicant has operated a Medical Cannabis Dispensing Organization at 3714 Illinois Avenue since 2015. At that time, Chief of Police stated, in reference to the Medical Cannabis Dispensing Organization "has had minimal impact on police operations in the City of St. Charles." In 2020, the Applicant received special use approval to co-locate a Recreational Cannabis Dispensing Organization and has continued to operate without issue, allowing police resources to focus on serving the public and protecting its health, safety, comfort, and general welfare.

The current proposed application for special use allows the existing Medical and Recreational Cannabis Dispensing Organizations to relocate to a more optimal commercial space along IL Route 64 (E. Main Street) as allowed by IDFPR. Safe access to the property is provided via a four-way, signalized intersection at IL Route 64, with a shared driveway off a commercial collector road which provides access and circulation to the larger retail complex. Furthermore, the continued application of a sales tax to recreational cannabis sales will maintain the City's tax revenue, maintaining the funds that can be allocated towards social and capital programs that improve the general welfare of the public.

Compliance with all local and state laws will be met and strict enforcement banning on-site consumption rules will be enforced. Moreover, the State of Illinois has adopted the most stringent licensing requirements in the United States related to adult-use cannabis sales. The proposed special use, by requiring that the Applicant maintain State of Illinois license, will uphold these exacting standards, and will ensure full cooperation with the City and its resources so as to not endanger the public health, safety, comfort or general welfare of those in the community.

F. Conformance with Codes: That the proposed Special Use conforms to all applicable provisions of the St. Charles Municipal Code and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

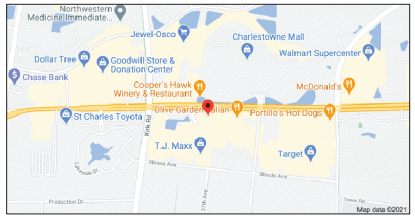
The Applicant currently operates a Medical and Recreational Cannabis Dispensing Organization in a nearby district. The proposed special use would facilitate relocation of the existing facility to a more suited commercial location along IL Route 64 (E. Main Street) as allowed by IDFPR. As such, the proposed special use will conform to all applicable provisions of the St. Charles Municipal Code and meet or exceed all applicable provisions of this title, except as may be varied pursuant to a Special Use for Planned Development.

UNITED SURVEY SERVICE, LLC
CONSTRUCTION AND LAND SURVEYORS
7710 CENTRAL AVENUE, RIVER FOREST, IL 60305
TEL.: (847) 299 - 1010 FAX : (847) 299 - 5887
E-MAIL: USURVEY@USANDCS.COM

ALTA / NSPS LAND TITLE SURVEY

0' 10' 20' 50'

LOCATION MAP



PARCEL 1:
LOT 4 IN MAIN STREET COMMONS PLANNED UNIT DEVELOPMENT, BEING A RESUBDIVISION OF PART OF LOTS 4, 5, 6 AND 17 OF UNIT NO. 1 OF THE ST. CHARLES ILLINOIS INDUSTRIAL DEVELOPMENT OF THE CENTRAL MANUFACTURING DISTRICT IN SECTIONS 25 AND 36, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 13, 2000 AS DOCUMENT NUMBER 2000K046916, IN KANE COUNTY, ILLINOIS.

PARCEL 2:
EASEMENTS FOR THE BENEFIT OF PARCEL ONE CREATED BY THE INSTRUMENTS RECORDED JULY 26, 2000 DOCUMENT 2000K058745 AND RECORDED AUGUST 3, 2000 DOCUMENT 2000K061696 AND RECORDED JANUARY
4 2002 AS DOCUMENT 2002K001839.

KNOWN AS: **3691 E. MAIN STREET SAINT CHARLES, ILLINOIS**

PERMANENT INDEX NUMBER: 09 - 25 - 327 - 004 - 0000

TOTAL AREA= 46,327 SQ. FT. OR 1.0634 ACRES

NOTE:
THIS LEGAL DESCRIPTION DESCRIBES THE SAME PROPERTY AS INSURED IN THE TITLE COMMITMENT AND ANY EXCEPTIONS HAVE BEEN NOTED HEREIN.

NOTES:

-THE SUBJECT PROPERTY HAS ACCESS TO AND FROM A DULY DEDICATED AND ACCEPTED PUBLIC STREET KNOWN AS **E. MAIN STREET (ROUTE 64).**

-THE SURVEY AND THE INFORMATION, COURSES AND DISTANCES SHOWN THEREON ARE CORRECT;

-THE TITLE LINES AND LINES OF ACTUAL POSSESSION ARE THE SAME;

-THE SUBJECT PROPERTY DOES NOT SERVE ANY ADJOINING PROPERTY FOR DRAINAGE, UTILITIES, OR INGRESS OR EGRESS;

- ELECTRIC, GAS, TELEPHONE AND WATER UTILITY AND STORM AND SANITARY SEWER SYSTEMS ACCESS THE PROPERTY IN LEGALLY DEDICATED RIGHTS OF WAY THAT BENEFIT THE PROPERTY.

- THERE ARE NO VISIBLE EVIDENCE OF CEMETERIES, GRAVE SITES OR BURIAL GROUNDS LOCATED ON THE PROPERTY.

- ITEM # 8 FROM TABLE A
ALL SUBSTANTIAL FEATURES OBSERVED ON THE PROPERTY HAVE BEEN PLOTTED.

- ITEM # 9 FROM TABLE A
THERE ARE 38 STRIPED PARKING SPACES ON THE PROPERTY.

- ITEM # 11 FROM TABLE A
ALL VISIBLE UTILITIES ARE PLOTTED.

- ITEM # 16 FROM TABLE A
AT THE TIME OF THIS SURVEY, NO VISIBLE RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS WERE NOTED.

GREATER ILLINOIS TITLE COMPANY

COMMITMENT NO.: **51003389**

EFFECTIVE DATE: **DECEMBER 14, 2020**

ITEMS CORRESPONDING TO SCHEDULE B:

ITEMS 1 - 8.
NOT SURVEY RELATED.

ITEM 9.
TERMS, PROVISIONS AND CONDITIONS RELATING TO THE EASEMENT DESCRIBED AS PARCEL 2 CONTAINED IN THE INSTRUMENT CREATING SUCH EASEMENT.
(NOT PLOTTABLE)

ITEM 10.
RIGHTS OF THE ADJOINING OWNER AND OWNERS TO THE CONCURRENT USE OF THE EASEMENT DESCRIBED AS PARCEL 2.
(NOT PLOTTABLE)

ITEM 11.
TERMS, PROVISIONS AND CONDITIONS CONTAINED IN THE DOCUMENT RECORDED AUGUST 3, 2000 AS NO. 2000K061696, RELATING TO RECIPROCAL EASEMENT AND OPERATION AGREEMENT.
(NOT PLOTTABLE)

ITEM 12.
NOT SURVEY RELATED.

ITEM 13.
EASEMENT AS TO "OTR" AND DALAN ST. CHARLES RECORDED JULY 26 2000 AS DOCUMENT NO. 2000K058745 , AFFECTS LOT 1 AND EASEMENT PARCEL 2.
(NOT PLOTTABLE)

ITEM 14.
EASEMENTS FOR PUBLIC UTILITIES, INCLUDING SEWER AND WATER AS SHOWN ON THE PLAT OF UNIT NO. 1, ST. CHARLES ILLINOIS INDUSTRIAL DEVELOPMENT, AND SHOWN ON PLAT DOCUMENT 2000K046916 RECORDED JUNE 13, 2000 AFFECTS THE NORTHERLY 10 FEET OF LOT 1, LIMITED TO AREA AS SHOWN ON SURVEY OF CRAIG R. KNOCHE AND ASSOCIATES NUMBER OF SURVEY 6-032LT DATE OF SURVEY AUGUST 9 2006

BUILDING SETBACK LINES SHOWN ON PLAT OF SUBDIVISION DOCUMENT 2000K046916 AFFECTS NORTH 50 FEET AND WEST 50 FEET AND SOUTH 40 FEET LOT 1, LIMITED TO AREA AS SHOWN ON SURVEY OF CRAIG R. KNOCHE AND ASSOCIATES NUMBER OF SURVEY 6-032LT DATE OF SURVEY AUGUST 9 2006

BLANKET EASEMENT TO CITY OF ST. CHARLES AND PUBLIC UTILITIES ON THE PLAT OF SUBDIVISION DOCUMENT 2000K046916 AFFECTS ALL EXCEPT WHERE BUILDINGS ARE LOCATED AFFECTS ALL LOTS

INGRESS AND EGRESS EASEMENT ON PLAT OF SUBDIVISION DOCUMENT 2000K046916 AND PROVISIONS THEREON AFFECTS PART OF LOT 1 SEE PLAT, LIMITED TO AREA AS SHOWN ON SURVEY OF CRAIG R. KNOCHE AND ASSOCIATES NUMBER OF SURVEY 6-032LT DATE OF SURVEY AUGUST 9 2006

PROVISIONS AS TO LIMITED ACCESS TO KIRK ROAD ON THE PLAT OF SUBDIVISION DOCUMENT 2000K046916 AFFECTS LOT 1, LIMITED TO AREA AS SHOWN ON SURVEY OF CRAIG R. KNOCHE AND ASSOCIATES NUMBER OF SURVEY 6-032LT DATE OF SURVEY AUGUST 9 2006

LEGEND AS TO LIMITED ACCESS TO ILLINOIS ROUTE 64 ON THE PLAT OF SUBDIVISION DOCUMENT 2000K046916 AFFECTS LOT 1
(PLOTTED ON THE DRAWING)

ITEM 15.
COVENANTS AND RESTRICTIONS (BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW) CONTAINED IN THE DOCUMENT RECORDED AS NO. 2000K069912, RELATING TO UNDERGROUND WATER SPRINKLER SYSTEM.
(NOT PLOTTABLE)

ITEM 16.
BUILDING SETBACK LINE OF 50 FEET (FROM THE NORTH LOT LINE) AS SHOWN ON THE PLAT OF SUBDIVISION.
(PLOTTED ON THE DRAWING)

ITEM 17.
BLANKET EASEMENT TO CITY OF ST. CHARLES AND PUBLIC UTILITIES ON THE PLAT OF SUBDIVISION DOCUMENT 2000K046916 AFFECTS ALL EXCEPT WHERE BUILDINGS ARE LOCATED AFFECTS ALL LOTS.
(NOT PLOTTABLE)

ITEM 18.
LEGEND AS TO LIMITED ACCESS TO ILLINOIS ROUTE 64 ON THE PLAT OF SUBDIVISION DOCUMENT 2000K046916
(NOT PLOTTABLE)

CITY OF ST. CHARLES, ILLINOIS
TWO EAST MAIN STREET ST. CHARLES, IL 60174-1984
PHONE: 630-377-4400
FAX: 630-377-4440 - WWW.STCHARLESIL.GOVS

ZONING REQUIREMENTS:

BR - REGIONAL BUSINESS

PARKING SPACE TABLE	
TYPE OF SPACE	TOTAL EXISTING
REGULAR	35
HANDICAP	3
TOTAL	38

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

I, ROY G. LAWNICZAK, A REGISTERED LAND SURVEYOR, LICENSE NO. 35-2290, IN AND FOR THE STATE OF ILLINOIS AND LEGALLY DOING BUSINESS IN COOK COUNTY, DO HEREBY CERTIFY TO:

- **ST. CHARLES HOLDING CORP., A NEW YORK CORPORATION**

- **HEALTHWAY SERVICES OF WEST ILLINOIS, LLC**

- **GREATER ILLINOIS TITLE COMPANY**

AND TO THEIR SUCCESSORS AND ASSIGNS, THAT:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA / NSPS LAND TITLE SURVEYS JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 7(b)(1),7(c), 8, 9, 13 AND 16 OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON JANUARY 16, 2021.

DATE OF PLAT: JANUARY 19, 2021.

BY: _____
ROY G. LAWNICZAK, REGISTERED ILLINOIS LAND SURVEYOR NO. 35-2290
LICENSE EXPIRES: NOVEMBER 30, 2022
PROFESSIONAL DESIGN FIRM LICENSE NO.: 184-004576
LICENSE EXPIRES: APRIL 30, 2021

ROY G. LAWNICZAK 35-2290 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS CHICAGO, IL

FLOOD STATEMENT:
THE PROPERTY DESCRIBED IN THIS SURVEY DOES NOT LIE WITHIN FLOOD HAZARD AREAS IN ACCORDANCE WITH ANY MAPS ENTITLED "FLOOD INSURANCE RATE MAP" OR "FLOOD HAZARD FLOODWAY BOUNDARY MAP." "FLOOD HAZARD BOUNDARY MAP" OR "FLOOD BOUNDARY AND FLOODWAY MAP" PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY OR A FLOOD HAZARD BOUNDARY MAP PUBLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, AS SHOWN ON FLOOD INSURANCE MAP:

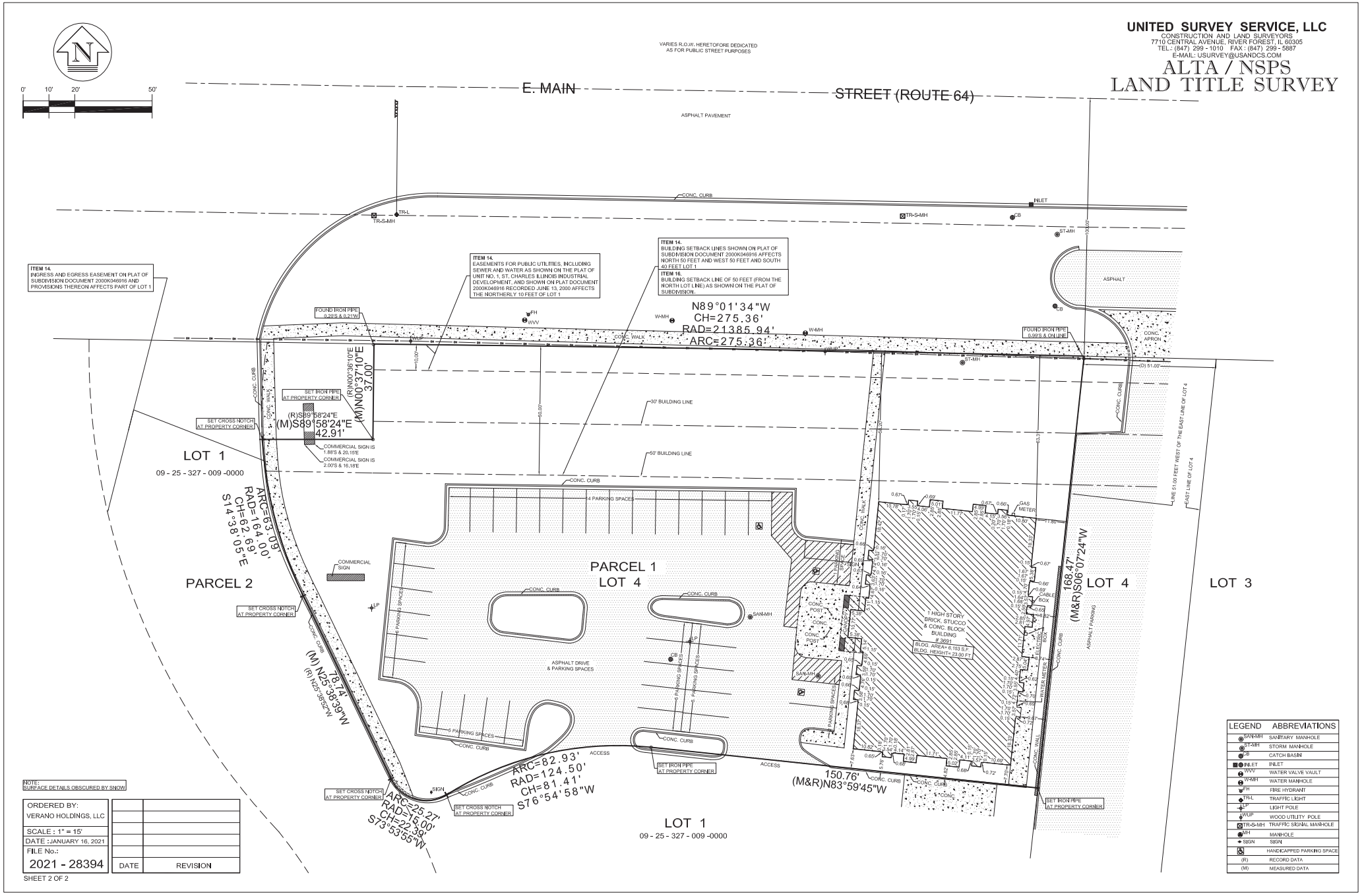
COMMUNITY NUMBER PANEL: NON-PRINTED
MAP NUMBER: **17089C0270H.**

ORDERED BY: VERANO HOLDINGS, LLC		
SCALE : 1" = 15'		
DATE :JANUARY 16, 2021		
FILE No.: 2021 - 28394	DATE	REVISION

SHEET 1 OF 2

UNITED SURVEY SERVICE, LLC
CONSTRUCTION AND LAND SURVEYORS
7710 CENTRAL AVENUE, RIVER FOREST, IL 60305
TEL.: (847) 299 - 1010 FAX : (847) 299 - 5887
E-MAIL: USURVEY@USANDCS.COM

ALTA / NSPS LAND TITLE SURVEY

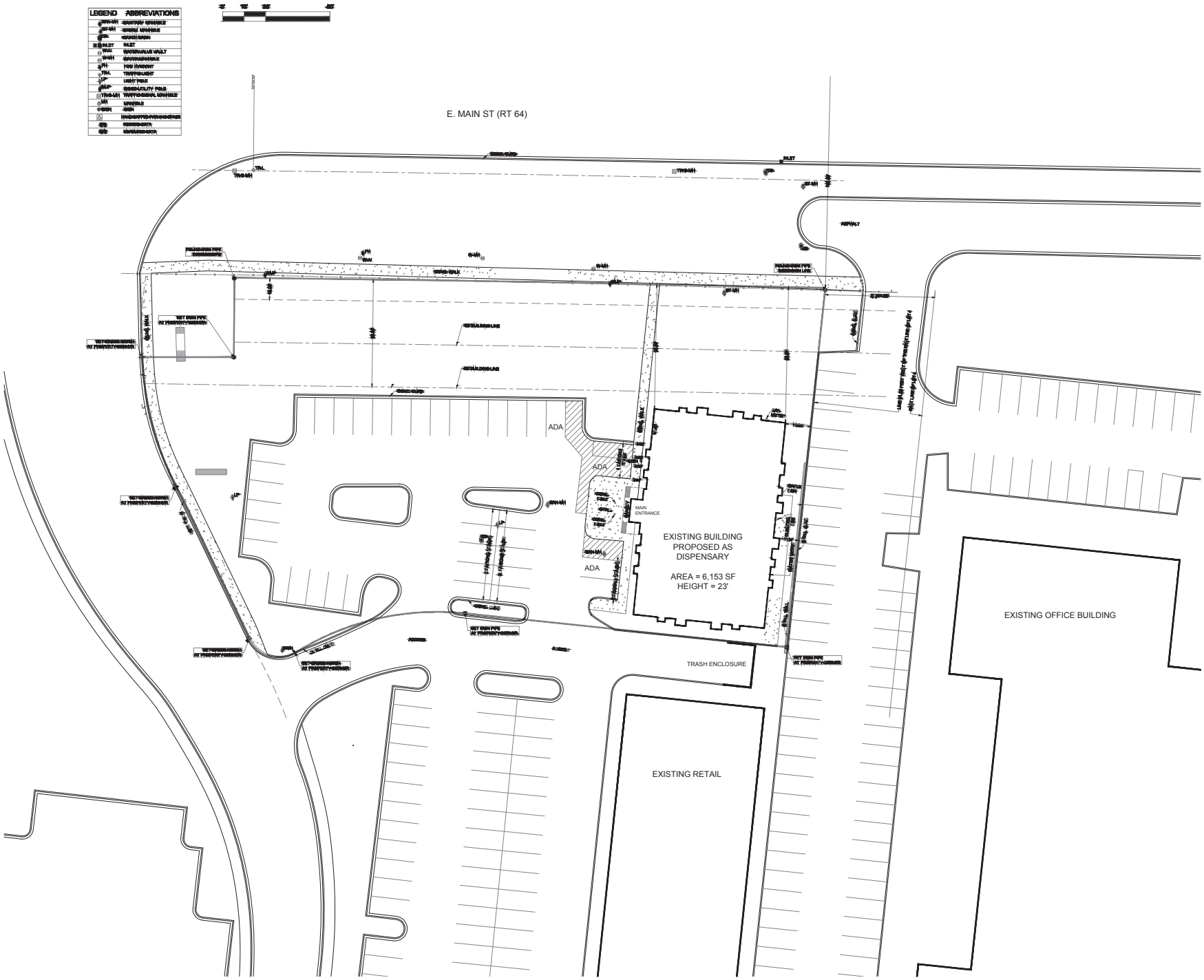


NOTE:
SURFACE DETAILS OBSCURED BY SNOW

ORDERED BY: VERANO HOLDINGS, LLC		
SCALE : 1" = 15'		
DATE :JANUARY 16, 2021		
FILE No.: 2021 - 28394	DATE	REVISION

SHEET 2 OF 2

LEGEND	ABBREVIATIONS
SAN-MH	SANITARY MANHOLE
ST-MH	STORM MANHOLE
CB	CATCH BASIN
INLET	INLET
WVV	WATER VALVE VAULT
W-MH	WATER MANHOLE
FH	FIRE HYDRANT
TR-L	TRAFFIC LIGHT
LP	LIGHT POLE
WUP	WOOD UTILITY POLE
TR-S-MH	TRAFFIC SIGNAL MANHOLE
MH	MANHOLE
SIGN	SIGN
	HANDICAPPED PARKING SPACE
(R)	RECORD DATA
(M)	MEASURED DATA



ADDRESS: 3691 E MAIN ST, ST. CHARLES, IL 60174

DRAWING: SITE PLAN

PROJECT: CANNABIS DISPENSARY

ZONING: -

INTENT: -

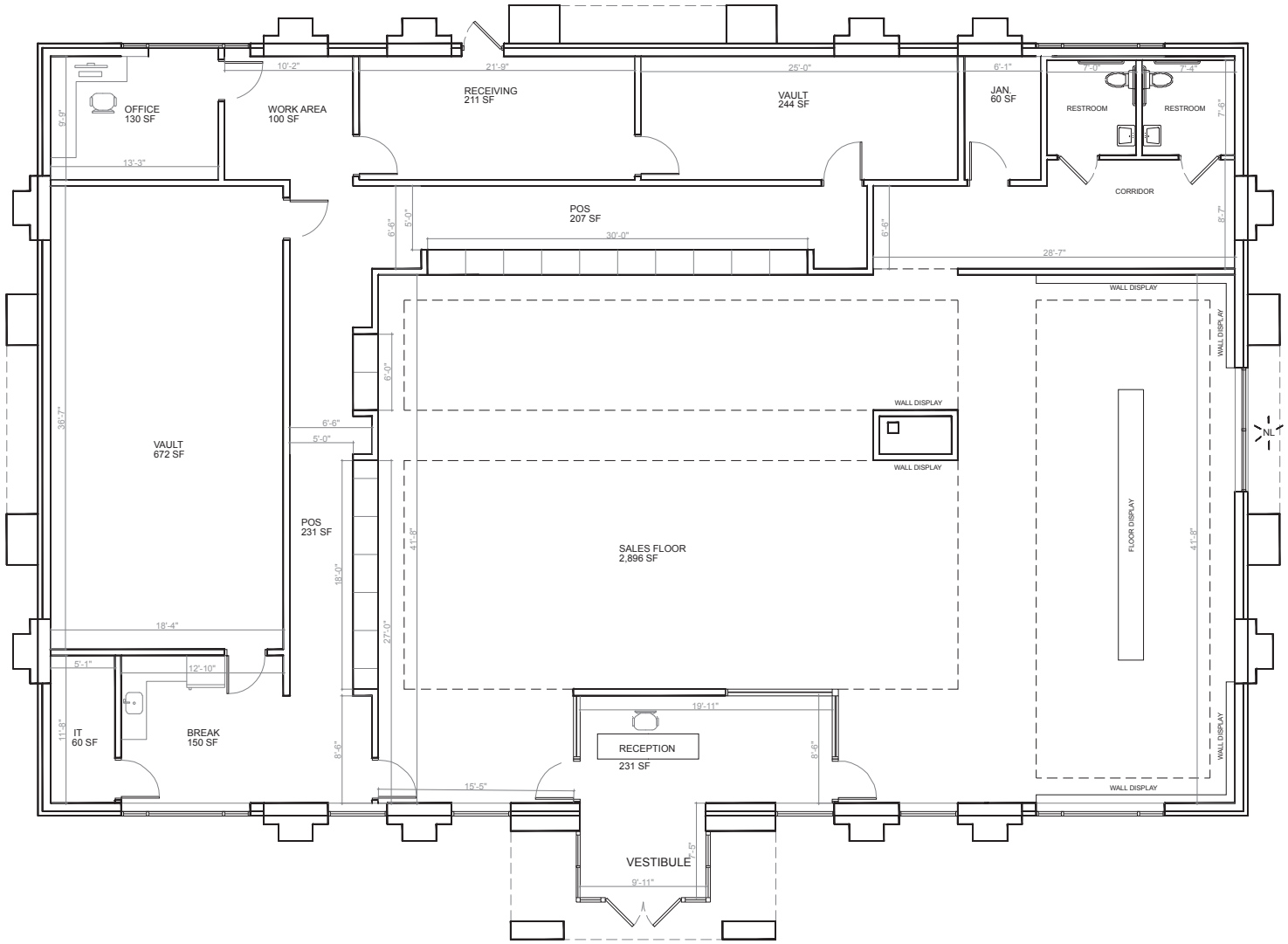
VERSION: 1

ORIGINAL DATE: 1/21/2021

REVISION DATE: 1/21/2021

RENOVATION

S 1.1



ADDRESS: MAIN ST, ST.CHARLES, IL

DRAWING: PROPOSED FLOOR PLAN

PROJECT: CANNABIS DISPENSARY

CLIENT: –

INTENT: --

VERSION: 1

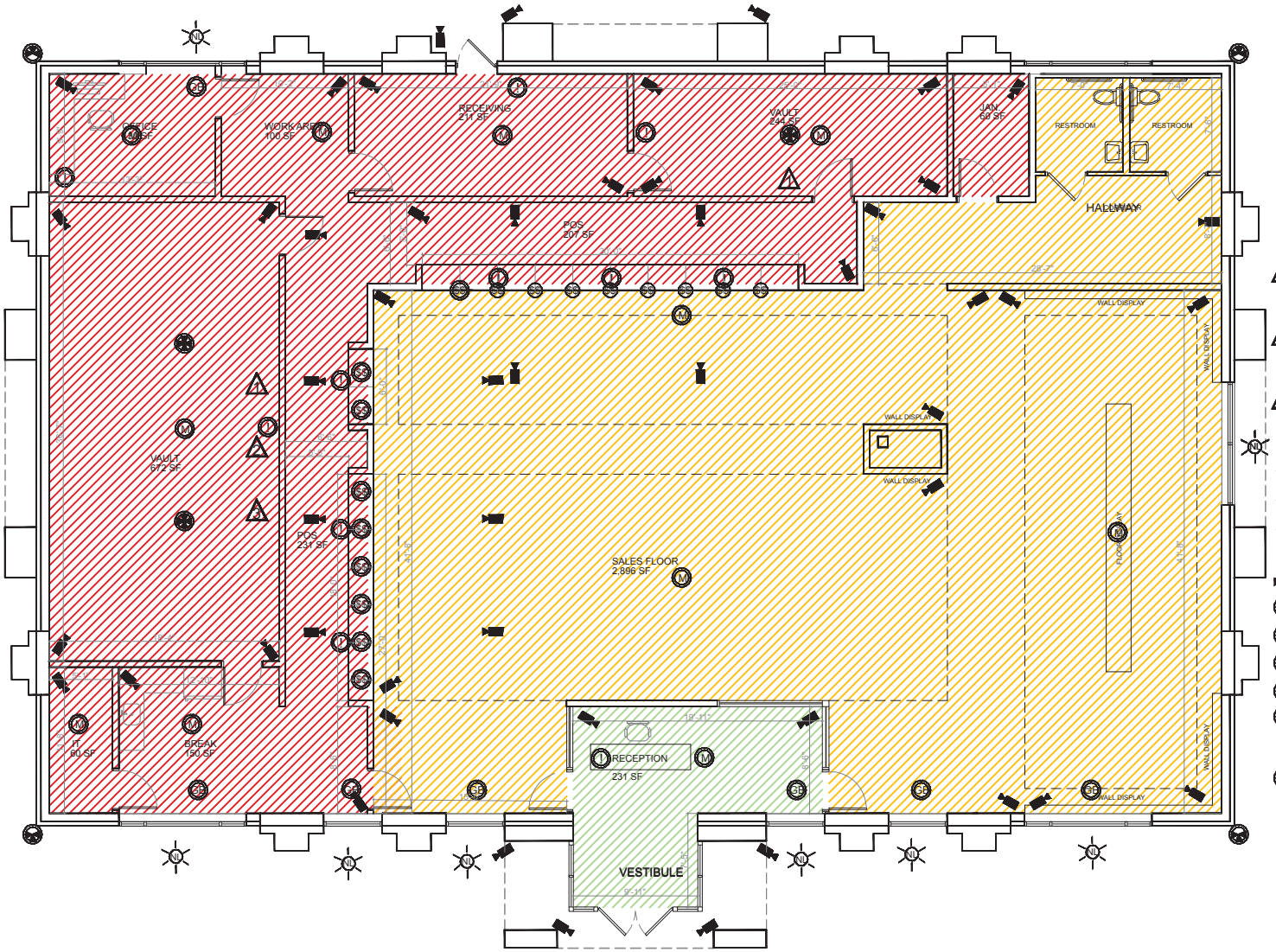
ORIGINAL DATE: 1/15/2021

REVISION DATE: 1/15/2021

--

RENOVATION

A 1.1



NATURAL LIGHTING
WINDOW WALL

ALL PRODUCT IS STORED IN THE VAULT
DURING NON-BUSINESS HOURS
VAULT DIMENSIONS ARE LABELED ON FLOOR PLAN.
VAULT AREA IS 266 SF

PRODUCT IS STORED IN THE FULFILLMENT
AREA DURING BUSINESS HOURS IN
LOCKING ROLLING CABINETS/CARTS. THESE ARE ROLLED
INTO THE VAULT FOR NON BUSINESS HOURS STORAGE.

LOCATION OF CASH SAFE IN VAULT
AMSEC DROP SAFE
50"W x 110"H x 20"D
ELECTRONIC PIN ACCESS

PUBLIC ACCESS AREAS

LIMITED ACCESS AREAS

RESTRICTED ACCESS AREAS

DIRECTIONAL CAMERA

360 CEILING MOUNTED CAMERA

EXTERIOR MULTI-LENS CAMERA

PANIC BUTTON

GLASS BREAK SENSOR

MOTION SENSOR

POINT OF SALE STATION

ADDRESS: MAIN ST, ST.CHARLES, IL

DRAWING: PROPOSED SECURITY PLAN

PROJECT: CANNABIS DISPENSARY

CLIENT: –

IN'TENT: --

VERSION: 1

ORIGINAL DATE: 1/15/2021

REVISION DATE: 1/15/2021

--

RENOVATION

A 1.1

Hampton, Lenzini and Renwick, Inc.
Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hlrengineering.com

February 25, 2021

Mr. Russel Colby
Assistant Director of Community and Economic Development
City of St. Charles
2 E. Main Street
St. Charles, IL 60174

Re: Zen Leaf Dispensary
3691 E. Main Street
Traffic Study Report

Dear Mr. Colby:

Per your request we reviewed the Traffic Study submitted by Gewalt Hamilton Associates, Inc. (GHA) on January 28, 2021 for the referenced project. We offer the following comments and recommendations for your consideration:

Traffic Study Comments

1. The site address is different on Page 1 (3691 E Main St) and Page 18 (3619 E Main St).

2. In Part II Kirk Road section, the report refers to the AADT coming from year 2016. IDOT gettingaroundillinois.com shows these values are from 2018.

3. Exhibit 3 Existing Traffic

    a. The AADT's on the exhibit (Kirk Rd south of Main St and Main St east of Kirk Rd) do not match the AADT's stated in the report or on gettingaroundillinois.com as mentioned.

4. Was existing site traffic at the current Zen Leaf location (3714 Illinois Ave) counted/considered? Because there is not a lot of data for Land Use 882, these values can be compared/calibrated using current site volumes.

5. Capacity Analysis

    a. Were the signalized intersections of Kirk Road at Main St. and 38th Street at Main St. considered for capacity analysis? These are main signalized intersections within the project area.

    b. Table 5 Level of Service Summary – Total Traffic is labeled as year 2029. Should this be 2026?

    c. In the Capacity and Queue Analysis results in the Appendix, for Main St. Commons/The Quad & Main St (IL 64), 2026 Total, Weekday AM, the SBT traffic volume does not match what is shown on Exhibit 7.

6. Parking Demand Requirements

    a. The report text states 15 parking spaces are required when referring to Table 6 and Table 6 shows 25 parking spaces are required.

7. Jared The Galleria of Jewelry is misspelled a couple times throughout the report (pg. 9, pg. 18).

If you have any questions or need additional information regarding the above comments, please contact HLR at 847-697-6700.

Yours truly,

HAMPTON, LENZINI AND RENWICK, INC.

By: Callie Castro

Callie Castro, PE, PTOE
Traffic Engineer

Amy McSwane, PE, PTOE
Preliminary/Traffic Engineering Manager

CONSULTING ENGINEERS

BLA, Inc.
333 Pierce Road, Suite 200 ▪ Itasca, IL 60143
630 438 6400 ▪ FAX 630 438 6444 ▪ www.bollingerlach.com

March 1, 2021

Mr. Russel Colby
Assistant Director of Community and Economic Development
City of St. Charles
2 E. Main Street
St. Charles, Illinois 60174

RE: Zen Leaf Dispensary
3691 E. Main Street
St. Charles, Illinois
Project No.: 180-000

Dear Mr. Colby:

Per the Hampton, Lenzini and Renwick, Inc. (HLR) memorandum dated February 25, 2021 in reference to the above project, we have the following responses to your comments to complete the review process.

Traffic Study Comments:

1. **Comment:** The site address is different on Page 1 (3691 E Main St) and Page 18 (3619 E Main St).
   Response: The address on page 18 of the Traffic Impact Study (TIS) has been revised, accordingly.

2. **Comment:** In Part II Kirk Road section, the report refers to the AADT coming from year 2016. IDOT gettingaroundillinois.com shows these values are from 2018.
   Response: The TIS has been revised to include the correct date for the AADT, year 2018.

3. **Comment:** Exhibit 3 Existing Traffic.
   a. The AADT's on the exhibit (Kirk Rd south of Main St east of Kirk Rd) do not match the AADT's stated in the report or on gettingaroundillinois.com as mentioned.
   Response: Exhibit 3 has been revised, accordingly.

4. **Comment:** Was existing site traffic at the current Zen Leaf location (3714 Illinois Ave) counted/considered? Because there is not a lot of data for Land Use 882, these values can be compared/calibrated using current site volumes.
   Response: The TIS has been revised to include historical data from the existing Zen Leaf location in St. Charles.

5. **Comment:** Capacity Analysis
    a. Where the signalized intersections of Kirk Road at Main St. and 38th Street at Main St. considered for capacity analysis? These are main signalized intersections within the project area.
    b. Table 5 Level of Service Summary – Total Traffic is labeled as year 2029. Should this be 2026?
    c. In the Capacity and Queue Analysis results in the Appendix, for Main ST. Commons/The Quad & Main St (IL 64), 2026 Total, Weekday AM, the SBT traffic volume does not match what is shown on Exhibit 7.

   Response: a. Based on the trip generation and traffic assignment, as summarized in Tables 2 and 3 and illustrated on Exhibit 6a, approximately 55% of the site traffic will travel through the Kirk Road and Main Street intersection and 30% through the Main Street and 38th Avenue intersection. Even without discounting for the existing Zen Leaf cannabis dispensary trips or the former Jared jewelry store, the proposed use represents only approximately 400 trips through the Main Street and 38th Avenue intersection daily and between approximately 15 to 55 on a peak hour basis. Similarly, through the Main Street and Kirk Road intersection approximately 700 trips daily and between approximately 25 to 100 trips during the peak hours. Accordingly, based on the IDOT volumes, these increases represent approximately a 1 to 2% increase over existing conditions or less than 2 vehicles per minute. Furthermore, based on the existing signal cycle lengths of 130, 150 and 120 seconds during the weekday morning, weekday evening and midday peak periods, respectively, these increases represent approximately 1 to 3 vehicles per cycle length at Main Street and Kirk Road and 1 to 2 vehicles per cycle length at Main Street and 38th Avenue.

   These increases will not materially impact the overall intersection operations and can be accommodated within the existing roadway geometrics and signal timings. Therefore, the study area limits were focused on the intersections that would have the greatest impact from the proposed development traffic: Kirk Road and Main Street at the shopping center access driveways.

   b. Table 5 has been updated to include the correct design year (2026).

   c. The capacity and queue analysis has been revised, accordingly, to include the correct value for the SBT movement during the weekday AM peak hour under 2026 Total traffic conditions. Table 5 has been also revised to reflect the updated results.

6. **Comment:** Parking Demand Requirements
    a. The report text states 15 parking spaces are required when referring to Table 6 and Table 6 shows 25 parking spaces are required.

   Response: The report text has been revised, accordingly, to report the correct requirement of 25 spaces.

7. **Comment:** Jared the Galleria of Jewelry is misspelled a couple of times throughout the report (pg. 9, pg. 18).
   Response: The TIS has been revised to include the correct spelling.

If you have any questions, please feel free to contact BLA at (630) 438-6400.

Sincerely,

BOLLINGER, LACH & ASSOCIATES, INC.

Lynn M. Means

Lynn M. Means, P.E., PTOE
Senior Transportation Engineer

Traffic Impact Study

Zen Leaf Cannabis Dispensary Development

St. Charles, Illinois

January 28, 2021

Updated March 1, 2021

BLA, Inc.

Prepared by:
Lynn M. Means, P.E., PTOE
Senior Transportation Engineer

GHA

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact Study for the proposed adult-use cannabis dispensary. The site is located at 3691 E. Main Street (IL Route 64) in St. Charles, Illinois. The site is currently vacant, formerly containing Jared The Galleria of Jewelry store and is an outlot to the Main Street Commons Shopping Center. Access to the site will be maintained via the existing Shopping Center driveways: a signalized full access on Main Street and a right-in/right-out (RIRO) access on Kirk Road. The Shopping Center also provides two (back/service) access driveways on Illinois Avenue, as well as a cross-access to the commercial uses to the east, providing access to 38th Avenue.

The following summarizes our findings and provides various recommendations for your consideration. *Appendices* referenced are in the Technical Addendum at the end of this document.

Part II. Background Information

Site Location Map and Roadway Inventory

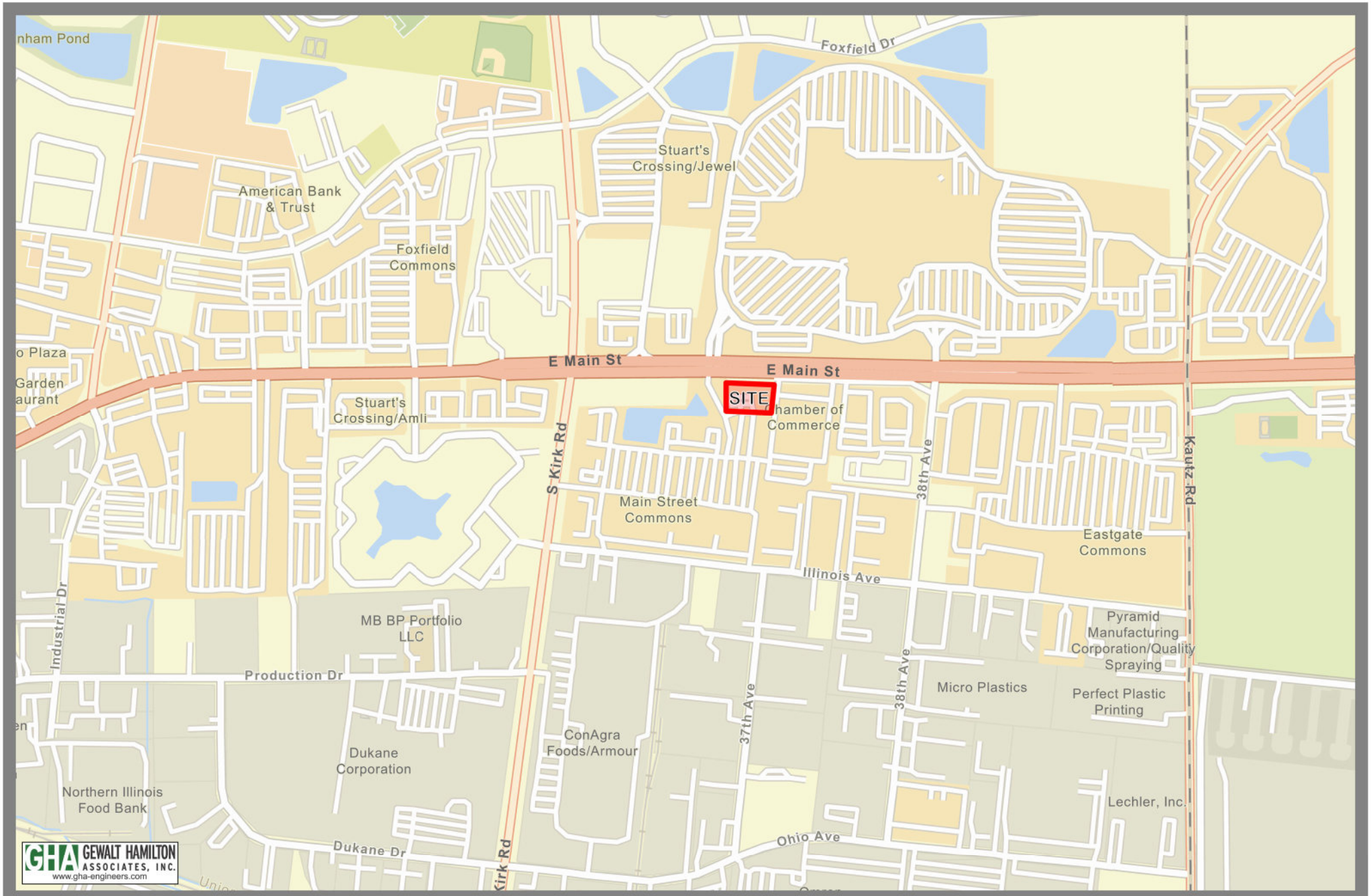
Exhibit 1 provides a site location map. The existing traffic operations in the site area are illustrated on ***Exhibit 2***. ***Appendix A*** provides a photo inventory of the site vicinity. Pertinent comments to the adjacent roadways include:

<u>IL Route 64 (Main Street)</u>

- Main Street is an east-west principal arterial roadway under the jurisdiction of the Illinois Department of Transportation (IDOT), with a posted speed limit of 45 miles per hour (mph) in the site vicinity. The posted speed limit decreases to 35 mph west of Kirk Road.
- Main Street is designated as a Strategic Regional Arterial (SRA) route. SRA routes are designed to carry higher traffic volumes at higher travel speeds through access control and traffic signal installation / spacing. It is also designated as a Class II Truck route.
- At its signalized intersection with the Main Street Commons Shopping Center / The Quad (formerly Charlestowne Mall), Main Street provides dual left-turn lanes, a through and a shared through/right-turn lane in the eastbound direction and a left-turn lane, two through lanes and a right-turn lane in the westbound direction. The *Main Street Commons Shopping Center* northbound approach and *the Quad* southbound approach both provide a separate left-, through and right-turn lane.
- The annual average daily traffic (AADT) on Main Street is 29,500 vehicles with 2,150 trucks (7.3%), west of Kirk Road, and 32,900 vehicles with 3,550 trucks (10.8%), east of Main Street (year 2019).

<u>Kirk Road</u>

- Kirk Road is a north south principal arterial roadway under the jurisdiction of the Kane County Division of Transportation (KDOT).
- It is also designated as a SRA route. Kirk Road is a designated Class II Truck route, south of Main Street.
- At its unsignalized "T" intersection with the Main Street Commons Shopping Center, Kirk Road provides two through lanes in both the northbound and southbound directions, as well as a right-turn lane in the northbound direction. The *Main Street Commons Shopping Center* westbound approach is restricted to right-out only via a channelizing island.
- It has a posted speed limit of 40 mph.
- The AADT on Kirk Road is 24,800 vehicles with 2,250 trucks (9.1%), south of Main Street, and 18,800 vehicles with 1,600 trucks (8.5%), north of Main Street, (year 2018).



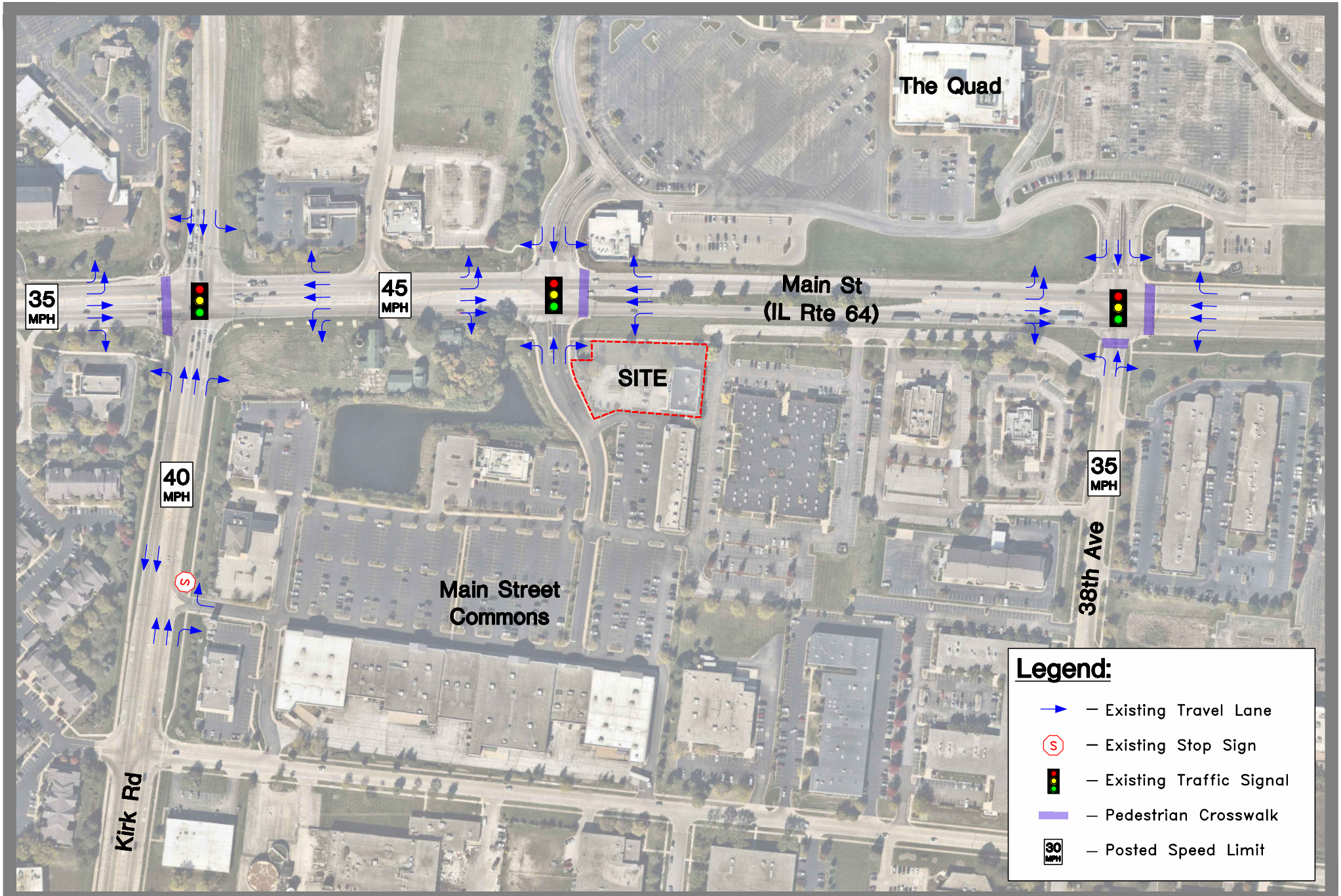
N

1 inch = 1,000 Feet

Exhibit 1 - Location Map

Proposed Cannabis Dispensary Development
3691 E. Main Street - St. Charles, Illinois

Map Center: 88.27315°W 41.91942°N



GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 2
Existing Traffic Operations

Pedestrian Facilities

- In the site vicinity, sidewalks are generally provided along both sides of Kirk Road and the south side of Main Street, as well connections to/from the Main Street Commons Shopping Center. *Note: There is no sidewalk provided on the south side of Main Street between Kirk Road and the Main Street Commons signalized access.*
- Push-button activated, pedestrian signals with countdown timers are provided to cross the east leg of the signalized intersection of Main Street and the Main Street Commons Shopping Center / The Quad West Access. Standard style crosswalks are also striped on the east leg of this intersection.

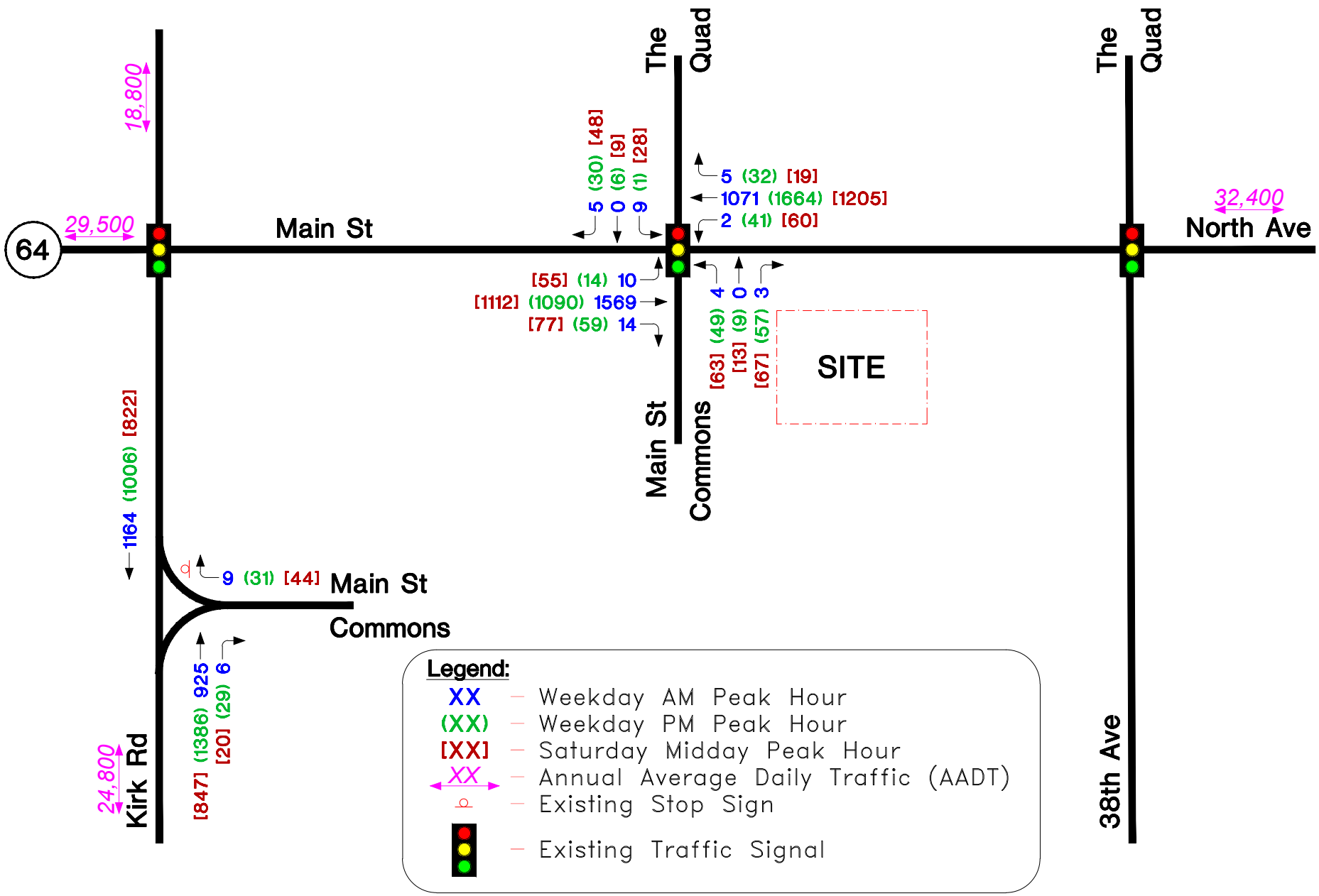
Existing Traffic

Peak period traffic turning movement and pedestrian counts were conducted by GHA on Saturday, January 16, 2021 from 11:00 AM to 1:00 PM and on Tuesday, January 19, 2021 from 7:00 to 9:00 and 4:00 to 6:00 PM. ***Exhibit 3*** summarizes the existing weekday morning and afternoon peak hour traffic volumes.

The observed weekday morning peak hour occurred from 7:15 to 8:15 AM, the weekday evening peak hour generally occurred from 5:00 to 6:00 PM and the Saturday midday peak hour, in general, occurred from 11:45 AM to 12:45 PM. However, the peak hour for each individual intersection was used in the analysis to provide a conservative analysis scenario.

Exhibit 3 also provides the AADT (24-hour volume) along Main Street and Kirk Road as published by IDOT on their website www.gettingaroundillinois.com. Summaries of the existing GHA and IDOT traffic counts can be found in ***Appendix B***.

Note: The 2021 intersection volumes were approximately 35 percent lower than historical IDOT roadway segment peak hour volumes and GHA intersection turning movement volumes during the weekday morning peak, approximately 25 percent during the weekday evening peak and approximately 20 percent lower during the Saturday midday peak. Accordingly, to provide a conservative analysis scenario, the 2021 peak hour volumes were increased by 35 percent during the weekday morning peak, 25 percent during the weekday evening peak and 20 percent during the Saturday midday peak to account for abnormal traffic conditions within the study area associated with school and business closures due to COVID-19.



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Not to Scale

Exhibit 3
Existing Traffic

Sources: 1) GHA January, 2021 2) IDOT 2018/2019 AADT

No-Build Traffic

Traffic growth in the area is a function of expected land development in the region. Future traffic volume conditions were developed for the year 2026, build-out year of the development (year 2021) plus five years. Based on a review of historical traffic volumes and the Chicago Metropolitan Agency for Planning (CMAP) 2050 projections (see ***Appendix C***), and recent studies performed in the area, traffic volumes along the roadways surrounding the site are assumed to experience an overall annual, compounded growth rate of approximately 0.18 to 0.81 percent; however, to provide a conservative analysis scenario, an annual compounded growth rate of 1.0 percent was assumed (total growth of approximately 5.1 percent over five years).

Second, any planned or approved specific developments in the area that would generate a significant volume of traffic on the study area roadways were included. The Pride of Kane County gasoline station is planned for the southeast corner of Main Street and Kirk Road. It includes 16 vehicle fueling positions, a 3,600 square-foot convenience store and a tunnel car wash. To estimate the volume of traffic to be generated by the development, GHA referenced the Traffic Study prepared by Eriksson Engineering Associates, dated June 25, 2020 (see ***Appendix D***).

In addition, approximately 60,000 square-feet of retail space is currently vacant within the existing Main Street Commons Shopping Center. To estimate the volume of traffic to be generated by this development, rates published by the Institute of Transportation Engineers (ITE) in the 10th Edition of the Manual *Trip Generation* were used and assigned to the roadway network (see ***Appendix D***). *Note: Not all vehicle trips expected to be generated by the retail use represent new trips on the study area roadway system. Studies have shown that for similar retail developments, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE Trip Generation Handbook, 3rd Edition, the average pass-by trip percentage for retail uses is between 26 and 34 percent. However, to provide a conservative analysis scenario, a 20 percent reduction for pass-by trips was applied.*

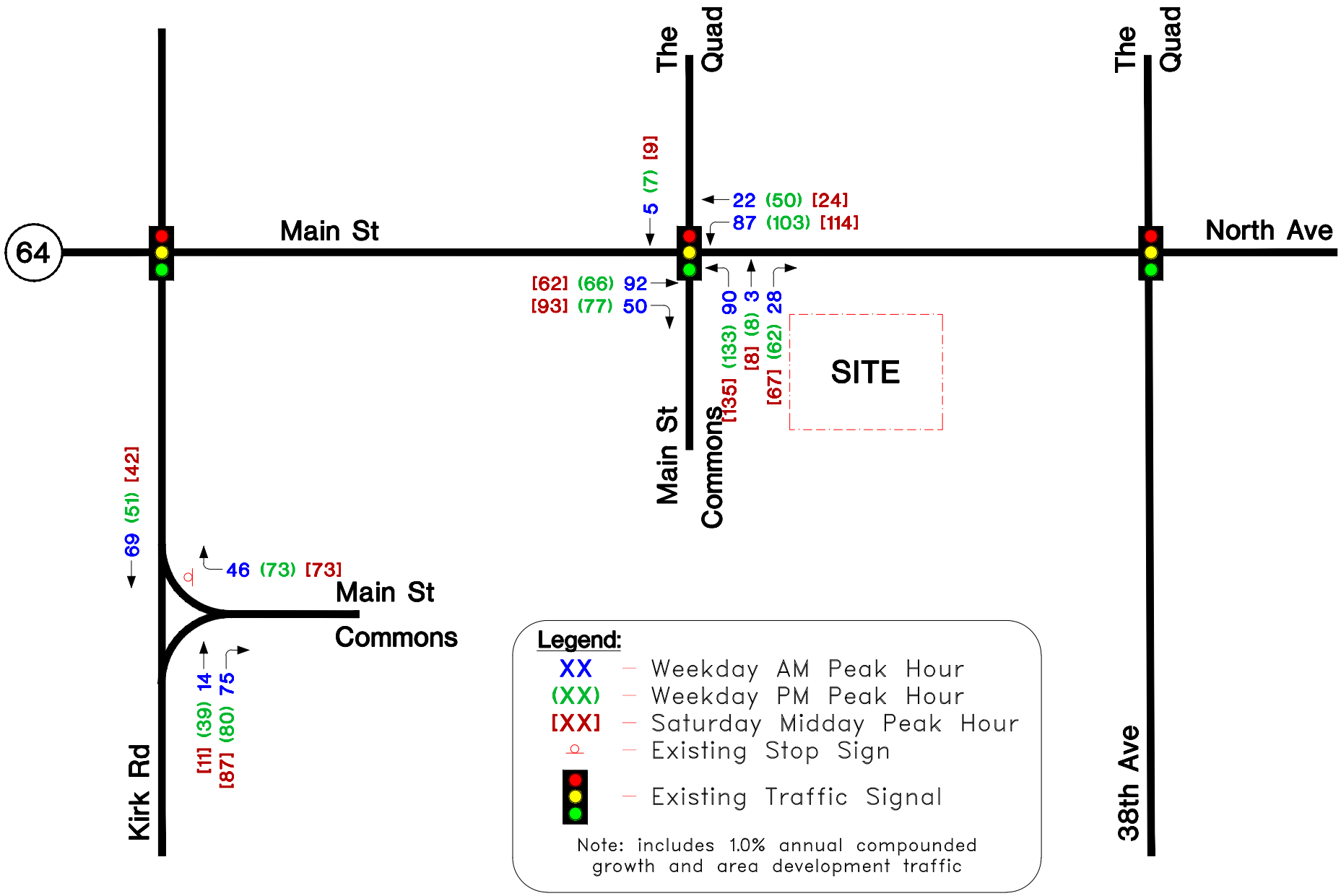
The number of vehicle trips anticipated during the weekday morning, weekday evening and Saturday midday peak hours for the full occupancy of the Main Street Shopping Center are summarized in ***Table 1***.

Table 1: Estimated Trip Generation – Main Street Shopping Center Fully Occupancy (Background Traffic)

Land Use / Size	ITE Land Use Code	Weekday						Saturday		
		AM Peak Hr[1]			PM Peak Hr[2]			Peak Hr[3]		
		In	Out	Total	In	Out	Total	In	Out	Total
Retail / 60,235 SF	820	113	69	182	179	194	373	216	199	415
less pass-by trips (20%)		*-18*	*-18*	*-36*	*-37*	*-37*	*-74*	*-42*	*-42*	*-84*
Total		**95**	**51**	**146**	**142**	**157**	**299**	**174**	**157**	**331**

[1] One hour between 7:00 and 9:00 AM.
[2] One hour between 4:00 and 6:00 PM.
[3] The hour with the highest volume of traffic (combined entering & exiting); may occur in the AM or PM and typically occurs during the Midday (11:00 AM-2:00 PM).

Exhibit 4 illustrates the background development traffic assignment (Pride of Kane County service station and full occupancy of vacant space in Main Street Commons Shopping Center), which also includes the general (1.0 percent compounded) annual growth. Background development and Existing traffic (see ***Exhibits 4*** **and** ***3***, respectively) were combined to develop the 2026 No-Build Traffic, which is illustrated on ***Exhibit 5***.



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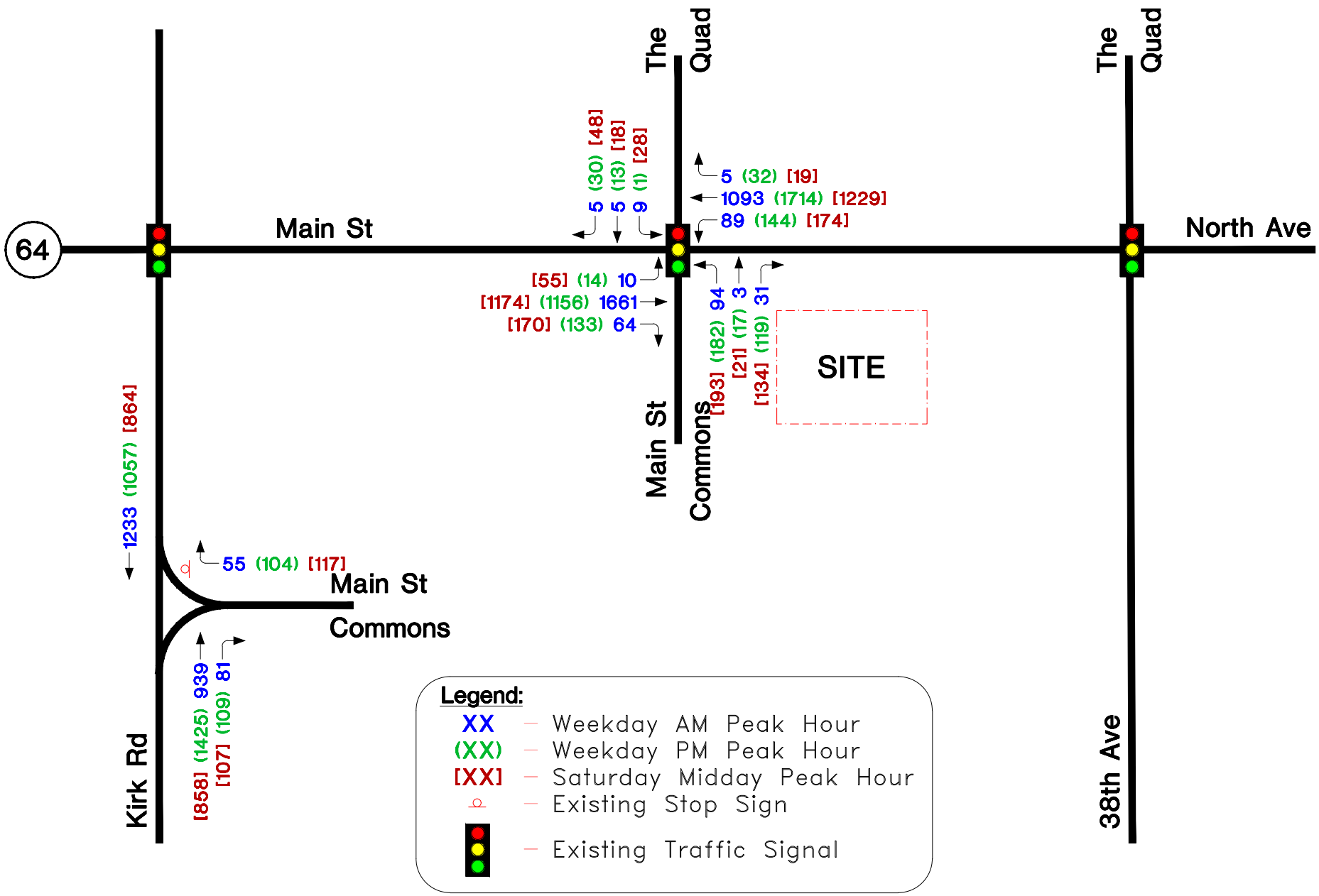
Not to Scale

Exhibit 4
Background Traffic



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Not to Scale

Exhibit 5
2026 No-Build Traffic

Part III. Project Traffic Characteristics

Future Site Characteristics

Proposed Development Plan

The proposed site plan is provided in ***Appendix E***. As proposed, an adult-use cannabis dispensary will occupy an approximately 6,150 square-foot building, which is an outlot to the existing Main Street Commons Shopping Center. This space is currently vacant, formerly occupied by the Jared Galleria of Jewelry store. The site is served by a total of 38 parking spaces, including 3 accessible spaces.

Access to the site will be maintained via the Main Street Commons Shopping Center: a signalized full access on Main Street and a right-in/right-out (RIRO) access on Kirk Road. The Shopping Center also provides two (back/service) access driveways on Illinois Avenue, as well as a cross-access to the commercial uses to the east, providing access to 38th Avenue.

Proposed Operational Characteristics

- The anticipated hours of operation are Monday through Thursday from 9:00 AM to 9:00 PM; Friday and Saturday from 9:00AM to 10:00PM and from 10:00 AM to 6:00 PM on Sunday.
- The development is anticipated to be served by a total of 50 employees (full and part time), with a maximum of 15 employees present during peak operations.
- The development will replace the existing cannabis dispensary located at 3714 Illinois Avenue – Unit C in St. Charles, serving both medicinal and recreational customers.
- Customers are anticipated to spend, on average, 5 minutes in the cannabis dispensary.
- On average, approximately 20 percent or more of all purchases are pre-ordered on-line or via a mobile phone app. This helps to save time spent inside the store when the order is picked-up. It is anticipated that this percentage will increase over time.
- On average, the proposed use with serve approximately 750 customers on a daily basis.
- The proposed use is not open during the morning peak hour of adjacent street traffic.
- Security and staff assists with exterior customer flow during peak hours of operation.
- Consumption is prohibited on-site.

Trip Generation

Trip generation rates published by ITE in the 10th Edition of the Manual *Trip Generation* were used to determine the anticipated traffic from the proposed cannabis dispensary use (see ***Appendix F***). Again, not all vehicle trips expected to be generated by the proposed project represent new trips on the study area roadway system. Studies have shown that for retail developments, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE *Trip Generation Handbook, 3rd Edition*, the average pass-by trip percentage for retail use is between 26 and 34 percent. However, to provide a conservative analysis, a 20 percent reduction for pass-by traffic was applied to the development site-generated trips, consistent with IDOT guidelines for the preparation of traffic impact studies on SRA routes. It should be noted that the volume of pass-by traffic does not reduce the total trips generated and those trip volumes will still be realized as turning movements at the site driveways.

In addition, for multi-use developments, or developments with cross-access and shared access driveways, internal trips between the land uses within the development are expected to occur. These are multi-purpose trips from one land use within the development to another land use within the same development. *However, to provide a conservative analysis scenario, no reduction for internal capture was applied.*

The number of vehicle trips anticipated during the weekday morning, weekday evening and Saturday midday peak hours, as well as on a weekday daily basis are summarized in ***Table 2*** and includes all traffic attributed to the proposed development (employees, customers, deliveries, etc.).

Table 2: Estimated Trip Generation – Site Traffic

Land Use / Size	ITE Land Use Code	Weekday									Saturday		
		AM Peak Hour[1]			PM Peak Hour			Daily[1]			Peak Hour[1]		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Proposed Cannabis Dispensary[2]													
6,153 SF	882	36	28	64	67	67	134	778	778	1,556	112	112	224
less retail pass-by trips (20%)		*-6*	*-6*	*-12*	*-13*	*-13*	*-26*	*-156*	*-156*	*-312*	*-22*	*-22*	*-44*
New Cannabis Dispensary Trips		30	22	52	54	54	108	622	622	1244	90	90	180

[1] ITE data set includes five (5) or fewer data points during these timeframes; "professional judgement must be exercised in the use of the reported data and statistics".

[2] The proposed cannabis dispensary is *not* anticipated to be open during the weekday am peak hour of adjacent street traffic; however, weekday am trips were assumed to be conservative, to account for any potential customers or employees that arrive/depart during this timeframe.

Note: The existing site formerly contained a jewelry store. Thus, the trips as presented above in Table 2 provide a conservative analysis scenario.

Trip Distribution

The anticipated trip distribution of *new* site traffic is summarized in ***Table 3***. This was based on current travel patterns, the operational characteristics of the street system and site access.

Table 3: New Trip Distribution

Route & Direction	Percent Route (To/From)
Main Street	
West of Kirk Road	30%
East of Main St Commons	30%
Kirk Road	
North of Main Street	15%
South of Main St Commons	20%
The Quad (Charlestowne Mall)	
North of Main Street	5%
Total	**100%**

Site Traffic Comparison

Zen Leaf Cannabis Dispensary – 3714 Illinois Ave, St. Charles

Historical customer transaction data was also obtained for comparative purposes only from an existing cannabis dispensary operated by Zen Leaf at 3714 Illinois Avenue in St. Charles, Illinois. The facility is located within the St. Charles Commons office/warehouse building. The hours of operation for this facility are Monday through Thursday from 9:00 AM to 9:00 PM; Friday and Saturday from 9:00AM to 10:00PM and from 10:00 AM to 6:00

PM on Sunday; the same as the proposed facility. Based on data provided from February 2021, the facility experienced the following customer transactions:

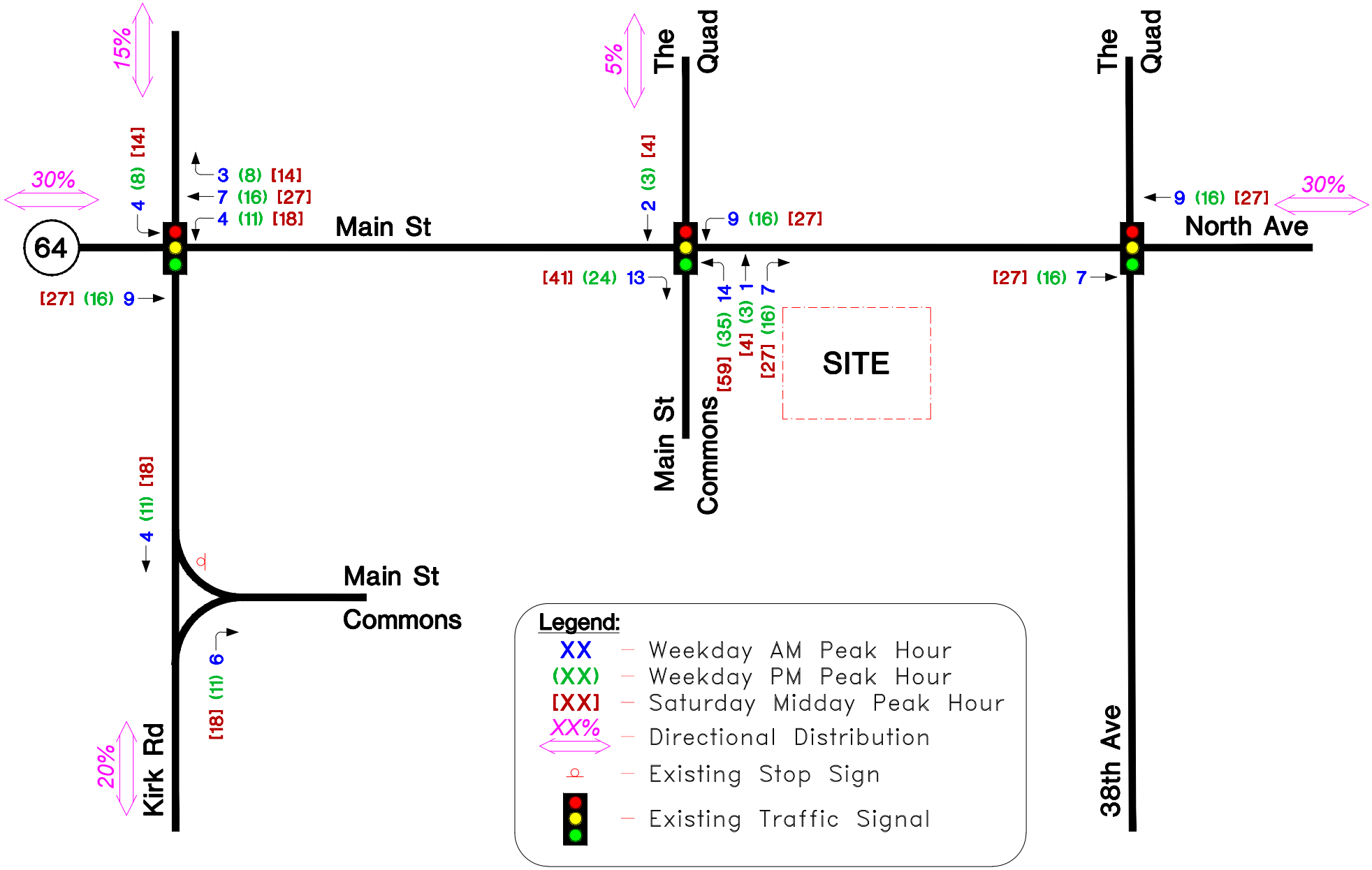
- Sunday – 555 to 565
- Monday – 550 to 580
- Tuesday to Thursday (typical weekday) – 595 to 605
- Friday – 730 to 755
- Saturday – 585 to 610

Conservatively assuming one vehicle entering and one vehicle exiting per transaction and no non-auto trips (walking, biking or public transportation) and no multiple-transaction trips (i.e., a customer makes a purchase and then makes another one as they see something else in the facility that they would like to also purchase), the above customer transactions translates to approximately 1,190 to 1,210 total vehicle trips (combined entering and exiting) on a typical weekday and 1,170 to 1,220 total vehicle trips (combined entering and exiting) on a Saturday. The existing facility operations are lower than the projected daily operations by ITE (1,556 total vehicle trips), as summarized in Table 2. Of note, the ITE projections are consistent with the anticipated operational characteristics of the facility (750 customers per day, 1,500 total trips).

Accordingly, it is in our professional opinion that the ITE data portrays an appropriate representation of the estimated traffic to be generated by the proposed facility on a typical weekday and Saturday basis.

Site and Total Traffic Assignments

Exhibits 6a and 6b illustrate the site traffic assignment for the development's *new* and *pass-by* trips, respectively, which is based on the traffic characteristics summarized in *Tables 3 and 4* (traffic generation and trip distribution) and assigned to the area roadways. The total additional site traffic (*Exhibit 6a plus 6b*) and 2026 No-Build traffic (*Exhibit 5*) were combined to produce the 2026 Total traffic, which is illustrated on ***Exhibit 7***.



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Not to Scale

Exhibit 6A
Site Traffic
New Trips

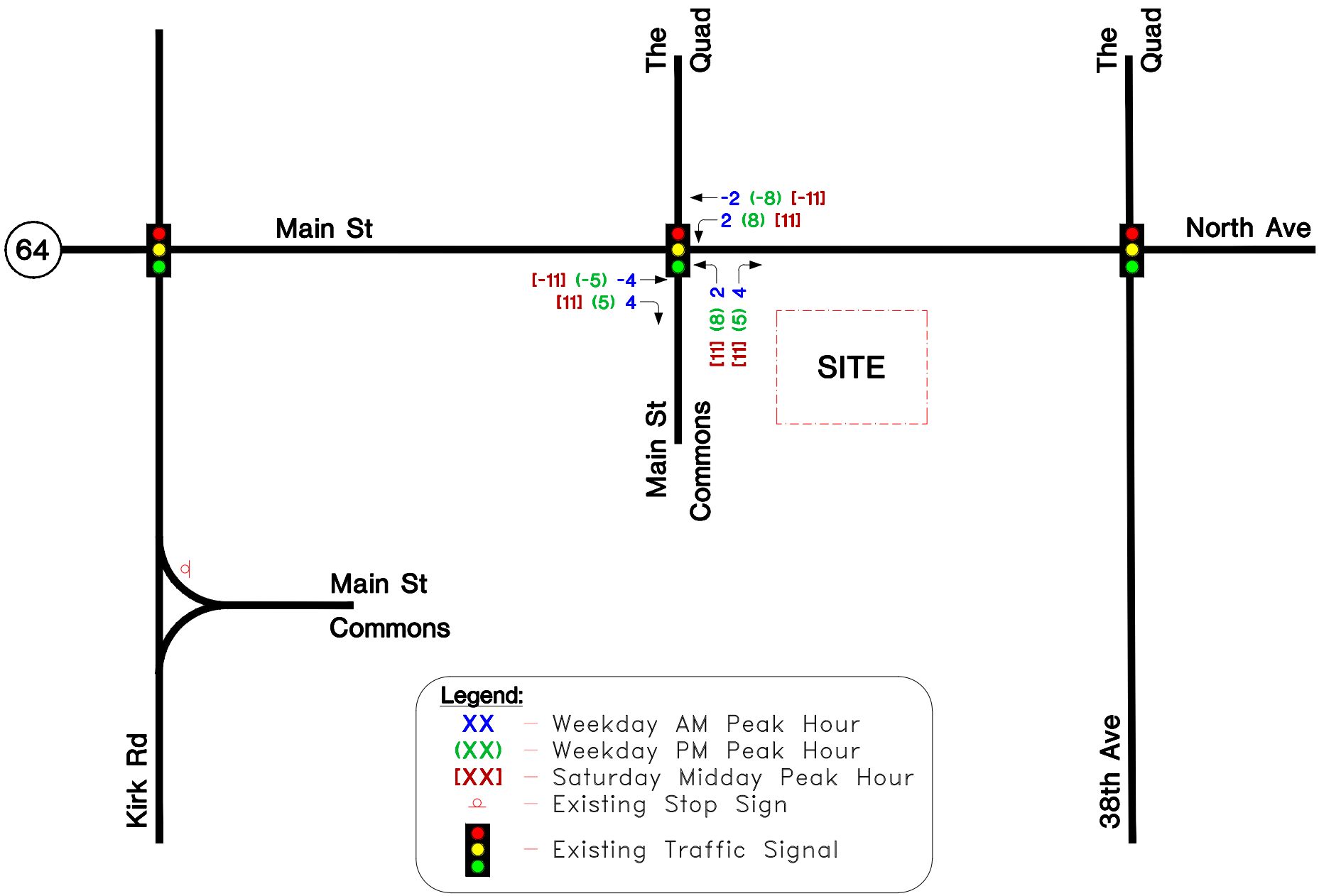

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Exhibit 6B
Site Traffic
Pass-by Trips

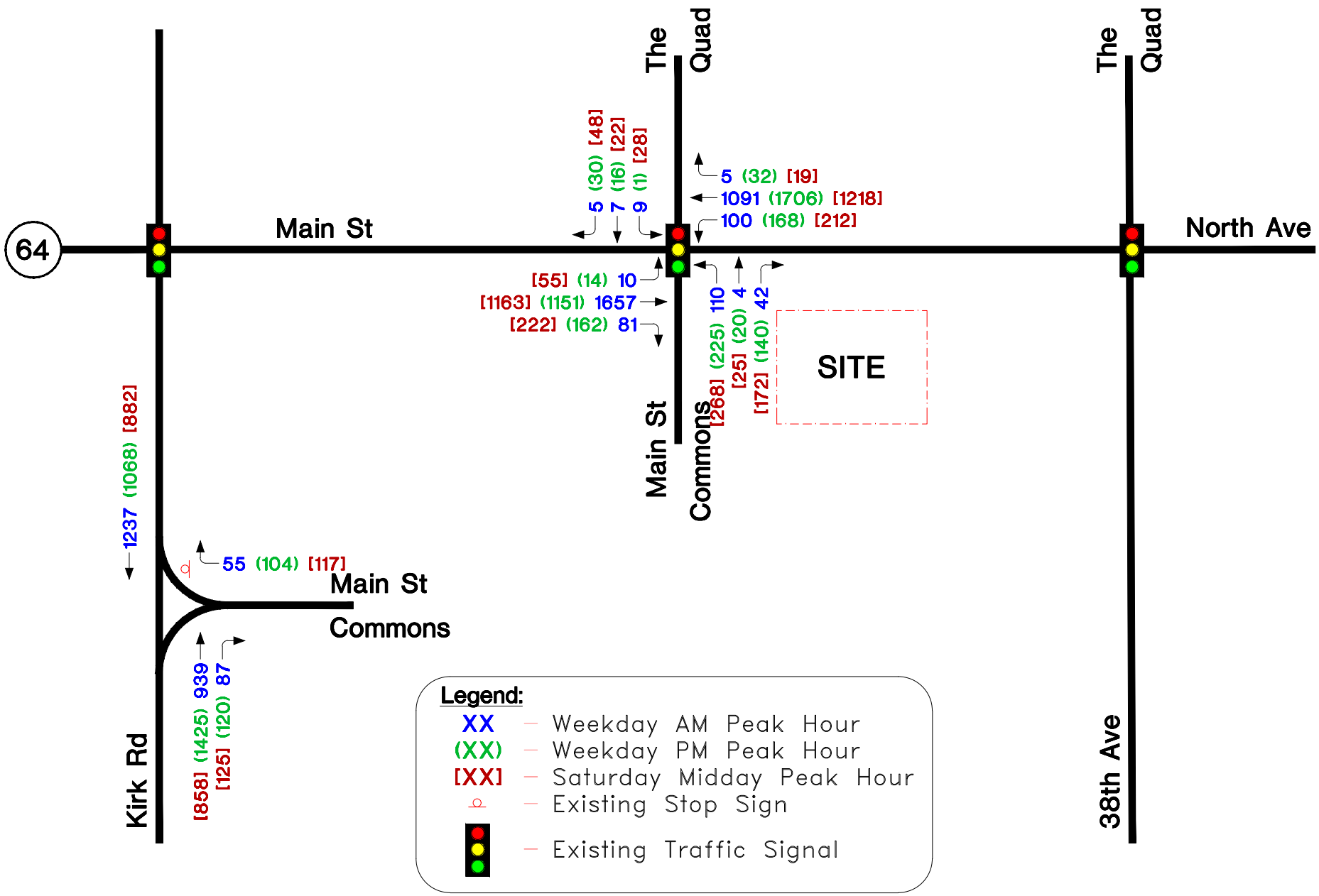

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Exhibit 7
2026 Total Traffic

Part IV. Traffic and Parking Evaluation

Capacity Analysis

Capacity analyses are a standard measurement that identifies how an intersection operates. They are measured in terms of Level of Service (LOS). The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels of Service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service is a function of the traffic flows placed upon it, the facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service, based on the analysis parameters as published in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM), Sixth Edition, is provided in ***Table 4***.

Table 4: Level of Service (LOS) Summary

LOS	Description	Delay (sec/veh)	
		Traffic Signal	Stop Sign
A	Describes conditions with little to no delay to motorists.	<10	< 10
B	Represents a desirable level with relatively low delay to motorists.	>10 and < 20	>10 and < 15
C	Describes conditions with average delays to motorists.	>20 and < 35	>15 and < 25
D	Describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.	>35 and < 55	>25 and < 35
E	Represents operating conditions with high delay values. This level is often considered within urban settings or for minor streets intersecting major arterial roadways to be the limit of acceptable delay.	>55 and < 80	>35 and < 50
F	Is unacceptable to most drivers with high delay values that often occur, when arrival flow rates exceed the capacity of the intersection.	>80	>50

Capacity analyses were performed, in accordance with IDOT guidelines, for three scenarios:

- *Existing Traffic* - Existing traffic (year 2021),
- *No-Build Traffic* – Future (non-site, year 2026) traffic with background growth (assumed at 1.0 percent compounded per year) and planned area developments (full occupancy Main Street Commons Shopping Center and Pride of Kane County service station), and
- *Total Traffic* – Future No-Build traffic volumes (year 2026) plus the addition of site generated traffic.

Table 5 summarizes the intersection capacity and queue analysis results. Capacity analysis summary printouts are provided in ***Appendix G.***

Table 5: Level-of-Service Summary

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or not Allowed Movement												Overall Intersection
			Eastbound			Westbound			Northbound			Southbound			
1. Main St (IL 64) at Main St Commons		Traffic Signal	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	-
AM Peak	A.Existing (See Exhibit 3)	• LOS	E	A	<	E	A	A	E	A	A	E	A	A	A
		• Delay	60.1	2.3	-	60.0	1.8	0.0	60.5	0.0	0.0	61.4	0.0	0.2	2.6
		• 95th Queue Length (ft)	15	322	-	11	164	0	16	0	0	27	0	0	-
		• Approach LOS (Delay)	A (2.6)			A (1.9)			C (34.6)			D (41.0)			-
	B. 2026 No-Build (See Exhibit 5)	• LOS	E	B	<	E	A	A	F	E	A	D	E	A	B
		• Delay	60.1	17.8	-	67.6	5.8	0.0	84.5	56.7	4.3	53.1	58.4	0.4	17.2
		• 95th Queue Length (ft)	15	816	-	134	290	0	133	13	13	23	18	0	-
		• Approach LOS (Delay)	B (18.1)			B (10.4)			E (64.4)			D (41.3)			-
	C. 2026 Total (See Exhibit 7)	• LOS	E	B	<	E	A	A	F	E	A	D	E	A	B
		• Delay	60.1	18.9	-	66.8	5.8	0.0	101.6	57.0	8.2	53.1	58.7	0.4	18.9
		• 95th Queue Length (ft)	15	830	-	148	290	0	153	15	25	23	22	0	-
		• Approach LOS (Delay)	B (19.2)			B (10.9)			E (75.2)			D (42.9)			-
PM Peak	A.Existing (See Exhibit 3)	• LOS	E	A	<	E	A	A	E	E	B	E	E	B	B
		• Delay	70.5	8.0	-	78.0	8.4	0.0	68.3	66.0	12.7	59.0	68.8	10.9	10.8
		• 95th Queue Length (ft)	20	390	-	83	602	0	87	29	41	7	22	20	-
		• Approach LOS (Delay)	A (8.7)			A (9.9)			D (40.8)			C (21.1)			-
	B. 2026 No-Build (See Exhibit 5)	• LOS	E	B	<	E	B	A	F	E	A	D	E	A	C
		• Delay	70.5	19.2	-	69.3	11.8	0.0	131.1	61.4	6.9	52.0	70.1	9.4	23.4
		• 95th Queue Length (ft)	20	564	-	225	655	0	285	43	51	7	38	20	-
		• Approach LOS (Delay)	B (19.8)			B (16.0)			F (80.9)			C (28.4)			-
	C. 2026 Total (See Exhibit 7)	• LOS	E	C	<	E	B	A	F	E	A	D	E	A	C
		• Delay	70.5	23.9	-	67.7	13.5	0.0	178.6	58.8	6.4	50.0	70.5	8.6	30.0
		• 95th Queue Length (ft)	20	583	-	275	656	0	423	49	54	7	43	20	-
		• Approach LOS (Delay)	C (23.9)			B (18.0)			F (109.6)			C (30.5)			-
SAT MID Peak	A.Existing (See Exhibit 3)	• LOS	E	B	<	E	A	A	D	D	B	D	D	B	B
		• Delay	56.3	10.9	-	61.4	9.3	0.0	49.5	54.2	10.7	50.0	53.7	11.7	13.7
		• 95th Queue Length (ft)	43	374	-	90	338	0	83	31	38	45	24	27	-
		• Approach LOS (Delay)	B (12.9)			B (11.6)			C (31.7)			C (28.8)			-
	B. 2026 No-Build (See Exhibit 5)	• LOS	E	C	<	E	B	A	F	D	A	D	D	A	C
		• Delay	56.3	20.4	-	59.6	11.3	0.1	86.1	54.4	6.9	45.2	54.8	9.9	23.5
		• 95th Queue Length (ft)	43	481	-	253	356	0	266	43	50	45	39	27	-
		• Approach LOS (Delay)	C (21.9)			B (17.1)			D (53.7)			C (29.3)			-
	C. 2026 Total (See Exhibit 7)	• LOS	E	C	<	E	B	A	F	D	A	D	E	A	D
		• Delay	56.3	22.9	-	61.4	11.6	0.1	225.5	54.0	8.0	42.2	55.2	9.2	37.1
		• 95th Queue Length (ft)	43	506	-	334	355	0	352	49	64	45	44	27	-
		• Approach LOS (Delay)	C (24.1)			B (18.8)			F (135.8)			C (29.2)			-

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
Kirk Rd at Main St Commons		**TWSC - WB Stops**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak	**A.Existing (See Exhibit 3)**	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	11.8	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	3	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (11.8)**			-			-	
	B. 2026 No-Build (See Exhibit 5)	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	12.6	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	10	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (12.6)**			-			-	
	C. 2026 Total (See Exhibit 7)	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	12.6	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	10	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (12.6)**			-			-	
PM Peak	**A.Existing (See Exhibit 3)**	• LOS	-	-	-	-	-	**C**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	15.8	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	8	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**C (15.8)**			-			-	
	B. 2026 No-Build (See Exhibit 5)	• LOS	-	-	-	-	-	**C**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	19.7	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	32	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**C (19.7)**			-			-	
	C. 2026 Total (See Exhibit 7)	• LOS	-	-	-	-	-	**C**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	19.7	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	32	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**C (19.7)**			-			-	
SAT MID Peak	**A.Existing (See Exhibit 3)**	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	11.8	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	8	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (11.8)**			-			-	
	B. 2026 No-Build (See Exhibit 5)	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	12.9	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	20	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (12.9)**			-			-	
	C. 2026 Total (See Exhibit 7)	• LOS	-	-	-	-	-	**B**	-	-	-	-	-	-
		• Delay	-	-	-	-	-	12.9	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	20	-	-	-	-	-	-
		• Approach LOS (Delay)		-			**B (12.9)**			-			-	

Main Street (IL Route 64) and Main Street Commons / The Quad (former Charlestowne Mall)
Under Existing conditions, the signalized intersection of Main Street and the Main Street Commons Shopping Center operates at an overall LOS "A" during the weekday AM peak hour and LOS "B" during the weekday PM and Saturday midday peak hours. The Main Street eastbound and westbound left-turn movements operate at LOS "E" during all three peak periods, as well as minor street movements during the weekday AM and PM peaks. Note, however, it is not uncommon and is acceptable for local roadways / driveways and turns from major roadways to operate these levels, since majority of the green time is allocated to mainline to provide progression.

Under future No-Build conditions, with anticipated traffic growth within the study area (including the full occupancy of the shopping center and new Pride of Kane County service stations), as well as Total Traffic conditions, with the addition of site generated traffic, this intersection will continue to operate at overall acceptable levels of service (at LOS "D" or better). The development has limited impacts on the existing signal operations. No changes to the existing signal timing and phasing are required to accommodate the development traffic.

Kirk Road and Main Street Commons
Under both existing and future conditions, all movements at this unsignalized study area intersection operate at acceptable levels of service (at LOS "C" or better) during all three peak hours studied. The proposed site traffic has minimal impact on the intersection operations.

Parking Analysis

Parking Demand Requirements

Per recent amendments to the City of St. Charles Zoning Ordinances (Section 17.24.140), Adult-Use Cannabis Dispensaries shall be classified as "retail stores" in regard to off-street parking regulations. As summarized in ***Table 6,*** based on the City's parking requirements, 25 parking spaces are required for the proposed site.

Table 6: City Parking Requirements

Use	Size	Parking Requirement	Parking Spaces	
			Required	Provided
Recreational Cannabis Dispensary	6,153 SF	4 spaces for each 1,000 SF GFA	25	**38**

Parking Demand Projections

- Based on the estimated traffic during the highest timeframe (Saturday) with a peak demand of 112 (*see* ***Table 2***), the assumed maximum number of employee (15), the typical turnover rate per customer per parking space (6 customers / space / hour, based on an average timeframe of 5 minutes in the dispensary plus 5 minutes load/unload time), a peak demand of 35 spaces is needed (15 employee and 20 customer spaces).
- The proposed development will provide a total of 38 parking spaces.
- Accordingly, the proposed parking supply is anticipated to be adequate to accommodate the projected parking demand.
- *Note, there may be occasions, such as opening day when additional parking may be needed. And, the adjacent shopping center parking supply could readily accommodate overflow parking, if needed (see* ***Appendix H*** *for aerial imagery during pre-COVID pandemic conditions).*

Part IV. Recommendations and Conclusions

GHA has conducted a traffic impact and parking analysis for the proposed cannabis dispensary development located at 3691 E. Main Street in St. Charles, Illinois. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic operations and the impact of the planned development. Conclusions are presented below:

- Existing traffic conditions in the study area were defined by performing peak period turning movement counts in January 2021 during the weekday morning, weekday evening and Saturday midday peak periods and were upwardly adjusted to account for abnormal conditions (business and school closures/hybrid models) associated with the COVID-19 pandemic. Available daily traffic volumes were obtained from IDOT.
- Trip generation estimates associated with the new Pride of Kane County service station and the full occupancy of the existing vacant space within the Main Street Commons Shopping Center were quantified using industry standard rates contained within the ITE Trip Generation Manual.
- Trip generation for the increase in traffic associated with the proposed development was also quantified using ITE Trip Generation Manual. *Note: to provide a conservative analysis scenario no reduction for internal capture trips was applied, nor discounted for the former site use (Jared jewelry store).*
- Analyses have conducted for all study intersections under existing and future traffic conditions to determine the impact from the planned development. The capacity analysis results indicate that the increase in projected site-generated traffic has little effect upon the operations of the area roadway network.
- Employees should be encouraged to park in remote spaces (furthest from the site entrance) to provide convenient parking for customers.
- In addition, arrangements should be made on special occasions, such as opening day, when additional parking may be needed.
- Deliveries, to the extent feasible, should occur during off-peak hours.

Part V. Technical Addendum

The following Appendices were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

<u>Appendices</u>

A. Photo Inventory
B. Traffic Count Summaries
C. CMAP Traffic Projections
D. Background Traffic
E. Site Plan
F. ITE Trip Generation Excerpts – Site Traffic
G. Capacity Analysis Worksheets
H. Main Street Commons Shopping Center – Aerial Photography

Technical Addendum

GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendices

GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendix A
Photo Inventory

GHA GEWALT HAMILTON ASSOCIATES, INC.

Looking north on Kirk Rd at Main St Commons Access.

Looking south on Kirk Rd at Main St Commons Access.

Looking west on Main St Commons Access at Kirk Rd.

Looking southeast on Main St Commons Access at Kirk Rd.

Looking north on Main St Commons Access, south of Main St.

Looking northeast on Main Street at Main St Commons Access.

Looking south on the Quad Access, north of Main St.

Looking at the proposed site from Main St Commons Access.

Appendix B
Traffic Count Summaries

GEWALT HAMILTON ASSOCIATES, INC.

Main St & Main St Commons Shopping Center Si... - TMC

Tue Jan 19, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809094, Location: 41.921354, -88.272582

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Main Eastbound						Main Westbound						Center Access Northbound						Center Access Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-01-19 7:00AM	0	265	0	0	**265**	0	1	159	0	0	**160**	0	0	0	0	0	**0**	0	3	0	0	0	**3**	0	**428**
7:15AM	2	293	2	1	**298**	0	0	169	0	0	**169**	0	0	0	0	0	**0**	0	5	0	1	0	**6**	0	**473**
7:30AM	0	313	1	1	**315**	0	0	201	2	0	**203**	0	3	0	0	0	**3**	0	0	0	2	0	**2**	0	**523**
7:45AM	5	292	4	0	**301**	0	0	229	0	1	**230**	0	0	0	0	0	**0**	0	3	0	0	0	**3**	0	**534**
Hourly Total	7	1163	7	2	**1179**	0	1	758	2	1	**762**	0	3	0	0	0	**3**	0	11	0	3	0	**14**	0	**1958**
8:00AM	1	264	7	0	**272**	0	1	194	3	0	**198**	0	1	0	3	0	**4**	0	1	0	2	0	**3**	0	**477**
8:15AM	0	227	2	0	**229**	0	0	206	3	0	**209**	0	0	0	2	0	**2**	0	1	0	0	0	**1**	0	**441**
8:30AM	3	227	3	0	**233**	0	1	219	1	1	**222**	0	0	0	0	0	**0**	0	3	0	1	0	**4**	0	**459**
8:45AM	3	212	5	0	**220**	0	4	235	0	0	**239**	0	0	0	0	0	**0**	0	5	1	3	0	**9**	0	**468**
Hourly Total	7	930	17	0	**954**	0	6	854	7	1	**868**	0	1	0	5	0	**6**	0	10	1	6	0	**17**	0	**1845**
4:00PM	3	204	9	0	**216**	0	11	345	3	0	**359**	0	13	0	11	0	**24**	0	4	2	10	0	**16**	0	**615**
4:15PM	7	227	13	0	**247**	0	11	353	10	0	**374**	0	10	4	16	0	**30**	0	0	3	9	0	**12**	0	**663**
4:30PM	1	207	8	0	**216**	0	6	332	5	0	**343**	0	8	1	19	0	**28**	0	3	1	3	0	**7**	0	**594**
4:45PM	6	194	10	0	**210**	0	7	316	11	0	**334**	0	5	2	10	0	**17**	0	1	2	7	0	**10**	0	**571**
Hourly Total	17	832	40	0	**889**	0	35	1346	29	0	**1410**	0	36	7	56	0	**99**	0	8	8	29	0	**45**	0	**2443**
5:00PM	6	248	11	1	**266**	0	11	355	3	0	**369**	0	17	2	10	0	**29**	0	6	1	7	0	**14**	0	**678**
5:15PM	3	226	15	0	**244**	0	6	335	12	1	**354**	0	15	2	19	0	**36**	0	0	1	7	0	**8**	0	**642**
5:30PM	0	200	16	0	**216**	0	14	309	10	0	**333**	0	6	2	12	0	**20**	0	3	3	5	0	**11**	0	**580**
5:45PM	4	198	17	0	**219**	0	9	332	7	0	**348**	0	11	3	16	0	**30**	0	5	1	11	0	**17**	0	**614**
Hourly Total	13	872	59	1	**945**	0	40	1331	32	1	**1404**	0	49	9	57	0	**115**	0	14	6	30	0	**50**	0	**2514**
Total	44	3797	123	3	**3967**	0	82	4289	70	3	**4444**	0	89	16	118	0	**223**	0	43	15	68	0	**126**	0	**8760**
% Approach	1.1%	95.7%	3.1%	0.1%	**-**	-	1.8%	96.5%	1.6%	0.1%	**-**	-	39.9%	7.2%	52.9%	0%	**-**	-	34.1%	11.9%	54.0%	0%	**-**	-	-
% Total	0.5%	43.3%	1.4%	0%	**45.3%**	-	0.9%	49.0%	0.8%	0%	**50.7%**	-	1.0%	0.2%	1.3%	0%	**2.5%**	-	0.5%	0.2%	0.8%	0%	**1.4%**	-	-
Lights	43	3551	122	3	**3719**	-	82	4062	68	3	**4215**	-	88	16	118	0	**222**	-	42	15	66	0	**123**	-	8279
% Lights	97.7%	93.5%	99.2%	100%	**93.7%**	-	100%	94.7%	97.1%	100%	**94.8%**	-	98.9%	100%	100%	0%	**99.6%**	-	97.7%	100%	97.1%	0%	**97.6%**	-	94.5%
Articulated Trucks	0	110	1	0	**111**	-	0	86	1	0	**87**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	199
% Articulated Trucks	0%	2.9%	0.8%	0%	**2.8%**	-	0%	2.0%	1.4%	0%	**2.0%**	-	1.1%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	2.3%
Buses and Single-Unit Trucks	1	136	0	0	**137**	-	0	141	1	0	**142**	-	0	0	0	0	**0**	-	1	0	2	0	**3**	-	282
% Buses and Single-Unit Trucks	2.3%	3.6%	0%	0%	**3.5%**	-	0%	3.3%	1.4%	0%	**3.2%**	-	0%	0%	0%	0%	**0%**	-	2.3%	0%	2.9%	0%	**2.4%**	-	3.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main St & Main St Commons Shopping Center Si... - TMC

Tue Jan 19, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809094, Location: 41.921354, -88.272582

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Main Eastbound						Main Westbound						Center Access Northbound						Center Access Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-01-19 7:15AM	2	293	2	1	**298**	0	0	169	0	0	**169**	0	0	0	0	0	**0**	0	5	0	1	0	**6**	0	**473**
7:30AM	0	313	1	1	**315**	0	0	201	2	0	**203**	0	3	0	0	0	**3**	0	0	0	2	0	**2**	0	**523**
7:45AM	5	292	4	0	**301**	0	0	229	0	1	**230**	0	0	0	0	0	**0**	0	3	0	0	0	**3**	0	**534**
8:00AM	1	264	7	0	**272**	0	1	194	3	0	**198**	0	1	0	3	0	**4**	0	1	0	2	0	**3**	0	**477**
Total	8	1162	14	2	**1186**	0	1	793	5	1	**800**	0	4	0	3	0	**7**	0	9	0	5	0	**14**	0	**2007**
% Approach	0.7%	98.0%	1.2%	0.2%	**-**	-	0.1%	99.1%	0.6%	0.1%	**-**	-	57.1%	0%	42.9%	0%	**-**	-	64.3%	0%	35.7%	0%	**-**	-	-
% Total	0.4%	57.9%	0.7%	0.1%	**59.1%**	-	0%	39.5%	0.2%	0%	**39.9%**	-	0.2%	0%	0.1%	0%	**0.3%**	-	0.4%	0%	0.2%	0%	**0.7%**	-	-
PHF	0.400	0.928	0.500	0.500	**0.941**	-	0.250	0.866	0.417	0.250	**0.870**	-	0.333	-	0.250	-	**0.438**	-	0.450	-	0.625	-	**0.583**	-	0.940
Lights	8	1082	13	2	**1105**	-	1	734	4	1	**740**	-	3	0	3	0	**6**	-	9	0	5	0	**14**	-	1865
% Lights	100%	93.1%	92.9%	100%	**93.2%**	-	100%	92.6%	80.0%	100%	**92.5%**	-	75.0%	0%	100%	0%	**85.7%**	-	100%	0%	100%	0%	**100%**	-	92.9%
Articulated Trucks	0	30	1	0	**31**	-	0	28	1	0	**29**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	61
% Articulated Trucks	0%	2.6%	7.1%	0%	**2.6%**	-	0%	3.5%	20.0%	0%	**3.6%**	-	25.0%	0%	0%	0%	**14.3%**	-	0%	0%	0%	0%	**0%**	-	3.0%
Buses and Single-Unit Trucks	0	50	0	0	**50**	-	0	31	0	0	**31**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	81
% Buses and Single-Unit Trucks	0%	4.3%	0%	0%	**4.2%**	-	0%	3.9%	0%	0%	**3.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	4.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main St & Main St Commons Shopping Center Si... - TMC

Tue Jan 19, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809094, Location: 41.921354, -88.272582

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Main Eastbound						Main Westbound						Center Access Northbound						Center Access Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-01-19 5:00PM	6	248	11	1	**266**	0	11	355	3	0	**369**	0	17	2	10	0	**29**	0	6	1	7	0	**14**	0	**678**
5:15PM	3	226	15	0	**244**	0	6	335	12	1	**354**	0	15	2	19	0	**36**	0	0	1	7	0	**8**	0	**642**
5:30PM	0	200	16	0	**216**	0	14	309	10	0	**333**	0	6	2	12	0	**20**	0	3	3	5	0	**11**	0	**580**
5:45PM	4	198	17	0	**219**	0	9	332	7	0	**348**	0	11	3	16	0	**30**	0	5	1	11	0	**17**	0	**614**
Total	13	872	59	1	**945**	0	40	1331	32	1	**1404**	0	49	9	57	0	**115**	0	14	6	30	0	**50**	0	**2514**
% Approach	1.4%	92.3%	6.2%	0.1%	**-**	-	2.8%	94.8%	2.3%	0.1%	**-**	-	42.6%	7.8%	49.6%	0%	**-**	-	28.0%	12.0%	60.0%	0%	**-**	-	-
% Total	0.5%	34.7%	2.3%	0%	**37.6%**	-	1.6%	52.9%	1.3%	0%	**55.8%**	-	1.9%	0.4%	2.3%	0%	**4.6%**	-	0.6%	0.2%	1.2%	0%	**2.0%**	-	-
PHF	0.542	0.879	0.868	0.250	**0.888**	-	0.714	0.937	0.667	0.250	**0.951**	-	0.721	0.750	0.750	-	**0.799**	-	0.583	0.500	0.682	-	**0.735**	-	0.927
Lights	13	832	59	1	**905**	-	40	1303	32	1	**1376**	-	49	9	57	0	**115**	-	14	6	30	0	**50**	-	2446
% Lights	100%	95.4%	100%	100%	**95.8%**	-	100%	97.9%	100%	100%	**98.0%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	97.3%
Articulated Trucks	0	18	0	0	**18**	-	0	12	0	0	**12**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	30
% Articulated Trucks	0%	2.1%	0%	0%	**1.9%**	-	0%	0.9%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%
Buses and Single-Unit Trucks	0	22	0	0	**22**	-	0	16	0	0	**16**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	38
% Buses and Single-Unit Trucks	0%	2.5%	0%	0%	**2.3%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main St & Main St Commons Shopping Center Si... - TMC

Sat Jan 16, 2021
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809096, Location: 41.921265, -88.272661

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Main Eastbound						Main Westbound						Center Access Northbound						Center Access Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-01-16 11:00AM	7	214	20	0	**241**	0	10	227	5	0	**242**	0	8	0	8	0	**16**	0	2	3	8	0	**13**	0	**512**
11:15AM	3	228	19	1	**251**	0	7	224	2	1	**234**	0	11	2	11	0	**24**	0	8	5	9	0	**22**	0	**531**
11:30AM	16	216	18	0	**250**	0	11	237	6	2	**256**	1	5	4	13	0	**22**	0	5	3	5	0	**13**	0	**541**
11:45AM	13	247	18	1	**279**	0	14	243	5	0	**262**	0	18	3	18	0	**39**	0	10	1	15	0	**26**	0	**606**
Hourly Total	39	905	75	2	**1021**	0	42	931	18	3	**994**	1	42	9	50	0	**101**	0	25	12	37	0	**74**	0	**2190**
12:00PM	13	233	13	0	**259**	0	10	264	4	1	**279**	0	11	4	15	0	**30**	0	6	3	14	0	**23**	0	**591**
12:15PM	12	225	23	0	**260**	0	10	242	6	0	**258**	0	15	4	9	0	**28**	1	5	3	9	0	**17**	0	**563**
12:30PM	15	222	23	1	**261**	0	24	255	4	1	**284**	1	19	2	25	0	**46**	0	7	2	10	0	**19**	0	**610**
12:45PM	10	232	30	1	**273**	0	13	252	4	0	**269**	0	15	0	18	0	**33**	0	12	3	7	0	**22**	0	**597**
Hourly Total	50	912	89	2	**1053**	0	57	1013	18	2	**1090**	1	60	10	67	0	**137**	1	30	11	40	0	**81**	0	**2361**
Total	89	1817	164	4	**2074**	0	99	1944	36	5	**2084**	2	102	19	117	0	**238**	1	55	23	77	0	**155**	0	**4551**
% Approach	4.3%	87.6%	7.9%	0.2%	**-**	-	4.8%	93.3%	1.7%	0.2%	**-**	-	42.9%	8.0%	49.2%	0%	**-**	-	35.5%	14.8%	49.7%	0%	**-**	-	**-**
% Total	2.0%	39.9%	3.6%	0.1%	**45.6%**	-	2.2%	42.7%	0.8%	0.1%	**45.8%**	-	2.2%	0.4%	2.6%	0%	**5.2%**	-	1.2%	0.5%	1.7%	0%	**3.4%**	-	**-**
Lights	89	1787	162	4	**2042**	-	99	1916	36	5	**2056**	-	102	19	115	0	**236**	-	54	23	76	0	**153**	-	4487
% Lights	100%	98.3%	98.8%	100%	**98.5%**	-	100%	98.6%	100%	100%	**98.7%**	-	100%	100%	98.3%	0%	**99.2%**	-	98.2%	100%	98.7%	0%	**98.7%**	-	98.6%
Articulated Trucks	0	4	0	0	**4**	-	0	7	0	0	**7**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	12
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	1.8%	0%	0%	0%	**0.6%**	-	0.3%
Buses and Single-Unit Trucks	0	26	2	0	**28**	-	0	21	0	0	**21**	-	0	0	2	0	**2**	-	0	0	1	0	**1**	-	52
% Buses and Single-Unit Trucks	0%	1.4%	1.2%	0%	**1.4%**	-	0%	1.1%	0%	0%	**1.0%**	-	0%	0%	1.7%	0%	**0.8%**	-	0%	0%	1.3%	0%	**0.6%**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Main St & Main St Commons Shopping Center Si... - TMC

Sat Jan 16, 2021
Midday Peak (WKND) (11:45 AM - 12:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809096, Location: 41.921265, -88.272661

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Main Eastbound						Main Westbound						Center Access Northbound						Center Access Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-01-16 11:45AM	13	247	18	1	**279**	0	14	243	5	0	**262**	0	18	3	18	0	**39**	0	10	1	15	0	**26**	0	**606**
12:00PM	13	233	13	0	**259**	0	10	264	4	1	**279**	0	11	4	15	0	**30**	0	6	3	14	0	**23**	0	**591**
12:15PM	12	225	23	0	**260**	0	10	242	6	0	**258**	0	15	4	9	0	**28**	1	5	3	9	0	**17**	0	**563**
12:30PM	15	222	23	1	**261**	0	24	255	4	1	**284**	1	19	2	25	0	**46**	0	7	2	10	0	**19**	0	**610**
Total	53	927	77	2	**1059**	0	58	1004	19	2	**1083**	1	63	13	67	0	**143**	1	28	9	48	0	**85**	0	**2370**
% Approach	5.0%	87.5%	7.3%	0.2%	**-**	-	5.4%	92.7%	1.8%	0.2%	**-**	-	44.1%	9.1%	46.9%	0%	**-**	-	32.9%	10.6%	56.5%	0%	**-**	-	**-**
% Total	2.2%	39.1%	3.2%	0.1%	**44.7%**	-	2.4%	42.4%	0.8%	0.1%	**45.7%**	-	2.7%	0.5%	2.8%	0%	**6.0%**	-	1.2%	0.4%	2.0%	0%	**3.6%**	-	**-**
PHF	0.883	0.938	0.837	0.500	**0.949**	-	0.604	0.951	0.792	0.500	**0.953**	-	0.829	0.813	0.670	-	**0.777**	-	0.700	0.750	0.800	-	**0.817**	-	0.971
Lights	53	908	77	2	**1040**	-	58	992	19	2	**1071**	-	63	13	66	0	**142**	-	28	9	48	0	**85**	-	2338
% Lights	100%	98.0%	100%	100%	**98.2%**	-	100%	98.8%	100%	100%	**98.9%**	-	100%	100%	98.5%	0%	**99.3%**	-	100%	100%	100%	0%	**100%**	-	98.6%
Articulated Trucks	0	3	0	0	**3**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5
% Articulated Trucks	0%	0.3%	0%	0%	**0.3%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	0	16	0	0	**16**	-	0	10	0	0	**10**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	27
% Buses and Single-Unit Trucks	0%	1.7%	0%	0%	**1.5%**	-	0%	1.0%	0%	0%	**0.9%**	-	0%	0%	1.5%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Kirk Road & Main St Commons Shopping Center ... - TMC

Tue Jan 19, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809093, Location: 41.919531, -88.275861

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	RIRO Westbound					Kirk Northbound					Kirk Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-01-19 7:00AM	0	0	0	**0**	0	187	1	0	**188**	0	0	166	0	**166**	0	**354**
7:15AM	0	3	0	**3**	0	184	0	0	**184**	0	0	176	0	**176**	0	**363**
7:30AM	0	5	0	**5**	0	175	0	0	**175**	0	0	213	0	**213**	0	**393**
7:45AM	0	1	0	**1**	0	143	5	0	**148**	0	0	258	0	**258**	0	**407**
Hourly Total	0	9	0	**9**	0	689	6	0	**695**	0	0	813	0	**813**	0	**1517**
8:00AM	0	0	0	**0**	0	183	1	0	**184**	0	0	215	0	**215**	0	**399**
8:15AM	0	0	0	**0**	0	128	0	0	**128**	0	0	167	0	**167**	0	**295**
8:30AM	0	1	0	**1**	0	134	1	0	**135**	0	0	198	0	**198**	0	**334**
8:45AM	0	1	0	**1**	0	126	2	0	**128**	0	0	171	0	**171**	0	**300**
Hourly Total	0	2	0	**2**	0	571	4	0	**575**	0	0	751	0	**751**	0	**1328**
4:00PM	0	13	0	**13**	0	263	12	0	**275**	0	0	195	0	**195**	0	**483**
4:15PM	0	6	0	**6**	0	276	6	0	**282**	0	0	205	0	**205**	0	**493**
4:30PM	0	8	0	**8**	0	294	6	0	**300**	0	0	218	0	**218**	0	**526**
4:45PM	0	9	0	**9**	0	252	4	0	**256**	0	0	206	0	**206**	0	**471**
Hourly Total	0	36	0	**36**	0	1085	28	0	**1113**	0	0	824	0	**824**	0	**1973**
5:00PM	0	8	0	**8**	0	287	13	0	**300**	0	0	176	0	**176**	0	**484**
5:15PM	0	8	0	**8**	0	265	4	0	**269**	0	0	173	0	**173**	0	**450**
5:30PM	0	7	0	**7**	0	223	4	0	**227**	0	0	170	0	**170**	0	**404**
5:45PM	0	10	0	**10**	0	190	3	0	**193**	0	0	181	0	**181**	0	**384**
Hourly Total	0	33	0	**33**	0	965	24	0	**989**	0	0	700	0	**700**	0	**1722**
Total	0	80	0	**80**	0	3310	62	0	**3372**	0	0	3088	0	**3088**	0	**6540**
% Approach	0%	100%	0%	**-**	-	98.2%	1.8%	0%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0%	1.2%	0%	**1.2%**	-	50.6%	0.9%	0%	**51.6%**	-	0%	47.2%	0%	**47.2%**	-	**-**
Lights	0	80	0	**80**	-	3119	62	0	**3181**	-	0	2901	0	**2901**	-	6162
% Lights	0%	100%	0%	**100%**	-	94.2%	100%	0%	**94.3%**	-	0%	93.9%	0%	**93.9%**	-	94.2%
Articulated Trucks	0	0	0	**0**	-	94	0	0	**94**	-	0	100	0	**100**	-	194
% Articulated Trucks	0%	0%	0%	**0%**	-	2.8%	0%	0%	**2.8%**	-	0%	3.2%	0%	**3.2%**	-	3.0%
Buses and Single-Unit Trucks	0	0	0	**0**	-	97	0	0	**97**	-	0	87	0	**87**	-	184
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	2.9%	0%	0%	**2.9%**	-	0%	2.8%	0%	**2.8%**	-	2.8%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Kirk Road & Main St Commons Shopping Center ... - TMC

Tue Jan 19, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809093, Location: 41.919531, -88.275861

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	RIRO Westbound					Kirk Northbound					Kirk Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-01-19 7:15AM	0	3	0	**3**	0	184	0	0	**184**	0	0	176	0	**176**	0	**363**
7:30AM	0	5	0	**5**	0	175	0	0	**175**	0	0	213	0	**213**	0	**393**
7:45AM	0	1	0	**1**	0	143	5	0	**148**	0	0	258	0	**258**	0	**407**
8:00AM	0	0	0	**0**	0	183	1	0	**184**	0	0	215	0	**215**	0	**399**
Total	0	9	0	**9**	0	685	6	0	**691**	0	0	862	0	**862**	0	**1562**
% Approach	0%	100%	0%	**-**	-	99.1%	0.9%	0%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0%	0.6%	0%	**0.6%**	-	43.9%	0.4%	0%	**44.2%**	-	0%	55.2%	0%	**55.2%**	-	**-**
PHF	-	0.450	-	**0.450**	-	0.931	0.300	-	**0.939**	-	-	0.835	-	**0.835**	-	0.959
Lights	0	9	0	**9**	-	634	6	0	**640**	-	0	809	0	**809**	-	1458
% Lights	0%	100%	0%	**100%**	-	92.6%	100%	0%	**92.6%**	-	0%	93.9%	0%	**93.9%**	-	93.3%
Articulated Trucks	0	0	0	**0**	-	23	0	0	**23**	-	0	35	0	**35**	-	58
% Articulated Trucks	0%	0%	0%	**0%**	-	3.4%	0%	0%	**3.3%**	-	0%	4.1%	0%	**4.1%**	-	3.7%
Buses and Single-Unit Trucks	0	0	0	**0**	-	28	0	0	**28**	-	0	18	0	**18**	-	46
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	4.1%	0%	0%	**4.1%**	-	0%	2.1%	0%	**2.1%**	-	2.9%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Kirk Road & Main St Commons Shopping Center ... - TMC

Tue Jan 19, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809093, Location: 41.919531, -88.275861

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	RIRO Westbound					Kirk Northbound					Kirk Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-01-19 4:15PM	0	6	0	**6**	0	276	6	0	**282**	0	0	205	0	**205**	0	**493**
4:30PM	0	8	0	**8**	0	294	6	0	**300**	0	0	218	0	**218**	0	**526**
4:45PM	0	9	0	**9**	0	252	4	0	**256**	0	0	206	0	**206**	0	**471**
5:00PM	0	8	0	**8**	0	287	13	0	**300**	0	0	176	0	**176**	0	**484**
Total	0	31	0	**31**	0	1109	29	0	**1138**	0	0	805	0	**805**	0	**1974**
% Approach	0%	100%	0%	**-**	-	97.5%	2.5%	0%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0%	1.6%	0%	**1.6%**	-	56.2%	1.5%	0%	**57.6%**	-	0%	40.8%	0%	**40.8%**	-	**-**
PHF	-	0.861	-	**0.861**	-	0.943	0.558	-	**0.948**	-	-	0.923	-	**0.923**	-	0.938
Lights	0	31	0	**31**	-	1068	29	0	**1097**	-	0	768	0	**768**	-	1896
% Lights	0%	100%	0%	**100%**	-	96.3%	100%	0%	**96.4%**	-	0%	95.4%	0%	**95.4%**	-	96.0%
Articulated Trucks	0	0	0	**0**	-	25	0	0	**25**	-	0	13	0	**13**	-	38
% Articulated Trucks	0%	0%	0%	**0%**	-	2.3%	0%	0%	**2.2%**	-	0%	1.6%	0%	**1.6%**	-	1.9%
Buses and Single-Unit Trucks	0	0	0	**0**	-	16	0	0	**16**	-	0	24	0	**24**	-	40
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	1.4%	0%	0%	**1.4%**	-	0%	3.0%	0%	**3.0%**	-	2.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Kirk Road & Main St Commons Shopping Center ... - TMC

Sat Jan 16, 2021
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809095, Location: 41.919508, -88.27575

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	RIRO Westbound					Kirk Northbound					Kirk Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-01-16 11:00AM	0	9	0	**9**	0	207	2	0	**209**	0	0	179	0	**179**	0	**397**
11:15AM	0	7	0	**7**	0	181	5	0	**186**	0	0	158	0	**158**	0	**351**
11:30AM	0	9	0	**9**	0	158	5	0	**163**	0	0	187	0	**187**	0	**359**
11:45AM	0	12	0	**12**	0	164	7	0	**171**	0	0	150	0	**150**	0	**333**
Hourly Total	0	37	0	**37**	0	710	19	0	**729**	0	0	674	0	**674**	0	**1440**
12:00PM	0	14	0	**14**	0	174	4	0	**178**	0	0	157	0	**157**	0	**349**
12:15PM	0	6	0	**6**	0	179	5	0	**184**	0	0	183	0	**183**	0	**373**
12:30PM	0	8	0	**8**	0	174	8	0	**182**	0	0	174	0	**174**	0	**364**
12:45PM	0	16	0	**16**	0	179	3	0	**182**	0	0	171	0	**171**	0	**369**
Hourly Total	0	44	0	**44**	0	706	20	0	**726**	0	0	685	0	**685**	0	**1455**
Total	0	81	0	**81**	0	1416	39	0	**1455**	0	0	1359	0	**1359**	0	**2895**
% Approach	0%	100%	0%	**-**	-	97.3%	2.7%	0%	**-**	-	0%	100%	0%	**-**	-	-
% Total	0%	2.8%	0%	**2.8%**	-	48.9%	1.3%	0%	**50.3%**	-	0%	46.9%	0%	**46.9%**	-	-
Lights	0	81	0	**81**	-	1392	39	0	**1431**	-	0	1335	0	**1335**	-	2847
% Lights	0%	100%	0%	**100%**	-	98.3%	100%	0%	**98.4%**	-	0%	98.2%	0%	**98.2%**	-	98.3%
Articulated Trucks	0	0	0	**0**	-	6	0	0	**6**	-	0	9	0	**9**	-	15
% Articulated Trucks	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.4%**	-	0%	0.7%	0%	**0.7%**	-	0.5%
Buses and Single-Unit Trucks	0	0	0	**0**	-	18	0	0	**18**	-	0	15	0	**15**	-	33
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	1.3%	0%	0%	**1.2%**	-	0%	1.1%	0%	**1.1%**	-	1.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Kirk Road & Main St Commons Shopping Center ... - TMC

Sat Jan 16, 2021
Midday Peak (WKND) (12 PM - 1 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)
All Movements
ID: 809095, Location: 41.919508, -88.27575

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	RIRO Westbound					Kirk Northbound					Kirk Southbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-01-16 12:00PM	0	14	0	**14**	0	174	4	0	**178**	0	0	157	0	**157**	0	**349**
12:15PM	0	6	0	**6**	0	179	5	0	**184**	0	0	183	0	**183**	0	**373**
12:30PM	0	8	0	**8**	0	174	8	0	**182**	0	0	174	0	**174**	0	**364**
12:45PM	0	16	0	**16**	0	179	3	0	**182**	0	0	171	0	**171**	0	**369**
Total	0	44	0	**44**	0	706	20	0	**726**	0	0	685	0	**685**	0	**1455**
% Approach	0%	100%	0%	**-**	-	97.2%	2.8%	0%	**-**	-	0%	100%	0%	**-**	-	**-**
% Total	0%	3.0%	0%	**3.0%**	-	48.5%	1.4%	0%	**49.9%**	-	0%	47.1%	0%	**47.1%**	-	**-**
PHF	-	0.688	-	**0.688**	-	0.986	0.625	-	**0.986**	-	-	0.936	-	**0.936**	-	0.975
Lights	0	44	0	**44**	-	700	20	0	**720**	-	0	674	0	**674**	-	1438
% Lights	0%	100%	0%	**100%**	-	99.2%	100%	0%	**99.2%**	-	0%	98.4%	0%	**98.4%**	-	98.8%
Articulated Trucks	0	0	0	**0**	-	2	0	0	**2**	-	0	5	0	**5**	-	7
% Articulated Trucks	0%	0%	0%	**0%**	-	0.3%	0%	0%	**0.3%**	-	0%	0.7%	0%	**0.7%**	-	0.5%
Buses and Single-Unit Trucks	0	0	0	**0**	-	4	0	0	**4**	-	0	6	0	**6**	-	10
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	0.6%	0%	0%	**0.6%**	-	0%	0.9%	0%	**0.9%**	-	0.7%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Appendix C
CMAP Traffic Projections

GEWALT HAMILTON ASSOCIATES, INC.

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

January 27, 2021

Lynn M. Means, P.E., PTOE
Senior Transportation Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60

Subject: Main Street (IL 64) at Kirk Road
IDOT

Dear Ms. Means:

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

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Main St (IL 64) north of Kirk Rd	29,500	36,000
Main St (IL 64) north of Kirk Rd	32,400	41,600
Kirk Rd north of Main St	18,800	19,900
Kirk Rd south of Main St	29,000	32,800

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2020 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.

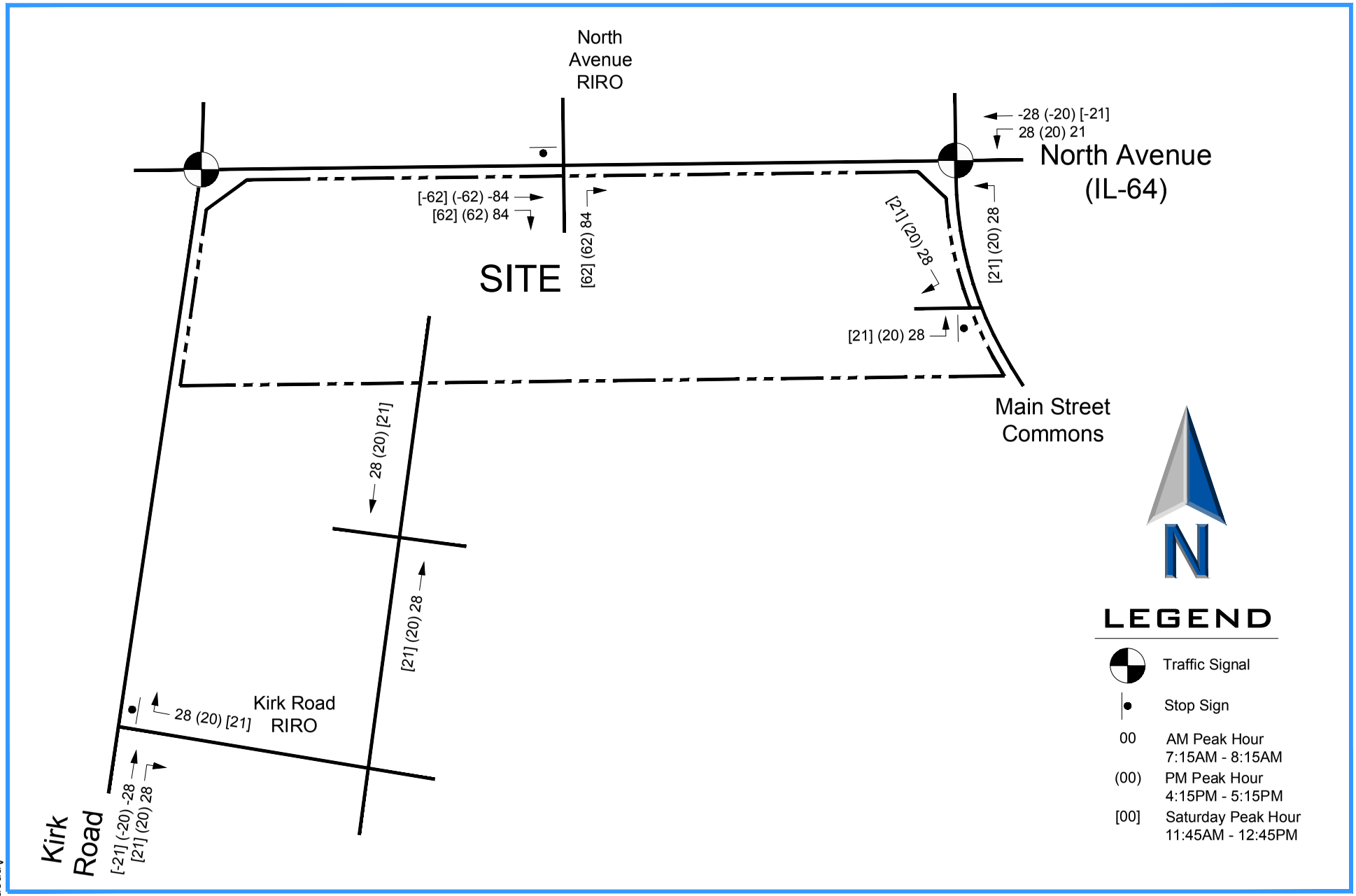
Sincerely,

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

cc: Quigley (IDOT)
2021_CY_TrafficForecast\St.Charles\ka-02-21\ka-02-21.docx

Appendix D
Background Traffic

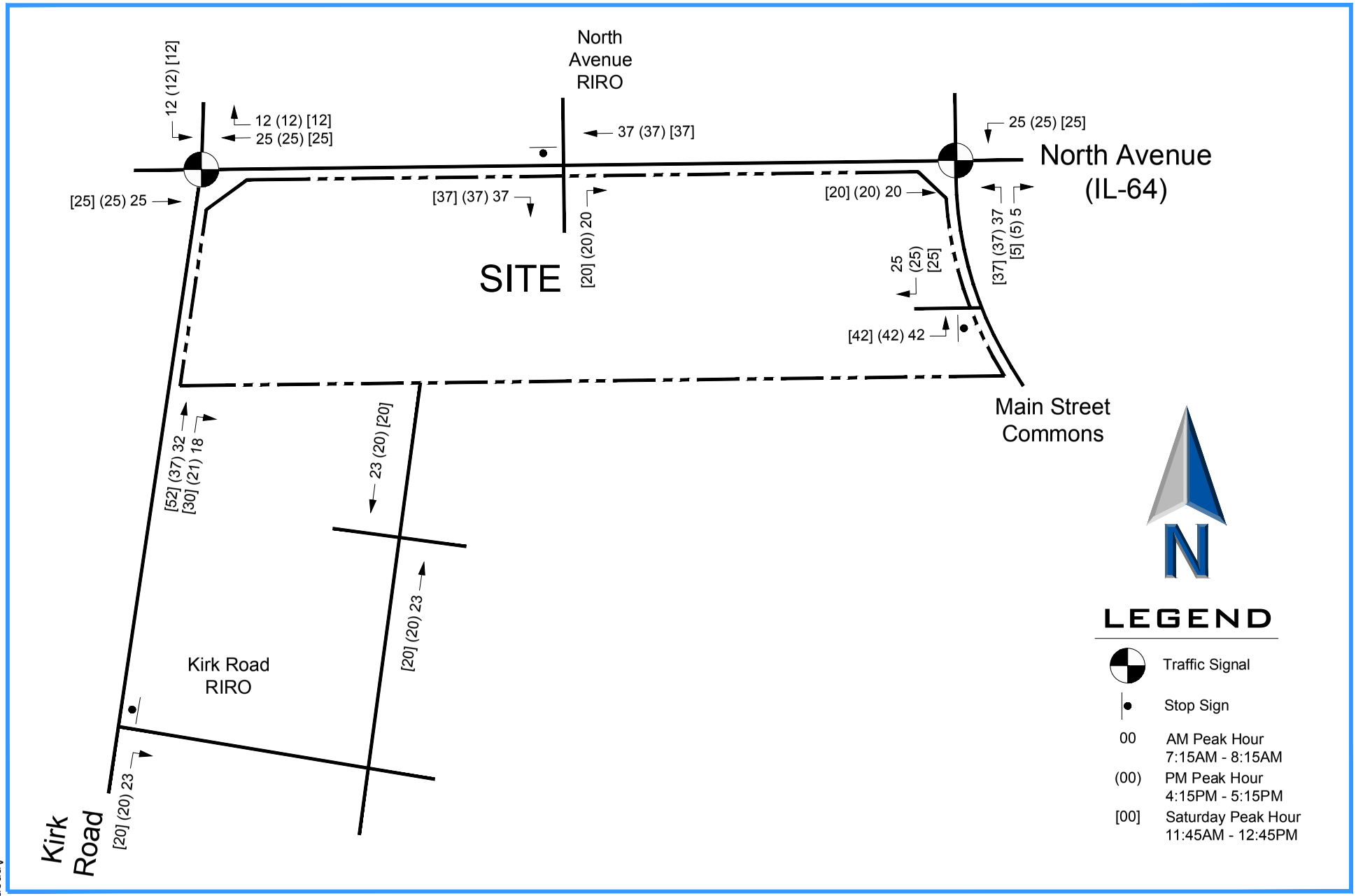
GEWALT HAMILTON ASSOCIATES, INC.



ERIKSSON ENGINEERING ASSOCIATES, LTD.

Pass-By Trip Assignment

Figure 5



ERIKSSON ENGINEERING ASSOCIATES, LTD.

New Trip Assignment

Figure 6

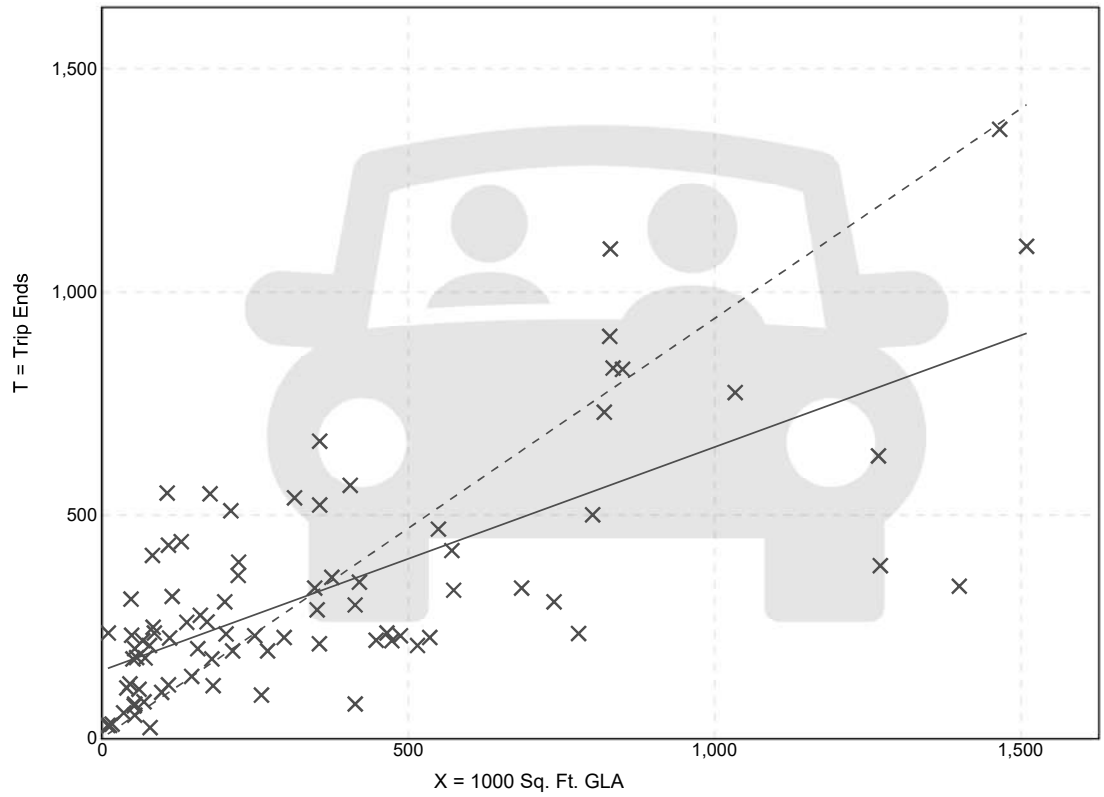
Shopping Center
(820)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GLA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	84
Avg. 1000 Sq. Ft. GLA:	351
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.94	0.18 - 23.74	0.87

Data Plot and Equation



× **Study Site** ——— **Fitted Curve** - - - - **Average Rate**

Fitted Curve Equation: T = 0.50(X) + 151.78 **R^2= 0.50**

Trip Gen Manual, 10th Ed + Supplement • Institute of Transportation Engineers

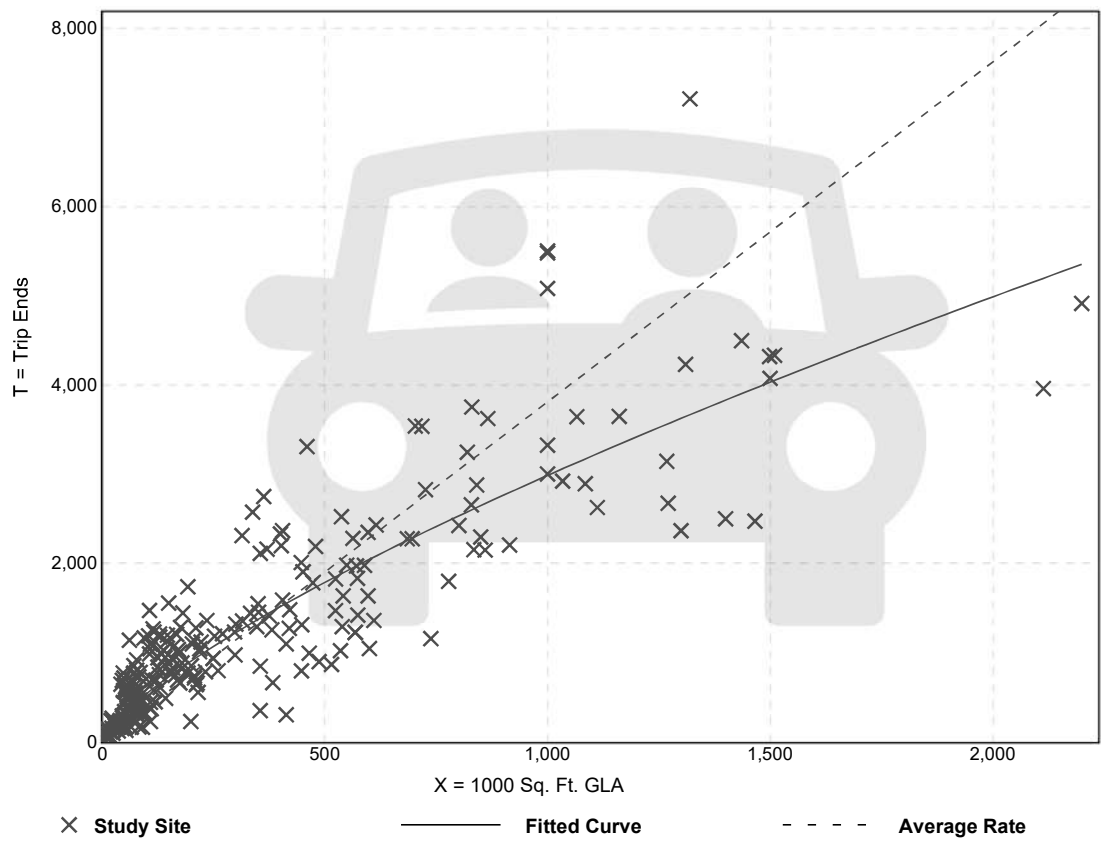
Shopping Center
(820)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GLA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	261
Avg. 1000 Sq. Ft. GLA:	327
Directional Distribution:	48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.81	0.74 - 18.69	2.04

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.74 Ln(X) + 2.89 **R^2= 0.82**

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Shopping Center
(820)

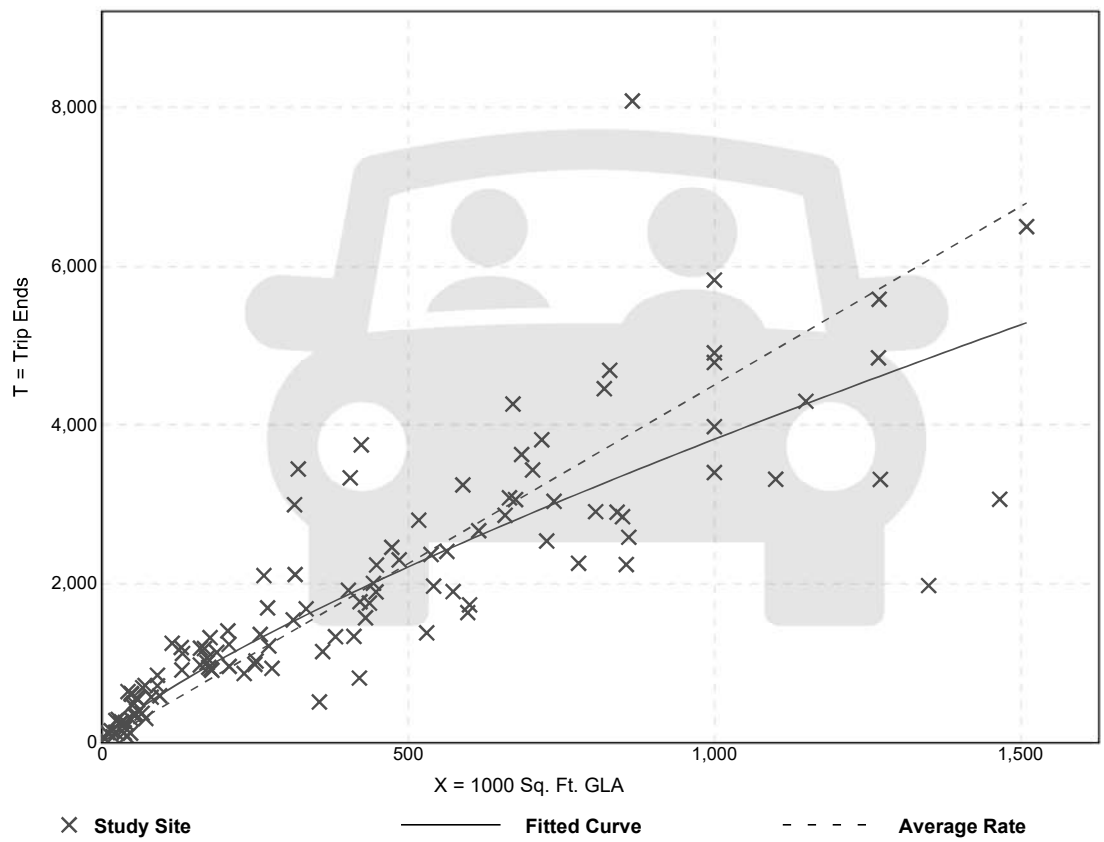
Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 119
Avg. 1000 Sq. Ft. GLA: 416
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
4.50	1.42 - 15.10	1.88

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.79 Ln(X) + 2.79 **R^2= 0.87**

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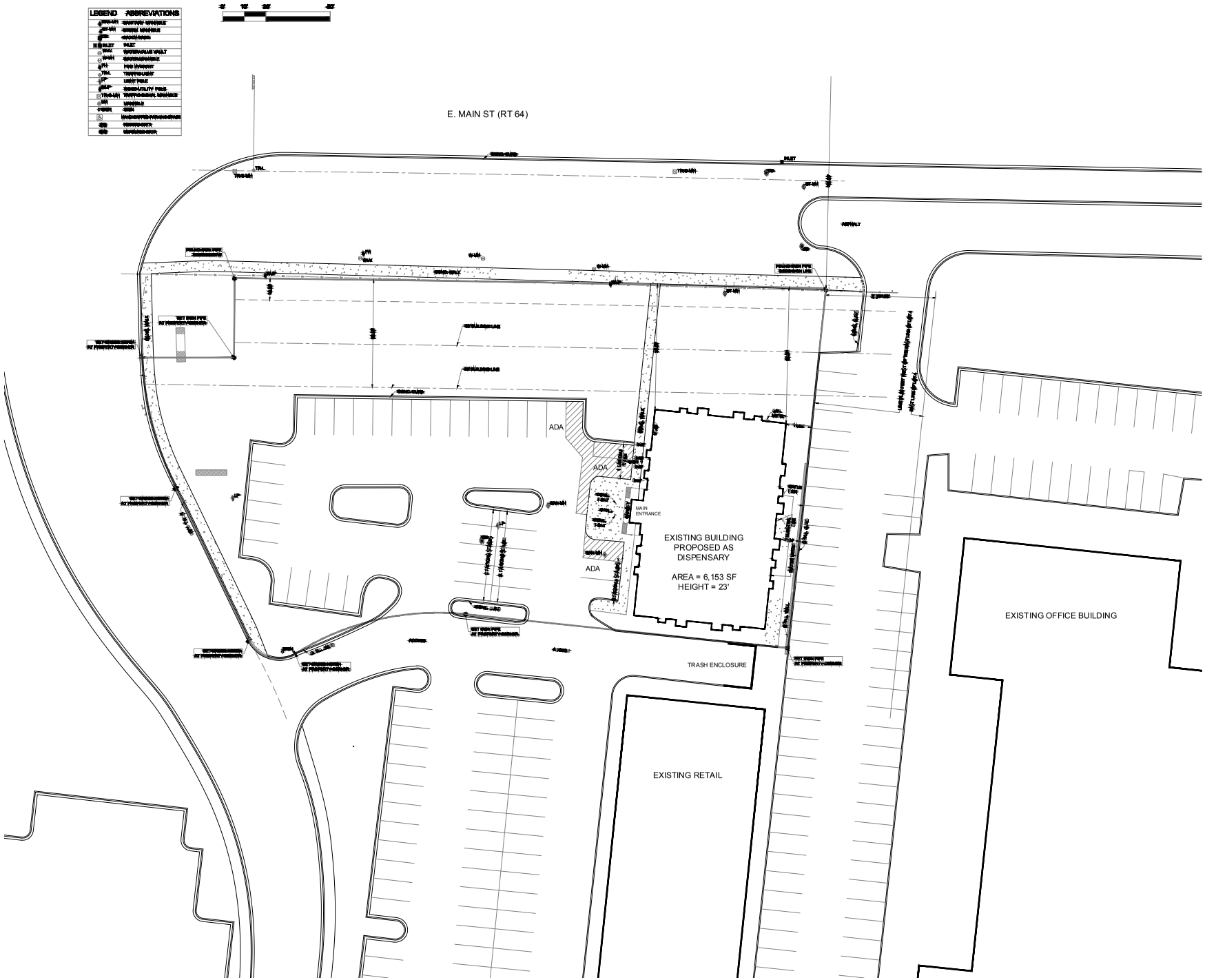
Appendix E
Site Plan

GHA GEWALT HAMILTON ASSOCIATES, INC.



ADDRESS: 3691 E MAIN ST, ST. CHARLES, IL 60174

DRAWING: SITE PLAN

PROJECT: CANNABIS DISPENSARY

ZONING: -

INTENT: -

VERSION: 1

ORIGINAL DATE: 1/21/2021

REVISION DATE: 1/21/2021

RENOVATION

S 1.1

Appendix F
ITE Trip Generation Excerpts -Site Traffic

GEWALT HAMILTON ASSOCIATES, INC.

Marijuana Dispensary
(882)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

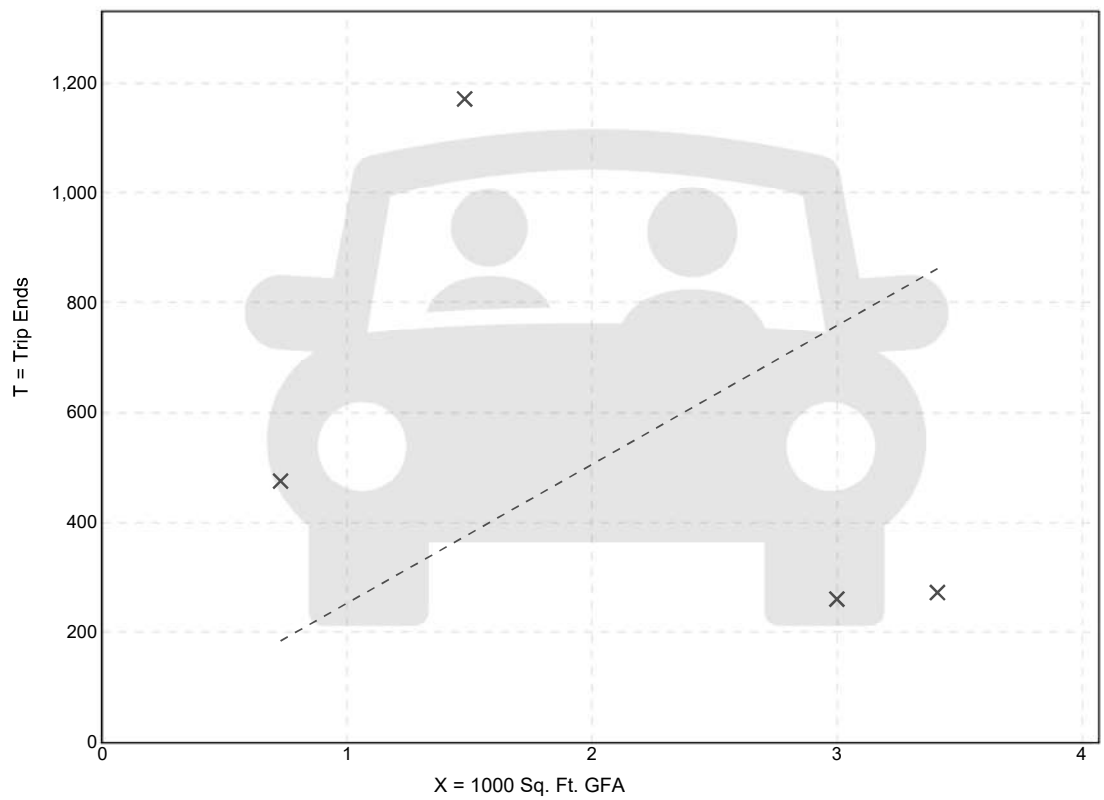
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
252.70	79.74 - 791.22	336.11

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

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Marijuana Dispensary
(882)

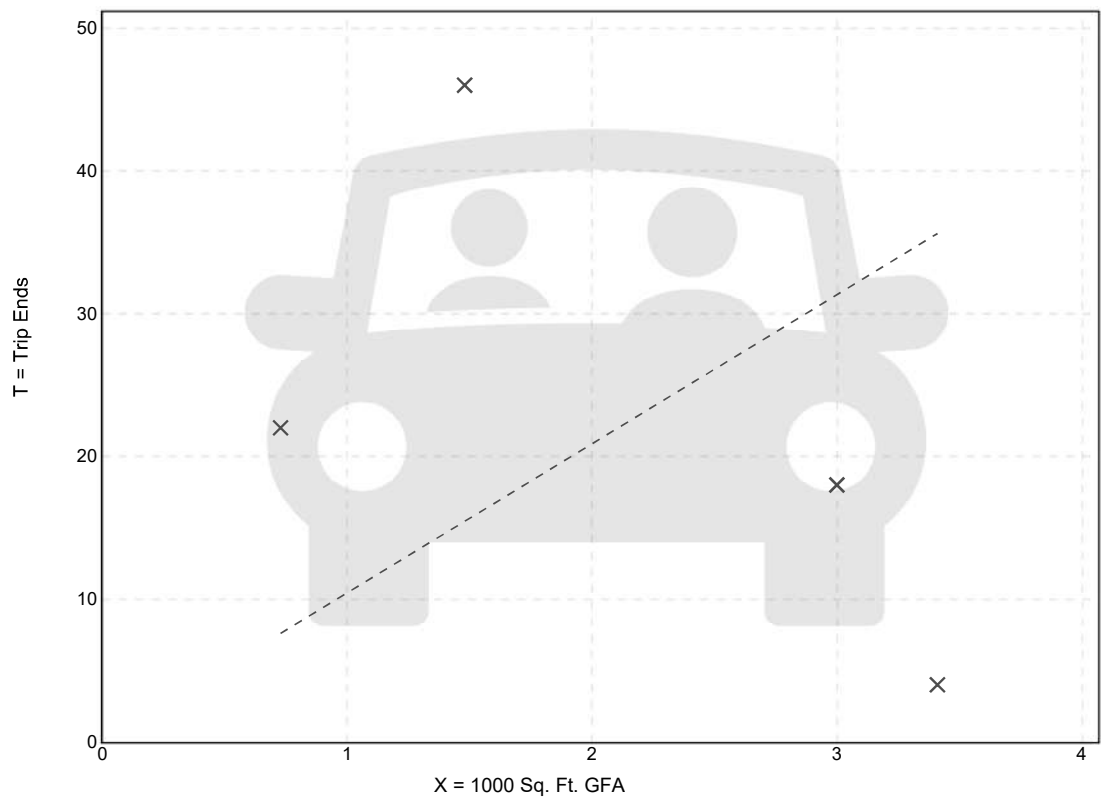
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	4
Avg. 1000 Sq. Ft. GFA:	2
Directional Distribution:	56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.44	1.17 - 31.08	14.00

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

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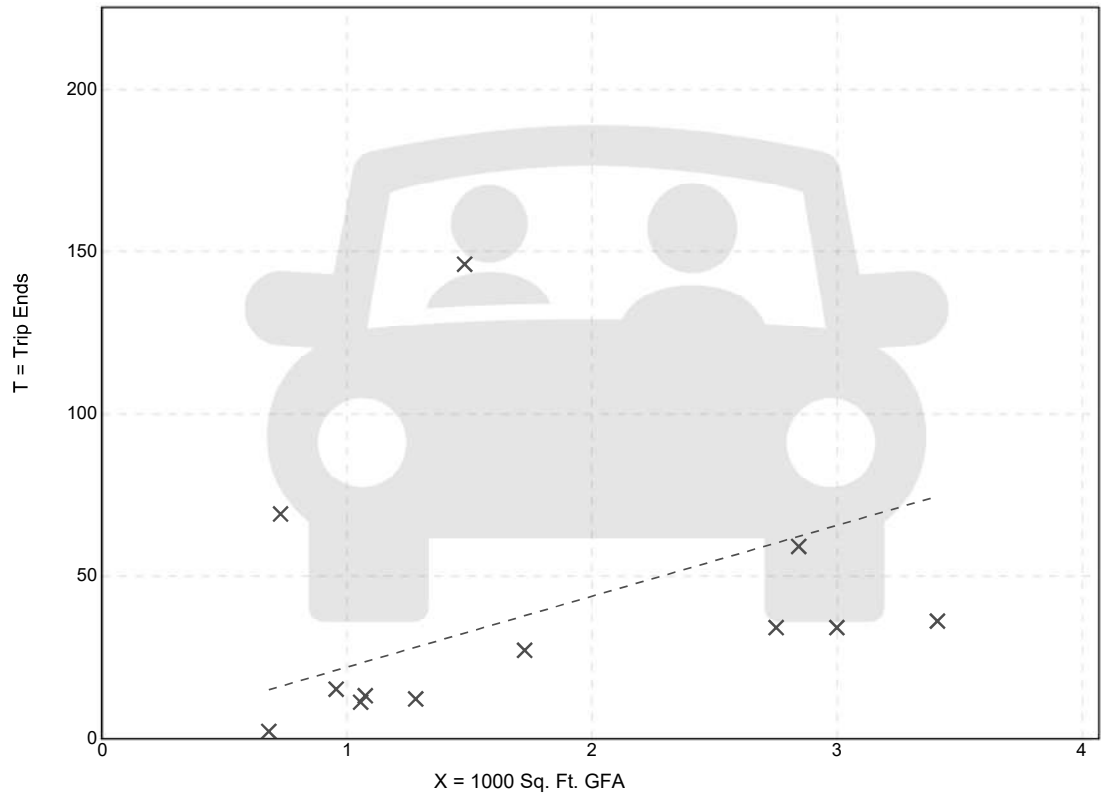
Marijuana Dispensary
(882)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	12
Avg. 1000 Sq. Ft. GFA:	2
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
21.83	2.94 - 98.65	27.36

Data Plot and Equation



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

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Marijuana Dispensary
(882)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

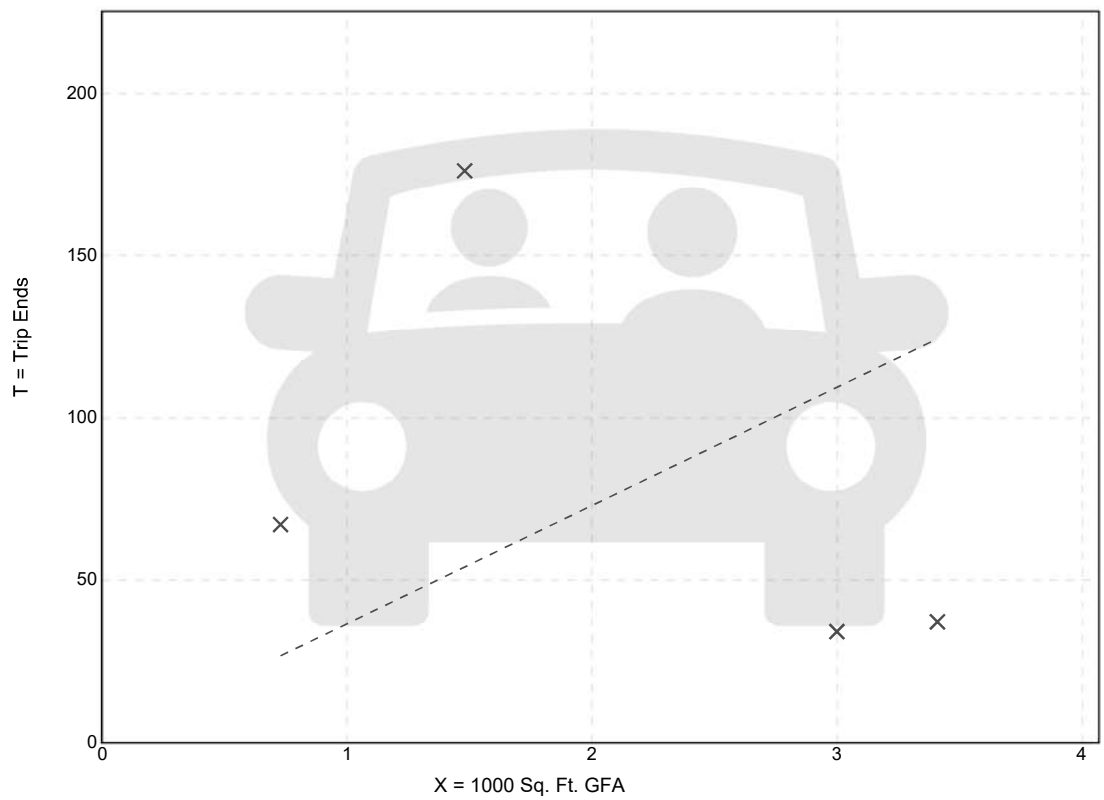
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
36.43	10.85 - 118.92	50.44

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

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Appendix G
Capacity Analysis Worksheets

GEWALT HAMILTON ASSOCIATES, INC.

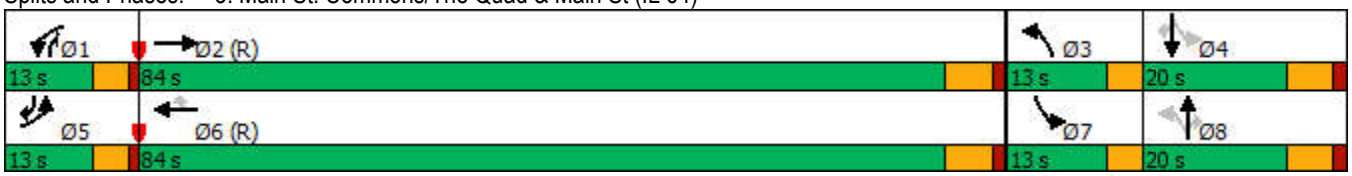
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1569	14	2	1071	5	4	0	3	9	0	5
Future Volume (vph)	10	1569	14	2	1071	5	4	0	3	9	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3370	0	1805	3551	1346	1444	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3502	3370	0	1805	3551	1346	1444	1900	1615	1805	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				92			134			194
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	7%	0%	7%	20%	25%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1684	0	2	1139	5	4	0	3	10	0	5
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	13.0	84.0		13.0	84.0	84.0	13.0	20.0	13.0	13.0	20.0	13.0
Total Split (%)	10.0%	64.6%		10.0%	64.6%	64.6%	10.0%	15.4%	10.0%	10.0%	15.4%	10.0%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	5.9	124.4		5.8	121.0	121.0	6.1		5.8	6.3		5.9
Actuated g/C Ratio	0.05	0.96		0.04	0.93	0.93	0.05		0.04	0.05		0.05
v/c Ratio	0.07	0.52		0.03	0.34	0.00	0.06		0.02	0.11		0.02
Control Delay	60.1	2.3		60.0	1.8	0.0	60.5		0.0	61.4		0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay	60.1	2.3		60.0	1.8	0.0	60.5		0.0	61.4		0.2
LOS	E	A		E	A	A	E		A	E		A
Approach Delay		2.6			1.9			34.6			41.0	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	4	0		2	0	0	3		0	8		0
Queue Length 95th (ft)	15	322		11	164	0	16		0	27		0
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	228	3225		118	3305	1259	105		230	131		286

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0		0	0		0
Spillback Cap Reductn	0	0		0	0	0	0		0	0		0
Storage Cap Reductn	0	0		0	0	0	0		0	0		0
Reduced v/c Ratio	0.05	0.52		0.02	0.34	0.00	0.04		0.01	0.08		0.02

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 118 (91%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 2.6 Intersection LOS: A
Intersection Capacity Utilization 62.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	9	925	6	0	1164
Future Vol, veh/h	0	9	925	6	0	1164
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	7	0	0	6
Mvmt Flow	0	9	964	6	0	1213

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	482	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	536	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	536	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	536	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	11.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

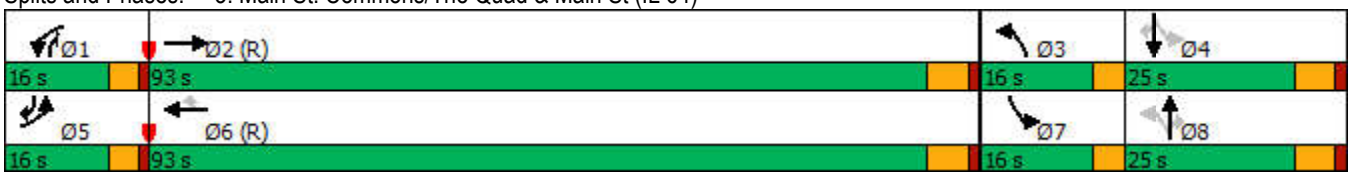
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1090	59	41	1664	32	49	9	57	1	6	30
Future Volume (vph)	14	1090	59	41	1664	32	49	9	57	1	6	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3419	0	1805	3725	1615	1805	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.784					
Satd. Flow (perm)	3502	3419	0	1805	3725	1615	1490	1900	1615	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				80			61			47
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	1235	0	44	1789	34	53	10	61	1	6	32
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	16.0	93.0		16.0	93.0	93.0	16.0	25.0	16.0	16.0	25.0	16.0
Total Split (%)	10.7%	62.0%		10.7%	62.0%	62.0%	10.7%	16.7%	10.7%	10.7%	16.7%	10.7%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	6.2	119.1		9.0	122.0	122.0	13.0	9.5	21.7	7.8	8.0	9.0
Actuated g/C Ratio	0.04	0.79		0.06	0.81	0.81	0.09	0.06	0.14	0.05	0.05	0.06
v/c Ratio	0.10	0.45		0.41	0.59	0.03	0.35	0.08	0.21	0.01	0.06	0.23
Control Delay	70.5	8.0		78.0	8.4	0.0	68.3	66.0	12.7	59.0	68.8	10.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	8.0		78.0	8.4	0.0	68.3	66.0	12.7	59.0	68.8	10.9
LOS	E	A		E	A	A	E	E	B	E	E	B
Approach Delay		8.7			9.9			40.8			21.1	
Approach LOS		A			A			D			C	
Queue Length 50th (ft)	7	193		42	309	0	51	10	0	1	6	0
Queue Length 95th (ft)	20	390		83	602	0	87	29	41	7	22	20
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	268	2716		140	3028	1327	178	240	313	177	240	196

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.45		0.31	0.59	0.03	0.30	0.04	0.19	0.01	0.03	0.16

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 102 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 10.8 Intersection LOS: B
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	31	1386	29	0	1006
Future Vol, veh/h	0	31	1386	29	0	1006
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	4	0	0	5
Mvmt Flow	0	33	1474	31	0	1070

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	737	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	365	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	365	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	365	-
HCM Lane V/C Ratio	-	-	0.09	-
HCM Control Delay (s)	-	-	15.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

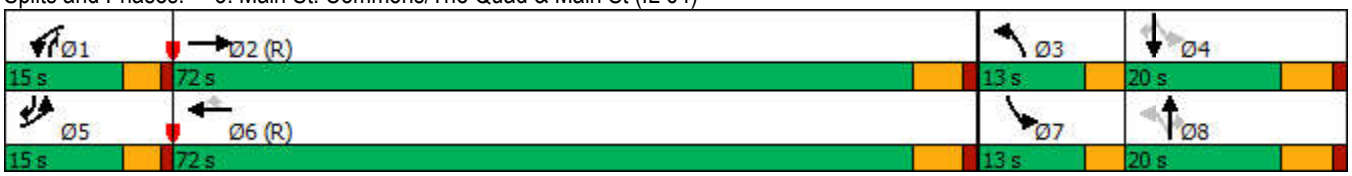
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1112	77	60	1205	19	63	13	67	28	9	48
Future Volume (vph)	55	1112	77	60	1205	19	63	13	67	28	9	48
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3508	0	1805	3725	1615	1805	1900	1583	1805	1900	1615
Flt Permitted	0.950			0.950			0.769					
Satd. Flow (perm)	3502	3508	0	1805	3725	1615	1461	1900	1583	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				100			69			59
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1225	0	62	1242	20	65	13	69	29	9	49
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	15.0	72.0		15.0	72.0	72.0	13.0	20.0	15.0	13.0	20.0	15.0
Total Split (%)	12.5%	60.0%		12.5%	60.0%	60.0%	10.8%	16.7%	12.5%	10.8%	16.7%	12.5%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	7.4	87.2		9.5	89.3	89.3	13.8	8.2	18.0	10.0	8.1	10.3
Actuated g/C Ratio	0.06	0.73		0.08	0.74	0.74	0.12	0.07	0.15	0.08	0.07	0.09
v/c Ratio	0.27	0.48		0.44	0.45	0.02	0.32	0.10	0.23	0.19	0.07	0.26
Control Delay	56.3	10.9		61.4	9.3	0.0	49.5	54.2	10.7	50.0	53.7	11.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	10.9		61.4	9.3	0.0	49.5	54.2	10.7	50.0	53.7	11.7
LOS	E	B		E	A	A	D	D	B	D	D	B
Approach Delay		12.9			11.6			31.7			28.8	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	22	184		47	170	0	49	10	0	21	7	0
Queue Length 95th (ft)	43	374		90	338	0	83	31	38	45	24	27
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	306	2552		166	2771	1227	211	221	317	177	221	233

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.48		0.37	0.45	0.02	0.31	0.06	0.22	0.16	0.04	0.21

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 90 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 13.7 Intersection LOS: B
Intersection Capacity Utilization 60.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	44	847	20	0	822
Future Vol, veh/h	0	44	847	20	0	822
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	0	45	864	20	0	839

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	432	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	577	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	577	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	577	-
HCM Lane V/C Ratio	-	-	0.078	-
HCM Control Delay (s)	-	-	11.8	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

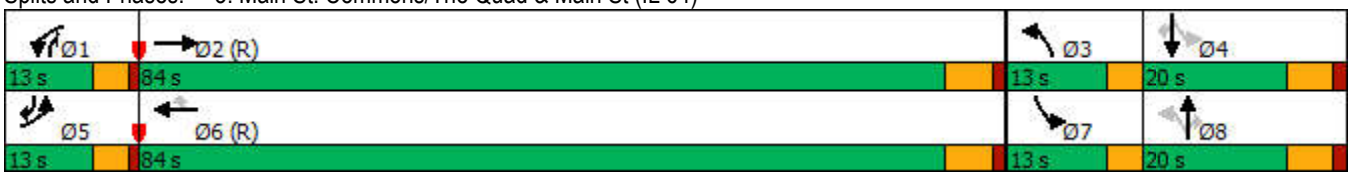
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1661	64	89	1093	5	94	3	31	9	5	5
Future Volume (vph)	10	1661	64	89	1093	5	94	3	31	9	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3354	0	1805	3551	1346	1444	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.784					
Satd. Flow (perm)	3502	3354	0	1805	3551	1346	1192	1900	1615	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				92			55			55
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	7%	0%	7%	20%	25%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1835	0	95	1163	5	100	3	33	10	5	5
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	13.0	84.0		13.0	84.0	84.0	13.0	20.0	13.0	13.0	20.0	13.0
Total Split (%)	10.0%	64.6%		10.0%	64.6%	64.6%	10.0%	15.4%	10.0%	10.0%	15.4%	10.0%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	5.9	90.4		12.5	103.0	103.0	12.8	8.4	27.0	8.4	8.0	8.7
Actuated g/C Ratio	0.05	0.70		0.10	0.79	0.79	0.10	0.06	0.21	0.06	0.06	0.07
v/c Ratio	0.07	0.79		0.55	0.41	0.00	0.73	0.02	0.09	0.09	0.04	0.03
Control Delay	60.1	17.8		67.6	5.8	0.0	84.5	56.7	4.3	53.1	58.4	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	17.8		67.6	5.8	0.0	84.5	56.7	4.3	53.1	58.4	0.4
LOS	E	B		E	A	A	F	E	A	D	E	A
Approach Delay		18.1			10.4			64.4			41.3	
Approach LOS		B			B			E			D	
Queue Length 50th (ft)	4	470		77	88	0	85	2	0	8	4	0
Queue Length 95th (ft)	15	816		134	290	0	133	13	13	23	18	0
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	228	2333		173	2814	1086	137	204	378	162	204	191

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.79		0.55	0.41	0.00	0.73	0.01	0.09	0.06	0.02	0.03

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 118 (91%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 17.2 Intersection LOS: B
Intersection Capacity Utilization 78.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	55	939	81	0	1233
Future Vol, veh/h	0	55	939	81	0	1233
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	7	0	0	6
Mvmt Flow	0	57	978	84	0	1284

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	489	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	530	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	530	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	530	-
HCM Lane V/C Ratio	-	-	0.108	-
HCM Control Delay (s)	-	-	12.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.4	-

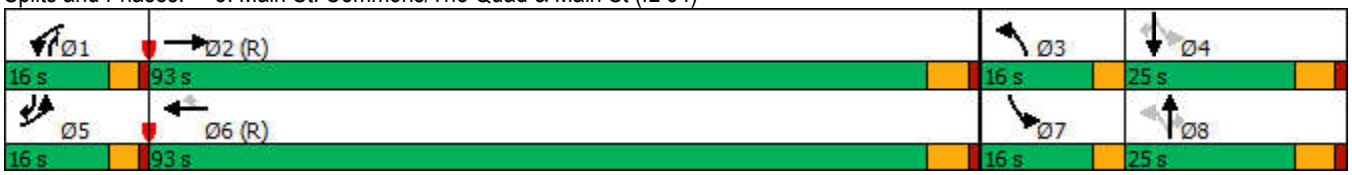
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1156	133	144	1714	32	182	17	119	1	13	30
Future Volume (vph)	14	1156	133	144	1714	32	182	17	119	1	13	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3403	0	1805	3725	1615	1805	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.571					
Satd. Flow (perm)	3502	3403	0	1805	3725	1615	1085	1900	1615	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				80			128			47
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	1386	0	155	1843	34	196	18	128	1	14	32
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	16.0	93.0		16.0	93.0	93.0	16.0	25.0	16.0	16.0	25.0	16.0
Total Split (%)	10.7%	62.0%		10.7%	62.0%	62.0%	10.7%	16.7%	10.7%	10.7%	16.7%	10.7%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	6.2	95.3		22.3	113.4	113.4	18.4	14.0	42.3	10.1	8.3	12.1
Actuated g/C Ratio	0.04	0.64		0.15	0.76	0.76	0.12	0.09	0.28	0.07	0.06	0.08
v/c Ratio	0.10	0.64		0.58	0.65	0.03	1.02	0.10	0.23	0.01	0.13	0.18
Control Delay	70.5	19.2		69.3	11.8	0.0	131.1	61.4	6.9	52.0	70.1	9.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	19.2		69.3	11.8	0.0	131.1	61.4	6.9	52.0	70.1	9.4
LOS	E	B		E	B	A	F	E	A	D	E	A
Approach Delay		19.8			16.0			80.9			28.4	
Approach LOS		B			B			F			C	
Queue Length 50th (ft)	7	359		144	354	0	~245	17	0	1	13	0
Queue Length 95th (ft)	20	564		225	655	0	#285	43	51	7	38	20
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	268	2167		267	2816	1240	193	253	547	207	240	229

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.64		0.58	0.65	0.03	1.02	0.07	0.23	0.00	0.06	0.14

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 102 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 23.4 Intersection LOS: C
Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	104	1425	109	0	1057
Future Vol, veh/h	0	104	1425	109	0	1057
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	4	0	0	5
Mvmt Flow	0	111	1516	116	0	1124

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	758	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	354	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	354	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	354	-
HCM Lane V/C Ratio	-	-	0.313	-
HCM Control Delay (s)	-	-	19.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.3	-

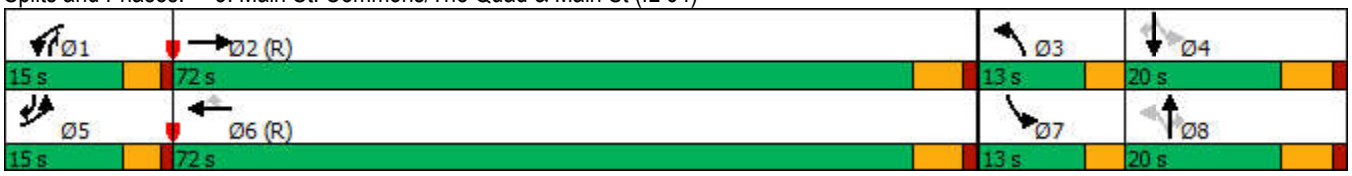
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1174	170	174	1229	19	198	21	137	28	18	48
Future Volume (vph)	55	1174	170	174	1229	19	198	21	137	28	18	48
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3481	0	1805	3725	1615	1805	1900	1583	1805	1900	1615
Flt Permitted	0.950			0.950			0.563					
Satd. Flow (perm)	3502	3481	0	1805	3725	1615	1070	1900	1583	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				100			141			59
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1385	0	179	1267	20	204	22	141	29	19	49
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	15.0	72.0		15.0	72.0	72.0	13.0	20.0	15.0	13.0	20.0	15.0
Total Split (%)	12.5%	60.0%		12.5%	60.0%	60.0%	10.8%	16.7%	12.5%	10.8%	16.7%	12.5%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	7.4	69.0		18.8	82.4	82.4	17.2	8.8	33.6	11.8	8.4	13.3
Actuated g/C Ratio	0.06	0.58		0.16	0.69	0.69	0.14	0.07	0.28	0.10	0.07	0.11
v/c Ratio	0.27	0.69		0.63	0.50	0.02	0.89	0.16	0.26	0.16	0.14	0.21
Control Delay	56.3	20.4		59.6	11.3	0.1	86.1	54.4	6.9	45.2	54.8	9.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	20.4		59.6	11.3	0.1	86.1	54.4	6.9	45.2	54.8	9.9
LOS	E	C		E	B	A	F	D	A	D	D	A
Approach Delay		21.9			17.1			53.7			29.3	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	22	396		131	257	0	148	16	0	22	14	0
Queue Length 95th (ft)	43	481		#253	356	0	#266	43	50	45	39	27
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	306	2010		282	2558	1140	228	221	544	215	221	272

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.69		0.63	0.50	0.02	0.89	0.10	0.26	0.13	0.09	0.18

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 90 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	117	858	107	0	864
Future Vol, veh/h	0	117	858	107	0	864
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	0	119	876	109	0	882

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	438	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	572	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	572	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	572	-
HCM Lane V/C Ratio	-	-	0.209	-
HCM Control Delay (s)	-	-	12.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-

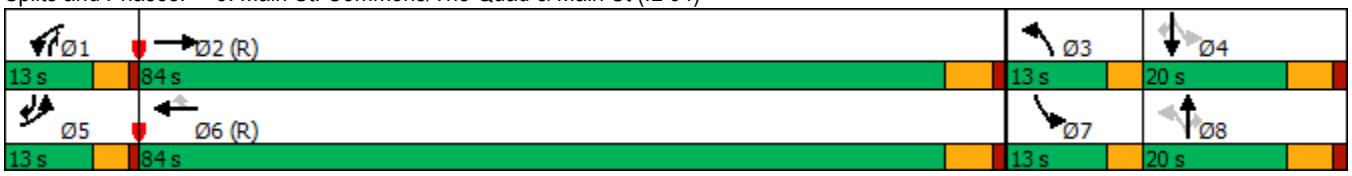
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1657	81	100	1091	5	110	4	42	9	7	5
Future Volume (vph)	10	1657	81	100	1091	5	110	4	42	9	7	5
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3350	0	1805	3551	1346	1444	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.784					
Satd. Flow (perm)	3502	3350	0	1805	3551	1346	1192	1900	1615	1900	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				92			55			55
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	7%	7%	0%	7%	20%	25%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1849	0	106	1161	5	117	4	45	10	7	5
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	13.0	84.0		13.0	84.0	84.0	13.0	20.0	13.0	13.0	20.0	13.0
Total Split (%)	10.0%	64.6%		10.0%	64.6%	64.6%	10.0%	15.4%	10.0%	10.0%	15.4%	10.0%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	5.9	89.2		13.7	103.0	103.0	12.9	8.5	28.1	8.4	8.0	8.7
Actuated g/C Ratio	0.05	0.69		0.11	0.79	0.79	0.10	0.07	0.22	0.06	0.06	0.07
v/c Ratio	0.07	0.80		0.56	0.41	0.00	0.85	0.03	0.11	0.08	0.06	0.03
Control Delay	60.1	18.9		66.8	5.8	0.0	101.6	57.0	8.2	53.1	58.7	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	18.9		66.8	5.8	0.0	101.6	57.0	8.2	53.1	58.7	0.4
LOS	E	B		E	A	A	F	E	A	D	E	A
Approach Delay		19.2			10.9			75.2			42.9	
Approach LOS		B			B			E			D	
Queue Length 50th (ft)	4	497		86	88	0	~101	3	0	8	6	0
Queue Length 95th (ft)	15	830		148	290	0	153	15	25	23	22	0
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	228	2301		189	2813	1085	137	204	392	162	204	191

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.80		0.56	0.41	0.00	0.85	0.02	0.11	0.06	0.03	0.03

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 118 (91%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 18.9 Intersection LOS: B
Intersection Capacity Utilization 80.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	55	939	87	0	1237
Future Vol, veh/h	0	55	939	87	0	1237
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	7	0	0	6
Mvmt Flow	0	57	978	91	0	1289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	489	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	530	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	530	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	530	-
HCM Lane V/C Ratio	-	-	0.108	-
HCM Control Delay (s)	-	-	12.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.4	-

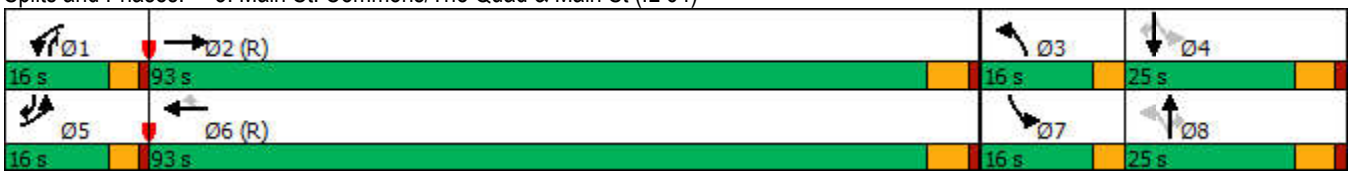
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1151	162	168	1706	32	225	20	140	1	16	30
Future Volume (vph)	14	1151	162	168	1706	32	225	20	140	1	16	30
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3396	0	1805	3725	1615	1805	1900	1615	1805	1900	1615
Flt Permitted	0.950			0.950			0.462			0.743		
Satd. Flow (perm)	3502	3396	0	1805	3725	1615	878	1900	1615	1412	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				80			151			47
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	5%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	1412	0	181	1834	34	242	22	151	1	17	32
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	16.0	93.0		16.0	93.0	93.0	16.0	25.0	16.0	16.0	25.0	16.0
Total Split (%)	10.7%	62.0%		10.7%	62.0%	62.0%	10.7%	16.7%	10.7%	10.7%	16.7%	10.7%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	6.2	89.2		25.4	110.4	110.4	21.4	17.0	48.4	12.4	8.5	15.1
Actuated g/C Ratio	0.04	0.59		0.17	0.74	0.74	0.14	0.11	0.32	0.08	0.06	0.10
v/c Ratio	0.10	0.70		0.59	0.67	0.03	1.20	0.10	0.24	0.01	0.16	0.16
Control Delay	70.5	23.4		67.7	13.5	0.0	178.6	58.8	6.4	50.0	70.5	8.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	23.4		67.7	13.5	0.0	178.6	58.8	6.4	50.0	70.5	8.6
LOS	E	C		E	B	A	F	E	A	D	E	A
Approach Delay		23.9			18.0			109.6			30.5	
Approach LOS		C			B			F			C	
Queue Length 50th (ft)	7	496		170	536	0	~239	19	0	1	16	0
Queue Length 95th (ft)	20	583		#275	656	0	#423	49	54	7	43	20
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	268	2025		306	2742	1210	202	267	623	214	240	260

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.70		0.59	0.67	0.03	1.20	0.08	0.24	0.00	0.07	0.12

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 102 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.20
Intersection Signal Delay: 30.0 Intersection LOS: C
Intersection Capacity Utilization 81.0% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	104	1425	120	0	1068
Future Vol, veh/h	0	104	1425	120	0	1068
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	4	0	0	5
Mvmt Flow	0	111	1516	128	0	1136

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	758	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	354	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	354	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	354	-
HCM Lane V/C Ratio	-	-	0.313	-
HCM Control Delay (s)	-	-	19.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.3	-

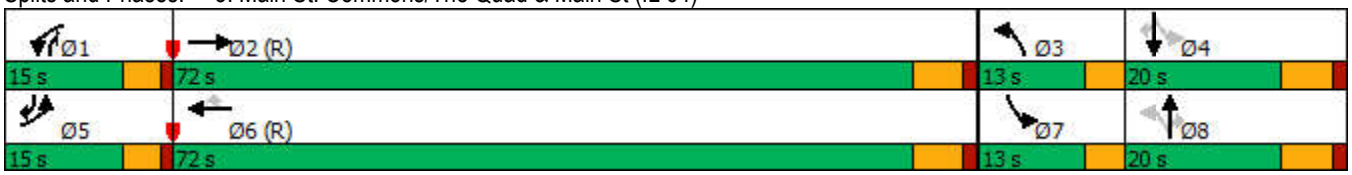
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1163	222	212	1218	19	268	25	172	28	22	48
Future Volume (vph)	55	1163	222	212	1218	19	268	25	172	28	22	48
Ideal Flow (vphpl)	1900	1900	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	200		200	150		150	0		155
Storage Lanes	2		0	1		1	1		1	1		1
Taper Length (ft)	135			185			80			25		
Satd. Flow (prot)	3502	3465	0	1805	3725	1615	1805	1900	1583	1805	1900	1615
Flt Permitted	0.950			0.950			0.455			0.755		
Satd. Flow (perm)	3502	3465	0	1805	3725	1615	864	1900	1583	1434	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29				100			164			59
Link Speed (mph)		45			45			15			15	
Link Distance (ft)		564			533			397			312	
Travel Time (s)		8.5			8.1			18.0			14.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1428	0	219	1256	20	276	26	177	29	23	49
Turn Type	Prot	NA		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8	1	7	4	5
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0	15.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	7.5	21.0		7.5	21.0	21.0	6.5	14.0	7.5	6.5	14.0	7.5
Total Split (s)	15.0	72.0		15.0	72.0	72.0	13.0	20.0	15.0	13.0	20.0	15.0
Total Split (%)	12.5%	60.0%		12.5%	60.0%	60.0%	10.8%	16.7%	12.5%	10.8%	16.7%	12.5%
Yellow Time (s)	3.5	4.5		3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5		1.0	1.5	1.5	0.0	1.5	1.0	0.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0		4.5	6.0	6.0	3.5	6.0	4.5	3.5	6.0	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	7.4	66.3		20.8	81.8	81.8	17.6	9.4	36.3	14.0	8.5	16.3
Actuated g/C Ratio	0.06	0.55		0.17	0.68	0.68	0.15	0.08	0.30	0.12	0.07	0.14
v/c Ratio	0.27	0.74		0.70	0.49	0.02	1.35	0.17	0.30	0.15	0.17	0.18
Control Delay	56.3	22.9		61.4	11.6	0.1	225.5	54.0	8.0	42.2	55.2	9.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	22.9		61.4	11.6	0.1	225.5	54.0	8.0	42.2	55.2	9.2
LOS	E	C		E	B	A	F	D	A	D	E	A
Approach Delay		24.1			18.8			135.8			29.2	
Approach LOS		C			B			F			C	
Queue Length 50th (ft)	22	416		169	269	0	~241	19	7	19	17	0
Queue Length 95th (ft)	43	506		#334	355	0	#352	49	64	45	44	27
Internal Link Dist (ft)		484			453			317			232	
Turn Bay Length (ft)	180			200		200	150		150			155
Base Capacity (vph)	306	1928		313	2540	1133	204	221	593	224	221	310

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.74		0.70	0.49	0.02	1.35	0.12	0.30	0.13	0.10	0.16

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 90 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 37.1 Intersection LOS: D
Intersection Capacity Utilization 86.2% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Main St. Commons/The Quad & Main St (IL 64)



Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↱	↑↑	↱		↑↑
Traffic Vol, veh/h	0	117	858	125	0	882
Future Vol, veh/h	0	117	858	125	0	882
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	-	0	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	1	0	0	2
Mvmt Flow	0	119	876	128	0	900

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	438	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	572	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	572	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	572	-
HCM Lane V/C Ratio	-	-	0.209	-
HCM Control Delay (s)	-	-	12.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-

Appendix H
Main Street Commons Shopping Center
Aerial Photography

GEWALT HAMILTON ASSOCIATES, INC.

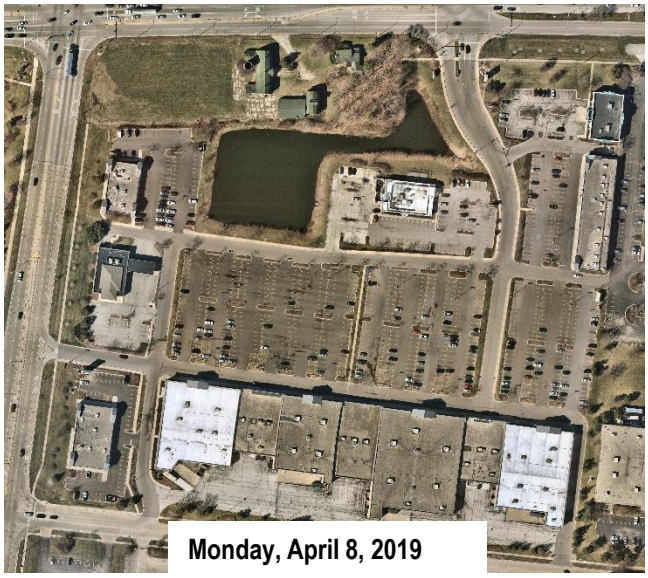
Saturday, March 10, 2018

Friday, July 6, 2018

Tuesday, July 10, 2018

Saturday, September 15, 2018

Sunday, September 23, 2018


Monday, April 8, 2019