Plan Commission Agenda

Sandra "Sandy" Frum Board Room
1225 Cedar Lane Northbrook, IL 60062
Tuesday, April 7, 2026

7:00 PM

1. **ROLL CALL**
2. **MINUTES APPROVAL**
   A. Minutes for approval - February 17, 2026
   Review and approve February 17, 2026 Plan Commission meeting minutes.
3. **COMMUNITY PLANNING REPORT**
4. **PUBLIC COMMENT TIME**

   This agenda item is reserved for members of the public who desire to address the Public Body on a topic that is within purview and jurisdiction of the Public Body, but that is not listed in another location on the agenda. If you would like to speak about a matter that is listed on the agenda, we ask that you wait until that agenda item is called, and we will give you an opportunity to speak then. Anyone desiring to speak should fill out a written speaker form (located in the back of the meeting room) and submit it to the Staff Liaison. “Public Comment Time” is not a forum for open dialogue or engagement with members of the Public Body. Rather, it is intended as an opportunity for you to make comments to the Public Body. While the Public Body will not immediately respond to public comments at this meeting, or engage in a back and forth discussion during the meeting, please be assured that the Public Body is actively listening to all comments, thoughts, and suggestions. All speakers will be limited to a total of three minutes. We request that everyone be respectful, civil, and non-repetitive; and we ask that members of the audience refrain from applauding or making any other comments during or after any speaker. Thank you for your understanding and taking the time to contribute to the success of our community.

5. **PUBLIC HEARING**
   A. DOCKET NO. PCD-25-18: 784 SKOKIE BOULEVARD - MARIANO'S GAS STATION (Public Hearing). An application by Roundyâ€™s Supermarkets, Inc. as lessee of a portion of the property (784 Skokie Boulevard) commonly known as Northshore 770 at 770 - 798 Skokie Boulevard and 510 Dundee Road, which is owned by Menard Inc. for the purposes of: (A) Approval of an amendment to the Special Permit for Planned Development for NorthShore 770 (Ordinance No 2014-3) to allow a gas station within the parking lot; (B) Site Plan Approval; and (C) Approval of any such variations, waivers, and zoning relief as may be necessary.
   Roundy’s Supermarkets, Inc. (Mariano's) proposes to construct an accessory gas station within the parking lot
   to an existing grocery store adjacent to Dundee Road.
6. **REVIEW OF DRAFT RESOLUTIONS**
7. **DISCUSSION TOPICS**
8. **REMARKS FOR THE GOOD OF THE ORDER**
9. **ADJOURN**

The Village of Northbrook is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe or participate in this meeting, or who have questions regarding the accessibility of the meeting or facilities, are requested to promptly contact the Village of Northbrook at (847) 272-5050, or the Illinois Relay Center at (800) 526-0844, to allow the Village of Northbrook to make reasonable accommodations for those persons.

MEMORANDUM

To: Plan Commission
From: Deputy Director Michaela Kohlstedt
Date: 2026-04-07
Subject: Minutes for approval - February 17, 2026

Overview
Review and approve February 17, 2026 Plan Commission meeting minutes.

Fiscal Impact
N/A.

Recommendation
Review and Approval.

Background

MEMORANDUM

To: Plan Commission
From: Deputy Director of Development and Planning Services Michaela Kohlstedt
Date: 2026-04-07
Subject: DOCKET NO. PCD-25-18: 784 SKOKIE BOULEVARD - MARIANO'S GAS STATION (*Public Hearing*). An application by Roundy's Supermarkets, Inc. as lessee of a portion of the property (784 Skokie Boulevard) commonly known as Northshore 770 at 770 - 798 Skokie Boulevard and 510 Dundee Road, which is owned by Menard Inc. for the purposes of: (A) Approval of an amendment to the Special Permit for Planned Development for NorthShore 770 (Ordinance No 2014-3) to allow a gas station within the parking lot; (B) Site Plan Approval; and (C) Approval of any such variations, waivers, and zoning relief as may be necessary.

Overview
Roundy's Supermarkets, Inc. (Mariano's) proposes to construct an accessory gas station within the parking lot
to an existing grocery store adjacent to Dundee Road.

Fiscal Impact
N/A.

Recommendation
Conduct a public hearing and consider a draft Resolution recommending approval.

Background
See attachments.

784 Skokie - Staff Report 4-7-26
784 Skokie - Sustainability Addendum
784 Skokie - Draft Plan Commission Resolution
784 Skokie - Public Comment
784 Skokie - BOT 9-9-2025
784 Skokie - Previously approved Ordinance 2014-3 & 2014-23
784 Skokie - Formal Application
784 Skokie - Narrative & Plans
784 Skokie - Parking & Traffic Impact Study

MEMORANDUM

To: Plan Commission
From: Swati Pandey, Senior Planner
CC: Michaela Kohlstedt, Deputy Director
Date: April 7, 2026
Subject: PCD-25-18: 784 Skokie Boulevard – Gas Station accessory with the existing grocery store

Requested Action

On April 7, 2026 the Plan Commission will conduct a public hearing on an application filed by Roundy's Supermarkets, Inc. (the "Applicant") as lessee of a portion of the property (784 Skokie Boulevard) commonly known as Northshore 770 at 770 - 798 Skokie Boulevard and 510 Dundee Road (collectively the "Subject Property"), which is owned by Menard Inc. (the "Owner"). The Applicant proposes to construct a gas station accessory to the existing grocery store within the parking lot on the Subject Property requiring the following relief:

A. Approval of an amendment to the Special Permit for Planned Development for NorthShore 770 (Ordinance No 2014-3) to allow a gas station within the parking lot;

B. Site Plan Approval; and

C. Approval of any such variations, waivers, and zoning relief as may be necessary to accomplish development and use of the Subject Property as requested by the Applicant.

Proposed Scope of Work

- The applicant is requesting to redevelop a portion of the property, known as NorthShore 770 for a gas station accessory to the Mariano's grocery store. A gas station is a permitted use in the O-4 District subject to additional regulations which underwent the necessary staff review per the current Zoning Code. The development at Northshore 770 was approved as a Planned Development with a final plan approval in 2014. In order to allow this redevelopment, an amendment of the existing Planned Development would be required. Details regarding the proposed request are outlined in the attached material submitted by the Applicant.
- The Mariano's grocery store was developed as part of the Planned Development. The applicant would like to utilize the relatively unused southern portion of the parking lot and redevelop 11,000 square feet approximately with a gas station; removing 91 parking stalls and modifying six landscape islands within the parking area. The major ingress/egress to the site, specifically on Dundee Road will remain undisturbed.
- The gas station would consist of five fuel dispensers (for ten vehicles) under one canopy, with one transaction kiosk in the parking lot. The canopy would be 145'x24' and 19-foot tall to provide weather protection for fuel dispensers. The transaction kiosk would be 244 square feet in size, and 11-foot tall, which includes retail and restroom area, with 2-3 employees. The kiosk would allow sale of windshield wiper fluid, firewood, ice, candy, etc. The exterior of the kiosk will match the Marianos's building.
- The hours of operation include:
    - Fuel center: 24 hours/seven days a week with credit card purchase
    - Transaction kiosk: 6:00am – 10:00pm (same hours as Mariano's grocery store)
- Stormwater detention and volume control system that serves the shopping center will remain unchanged. The development will occur on existing impervious area and would not change any

drainage patterns.

- *Parking*: There are 562 parking spaces provided on the property (surface parking of the entire Planned Development). The applicant has proposed to remove 91 spaces, therefore, there would be 471 remaining spaces. The parking requirement for a fuel sales facility is 1 space per 250 square feet, which in this instance would require one parking space for the kiosk.

  The applicant has provided the current tenant information for commercial portion of the Northshore 770 development. Based on the data provided, including the proposed use, a total of 449 spaces would be required for the entire shopping center. Therefore, there will be a surplus of 22 spaces within the shopping center. The applicant has provided a parking exhibit (attached) showing the data for the tenant and breakdown of parking for Northshore 770. Parking is in compliance with the requirements of the Zoning Code. The applicant has provided a parking study concluding that the observed parking demand for the existing grocery store is sufficient to accommodate the proposed gas station.

- *Landscaping*: A landscape plan has been provided by the Applicant. Interior parking lot landscaping is in compliance with the landscaping requirements within the Zoning Code. A mix of trees, deciduous shrubs, and grass are shown on the plan. The Village's tree preservation officer has reviewed and approved the plan subject to final site work permit approval.

- *Signage*:

  - *Wall*: The Applicant proposes installation of wall signs on the west and east façade of the kiosk building, which is a Mariano's logo. The canopy includes signage on three sides showing logo and lettering, and digital fuel sales price board as shown on the sign plan. The proposed wall signs are in compliance with the requirements of the Zoning Code.

  - *Ground*: The Applicant has proposed redesigning the two existing ground signs for the Northshore 770 development, located on Dundee Road and Skokie Boulevard. The existing Mariano's portion of signage on the ground signs will be split to allow a fuel sales price board. The sign is in compliance with the requirements of the Zoning Code.

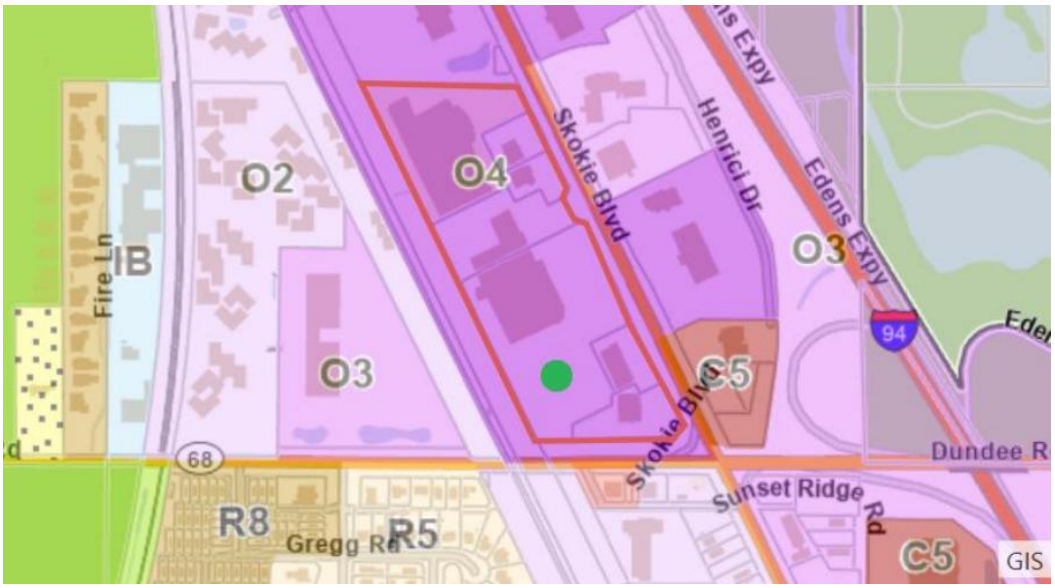
Property Description

The Subject Property is identified as being:

- located at the northwest corner of Skokie Boulevard and Dundee Road;
- approximately 15.8 acres in size;
- improved with a multi-story apartment building; multi-tenant and single-tenant commercial buildings with retail, restaurants, and service based uses;



- zoned O-4 Boulevard Office District;
- surrounded by:
    - North: O-4 Boulevard Office; Office
    - South: C-2 Neighborhood Commercial; Retail
      O-2 Limited Office; Gas Station
    - East: C-5 Boulevard Commercial; Retail
      O-3 General Office & O-4 Boulevard Office; Offices
    - West: O-4 Boulevard Office; Railroad Right-of-Way



- designated as appropriate for Major Corridor Multi-Use in the Comprehensive Plan's Future Land Use



- not located within the 100-year flood plain;
- not located in proximity to any areas identified in the Master Stormwater Management Plan.

Preliminary Review

On September 9, 2025, the Board of Trustees conducted a preliminary review of the request for a gas station at the property. The Board found the request to be appropriate but stated concerns regarding traffic and recommended a traffic study. An excerpt of the Board of Trustees minutes is attached for reference, and the meeting can be viewed on the Village website as well to hear the actual commentary from the Trustees.

The following is a table of the comments made by members of the Board of Trustees:

Trustee	Title	Status	Comments
Kathryn Ciesla	Village President	Present	Traffic; Layout and traffic patterns
Robert Israel	Trustee	Present	Use is acceptable; Traffic is a concern; proposed signage should be reviewed by PC
Heather Ross	Trustee	Present	Agree with Trustee Israel
Johannah Hebl	Trustee	Present	Traffic is a concern; Site access to be reviewed
Joy Ebhomielen	Trustee	Present	Traffic is a concern; Use is fine
Michelle Kohler	Trustee	Present	Use is fine; Traffic is a concern
Matt Cassidy	Trustee	Present	Location of the gas tank to be reviewed; traffic study.

The proposal and the general layout of the plan presented at preliminary review have not changed with the formal application, however, the scope of minor work on the Subject Property and the level of detail has expanded as discussed in the report. The Applicant has also provided the attached traffic study which was reviewed by the Village traffic consultant and found that the proposed plan is adequate as presented.

Staff Review

Prior to scheduling a public hearing the application underwent the standard review process and was reviewed by the following departments/entities. Staff found the proposed plan acceptable for a public hearing and any outstanding items can be addressed at the time of building permit:

- ✓ Development and Planning Services (Planning & Zoning)
- ✓ Sustainability
- ✓ Fire
- ✓ Police
- ✓ Public Works (Village Engineer and Tree Preservation)
- ✓ Traffic Consultant
- ✓ Village Attorney

Compliance with Village Plans

- The Comprehensive Plan identifies the property for Major Corridor Multi-Use which is intended to accommodate a mixture of higher density multi-family housing, retail, restaurant, business and professional offices, personal and business services. A gas station would be classified as retail, and business service use.
- The Village's Bicycle and Pedestrian Plan is applicable and as noted earlier in this memo, it designates Dundee Road in front of the Subject Property for a future sidepath (located adjacent to a roadway) and Skokie Valley Trail Phase 2 to the west for a shared use path (facilities separated from roadways for use by bicyclists and pedestrians).
- The Subject Property is not located within the 100-year flood plain, nor is it located within a stormwater project area as identified in the Master Stormwater Management Plan.

ZONING RELIEF

Major Amendment to an existing Planned Development

The Applicant is requesting approval for a fuel sales facility as a permitted use in O-4 District. As stated earlier, Northshore 770 through several approval documents including Ordinance No. 2014-3 and 2014-23 (attached), approved a Planned Development for the residential and commercial portions of the development. The proposed fuel sales facility is a permitted use in the zoning district; however, the planned development is required to be amended to allow the facility on the property. When considering a major amendment to an existing Planned Unit Development, the Zoning Code states that the amendment shall be treated as a new application for PUD approval. Below is the review criteria to consider when assessing a PUD:

Zoning Code Article 2-118 Planned Unit Development

2-118.D Review Criteria

1. **General Review Criteria**. In the review of all PUDs, the Board of Trustees shall find that all of the following objectives are met:

    a. **Plan Alignment**. The PUD is consistent with and clearly puts into effect the goals, objectives, and policies set forth in adopted plans and policy documents of the Village.

    b. **Placemaking**. The PUD has a distinctive identity and brand that is utilized in signs, streetscape, public art, architecture, public gathering spaces, and open spaces.

    c. **Integrated Design with Identifiable Centers and Edges**. The PUD is laid out and developed as a unit in accordance with an integrated overall design. The design provides identifiable centers and edges through the harmonious grouping of buildings, uses, facilities, community spaces, and open spaces. The design is highly connected internally and externally and maximizes multimodal transportation.

    d. **Compatibility with Adjacent Land Uses**. The PUD includes uses which are generally compatible with the uses of adjacent parcels, with consideration given to the level of activity or intensity, noise, light, and odor. If the uses are not generally compatible, adverse impacts are mitigated through building design, height, and placement; significant screening; landscaping; public open space; and other buffering features that protect uses within the development and surrounding properties beyond what is otherwise required by this Code.

    e. **Landscape Conservation and Visual Enhancement**. The PUD preserves and enhances existing natural features and amenities, such as stands of mature trees, riparian areas, wildlife habitat, unique landforms or topography, and significant viewsheds, beyond that which is required by the Village.

    f. **Open and Public Gathering Space**. The PUD includes prominent and accessible open space and public gathering space, meeting the ownership and maintenance standards of Article 8. The Board of Trustees may elect to condition their approval of the PUD on the dedication of open space and public gathering space to the Village for public use.

    g. **Archaeological, Historical, or Cultural Impact**. The PUD does not substantially, adversely impact archaeological, historical, or cultural resources, including historic properties eligible for or listed in the National Register of Historic Places located on or off the parcel(s) proposed for development. Examples of adverse impacts include but are not limited to:

i. Neglect, destruction, damage, or removal of resources; alteration of property inconsistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties,

ii. Change of the character of the physical features of the resource's setting and association that contribute to its historic significance, and

iii. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.

It is understood that not all of the above criteria would be applicable in reviewing the proposed modification to add a fuel station to the Subject Property since it will be constructed on the interior of an already constructed planned unit development.

SUMMARY

A sign has been posted on the Subject Property indicating the time and date of the Plan Commission public hearing. The Applicant has submitted evidence that the mailed notice requirements of the Zoning Code have been satisfied. The Plan Commission hearing was properly noticed on the Northbrook Public Notice Webpage.

Staff has received one public comment for this application, which is attached. The concerns include: increase in traffic and reduction in parking within the shopping center.

In reviewing this request, staff suggests the Plan Commission consider the following policy questions:

a) Is the proposed gas station an appropriate use on the property?

b) Is it acceptable to amend the Planned Development to allow redevelopment of a portion of the parking for a gas station?

c) Is the location and design of the facility within the existing parking lot appropriate?

Staff has prepared the attached draft resolution for consideration by the Commission. If the Commission should choose to amend and/or take action on this resolution, it would be **Resolution No. 26-PC-02.**

The Applicant and staff will attend the April 7, 2026 Plan Commission meeting to answer any questions.

MEMORANDUM

To: Northbrook Plan Commission
From: Kate Carney, Sustainability Coordinator
cc: Michaela Kohlstedt, DPS Deputy Director
Date: April 7, 2026
Subject: PCD-25-18: 784 Skokie - Mariano's Gas Station – Sustainability Addendum

Northbrook's Climate Action Plan (CAP) calls to foster sustainability and reduce 80% of community-wide carbon emissions by 2050 through strategic planning and action item implementation. With CAP adoption, development proposals are reviewed with respect to best environmental practices.

Village staff provided Sustainability Comments in response to all submittals for the proposed planned development solely regarding applicable measures from the CAP. Under each section are a list of Climate Action Plan items as they relate to the proposed development. Staff confirms the proposed project partially addresses CAP items requested of the Applicant.

Of the items presented to the Applicant 95% were fully realized according to CAP standards, to the extent *detailed below in italics.*

Transportation and Land Use
In the Transportation and Land Use section of the CAP, recommendations are made to enhance active mobility and fossil fuel-free transit:

TL 5- 8 Consider installing EV charging stations for patron use. If this will not be realized, consider including capabilities for future electric vehicle charging installation. This could include conduit, wiring, electrical service panels, and power capacity near parking areas, terminated in outlets or junction boxes to meet demand for at least 2 EV charging ports.

Applicant response: This project currently is not considering EV stations as part of this development.

TL 7- 1 The Village has enacted a nine-month ban on gas powered leaf blowers – ensure compliance on site.

Applicant response: This is noted, the landscaping maintenance is handled by the landlord who should be following the Village ordinance.

Buildings and Energy
The Building Energy section of the CAP provides the following items pertaining to reducing our community-wide carbon footprint and preserving wildlife:

BE 2- 1 Consider incorporating a renewable energy installation to offset emissions generated from the development. Work with CPACE, Illinois Shines, or similar programs for incentives. If installation will not be realized, consider reserving space for a solar-ready roof zone and plan for structural design loads and electrical service to allow for future installation of a dual pole circuit breaker if possible.

Applicant response: This project currently does not include solar panels but in the instance this was a requirement, the canopy roof could house these as required by code.

BE 2- 2 If the site is suitable, make the canopy solar ready.

Applicant response: This project currently does not include solar panels but in the instance this was a requirement, the canopy roof could house these as required by code.

BE 4- 1 Consider green power purchase options such as those provided by ComEd and Nicor.

Applicant response: This building will utilize the existing electrical service provided to the Mariano's grocery store and will not be unitizing natural gas.

BE 5- 1 Explore opportunities for the property to utilize smart lights that can save energy through conservation. Achieve 100% LED installation if possible.

Applicant response: This development will utilize all LED light fixtures.

BE 5- 4 Require purchase and installation of ENERGY STAR appliances when available.

Applicant response: This development will utilize the latest energy efficient appliances as it applies to coolers and roof top units (RTUs) for the kiosk.

BE 7- 2 Consider the benefits of replacing fossil fuel burning heating equipment with air-source heat-pumps, or other efficient electric heating options.

Applicant response: The kiosk building is scheduled to utilize an electric heater.

Waste Management
The CAP points to procedures that may facilitate waste reduction (with a goal of at least 50% landfill wasted diverted by 2030) in its Waste Management section:

WM 1- 1 Consider phasing out single-use products. This would apply to (but not limited to) bags (both paper and plastic), utensils, napkins, and take-out containers.

Applicant response: This operation will include only the use of single use grocery bags for customers who request them when making purchases at the kiosk building.

WM 2- 5 Assure compliance with the Cook County Construction & Demolition Debris Diversion Ordinance and encourage contractors and subcontractors to exceed minimum requirements where applicable.

Applicant response: All codes and requirements will be followed during the

Water and Wastewater
In the Water and Wastewater category, the CAP states to prioritize mitigating stormwater before it enters the sewer system through multiple capture techniques:

WW 1- 1 Consider landscaping practices that reduce water consumption and chemical use on site.

Applicant response: Existing landscaping practices will not be interrupted as we are doing a minimal net loss of green space with islands being relocated.

WW 2- 1 Prioritize managing stormwater before it enters the sewer system through a combination of overland flow, detention, and infiltration strategies (for example, permeable surfaces) where feasible.

Applicant response: We are implementing a sand/oil separator at our storm drains to treat water before it enters the storm system.

WW 2- 3 Consider revegetation, tree preservation planting and maintenance, de-paving and porous pavement, green infrastructure like bioswales and Eco-roofs in site development.

Applicant response: We are planning to relocate some existing islands but most of the development is within an underutilized paved parking area.

WW 3- 3 Reduce or offset impervious surfaces where possible and consider use of lighter colored pavements and building materials to lessen the impact of urban heat island effect.

Applicant response: Majority of this area will now be covered by a canopy which will help reduce the heat island effect.

Greenspace and Ecosystem Health
The Plan's Greenspace category includes the following for expansion of tree canopy coverage, transforming beneficial lawns, and mitigation of heat island impacts:

GS 1- 12 Plan for diversity of native tree cover and performance-based tree island within landscaping plan and parking lots with goals on percentage of pavement shaded. Consider a mix of canopy trees, shrubs, groundcovers, and raingarden components appropriate to the lot and its surroundings in any new landscaping where possible.

Applicant response: Landscaping work planned is to utilize existing species of shrubs within the landscape islands being relocated to work within the existing greater landscape design plan.

GS 2- 5 Consider including exterior lighting design a policy to protect native plants, species, biodiversity, and improve night sky quality.

Applicant response: Exterior lighting is being designed within the parameters of the Village lighting ordinance as demonstrated on the photometric plan.

GS 4- 8 Consider utilizing shade and water absorbing trees and replacing turf landscaping with native prairie, wild flower, and savanna plantings.

Applicant response: This scope will not apply to the development.

DRAFT

RESOLUTION NO. 26-PC-__

VILLAGE OF NORTHBROOK PLAN COMMISSION
DOCKET NO. PCD-25-18
(784 SKOKIE BOULEVARD)

WHEREAS, an application has been filed by Roundy's Supermarkets, Inc. (the "Applicant") as lessee of a portion of the property (784 Skokie Boulevard) commonly known as Northshore 770 at 770 - 798 Skokie Boulevard and 510 Dundee Road (collectively the "Subject Property"), which is owned by Menard Inc. (the "Owner"), and

WHEREAS, the Applicant has filed an application (Docket No. PCD-25-18) with the Village of Northbrook requesting:

A. Approval of an amendment to the Special Permit for Planned Development for NorthShore 770 (Ordinance No 2014-3) to allow a gas station within the parking lot;
B. Site Plan Approval; and
C. Approval of any such variations, waivers, and zoning relief as may be necessary to accomplish development and use of the Subject Property as requested by the Applicant.

WHEREAS, the Subject Property is designated as appropriate for Major Corridor Multi-Use uses in the Village of Northbrook Comprehensive Plan; and

WHEREAS, a public notice for this docket was duly published on the Northbrook Public Notice webpage and a public hearing was held on April 7, 2026; and

WHEREAS, the Applicant has submitted evidence that signs were properly posted on the Subject Property, indicating the time and date of the Commission hearing, and that all property owners within 250 feet of the Subject Property were notified of the Commission hearing by first class U.S. mail; and

WHEREAS, the Plan Commission has considered all the evidence presented to it, including, but not limited to, the following:

1. Village of Northbrook Plan Commission Application form & attachments received November 26, 2025, and all subsequent additions and revisions to these application materials and attachments.
2. Comments made by the Board of Trustees during its review of the preliminary application regarding this request.
3. All written and oral testimony concerning the application.

NOW, THEREFORE, BE IT RESOLVED by the Plan Commission of the Village of Northbrook, Cook County, Illinois, THAT:

1. Findings:

A. Comprehensive Plan Compliance. The Northbrook Plan Commission does hereby find that with respect to Docket No. PCD-25-18 the proposed application **is in general compliance** with the Northbrook Comprehensive Plan, and specifically **in compliance** with the Future Land Use Map.

B. Amendment to an Existing Planned Development. With respect to Docket No. PCD-25-18A, the Plan Commission does hereby find that the proposed facility on the Subject Property is **in compliance** with

the planned development amendment standards for such approvals as established in Article 2-118.E.3.c. of the Zoning Code.

C. Site Plan Approval. With respect to Docket No. PCD-25-18B, the Plan Commission does hereby find that the proposed improvements on the Subject Property are **in compliance** with the standards for such approvals as established in Article 2-108 of the Zoning Code.

D. Other Relief. With respect to Docket No. PCD-25-18C, the Plan Commission does hereby find that no other relief is necessary.

2. Recommendations: The Northbrook Plan Commission does hereby recommend to the Board of Trustees of the Village of Northbrook **approval** of Docket No. PCD-25-18 based on the findings established herein, to allow a Fuel Sales facility to be issued to the Applicant for the Subject Property.

ADOPTED THIS __ day of April 2026.

AYES: ()

NAYS: ()

ABSENT: ()

ABSTAIN: ()

_____
Steven Elisco, Chairman
Northbrook Plan Commission

ATTEST:

_____
Amy McEwan, Director
Development and Planning Services

Archived: Friday, March 27, 2026 9:06:32 AM
From: proby023@aol.com
Sent: Wednesday, March 25, 2026 6:01:16 PM
To: Pandey, Swati
Subject: Proposed Gas Station Roundy's Supermarket
Sensitivity: Normal

Beware External Email - Think Before You Act

To whom it may concern,

For a multitude of reasons the main question is do we need more gas stations?

In today's ever changing car industry the push and swap to EV cars will start to pick up pace in the next few years no matter the politics involved. I often question why there is always multiple gas stations on corners all fighting for the same customers and this would create the same problem in a already highly congested and trafficked area. This area during morning, mid day and evening is very busy and this would create more problems and potentially more accidents. Many cars come out of Marianos and turn left onto Dundee which is dangerous and I have watched many close calls and some accidents. Creating more traffic and congestion is not ideal and not what the area needs. I live close to the area and wonder how we can get better flow of traffic not make it worse.

The area of placement is another concern. The surrounding businesses are doing very well and half of that parking lot is full of cars during busy times and that would push the overflow of cars where? The parking for Marianos to the east is full most of the time so you will be taking away a ton of parking and creating more flow of cars with less area to maneuver.

This isn't a economic boom for the area or the village. Gas stations often employee just a couple employees and they do not hold their building and surrounding area to a high regard and it ends up looking awful and creating more problems than it would fix. There is already a gas station on the corner so besides them trying to boost revenue what does it bring to the area or community? I won't even get into the environmental aspect which is always an issue. If this was even a thought it should have been addressed when the building was constructed not now.

Regards,
CB
825 Dell

Village Board of Trustees Minutes

Sandra "Sandy" Frum Board Room
1225 Cedar Lane Northbrook, IL 60062
Tuesday, September 9, 2025

Village President Kathryn Ciesla called the meeting to order at 7:35 PM

1. **ROLL CALL**

Attendee Name	Title	Status
Kathryn Ciesla	Village President	Present
Robert Israel	Trustee	Present
Heather Ross	Trustee	Present
Johannah Hebl	Trustee	Present
Joy Ebhomielen	Trustee	Present
Michelle Kohler	Trustee	Present
Matt Cassidy	Trustee	Present

2. **PLEDGE OF ALLEGIANCE**

3. **MINUTES APPROVAL**

A. August 26, 2025 Regular Board Meeting Minutes for Approval

RESULT:	**APPROVED [6 – 0]**
MOVER:	Johannah Hebl, Trustee
SECONDER:	Heather Ross, Trustee
AYES:	Israel, Ross, Hebl, Ebhomielen, Kohler, Cassidy
NAYES:	None
ABSTAIN:	Kathryn Ciesla, President
ABSENT:	None

4. **PUBLIC COMMENT TIME** - None

5. **MANAGER'S REPORT**

Deputy Village Manager Hawkins reminded everyone that the next Board of Trustees meeting will be in October, the September 23rd meeting will not be held in observance of Rosh Hashanah.

The WaterSmart portal is coming online soon, and residents should sign up to receive helpful notifications (e.g. water leak alerts) from our upgraded water meter infrastructure.

Welcomed Bradley Taylor, newest member of the Public Works department.

Trustee Hebl encouraged the public to sign up for Northbrook Notify to receive helpful Village-wide notifications.

B. Ordinance 2025-56 Rezoning the Properties at 2890 and 2990 Dundee Road and Amending the District Zoning Map (Plan Commission Docket No. PCD-25-10)

Presentation waived.

RESULT:	**APPROVED [6 – 0]**
MOVER:	Johannah Hebl, Trustee
SECONDER:	Robert Israel, Trustee
AYES:	Israel, Ross, Hebl, Ebhomielen, Kohler, Cassidy
NAYES:	None
ABSTAIN:	Kathryn Ciesla, President
ABSENT:	None

C. Preliminary Review of a Request by Sevan Multi-Site Solutions on behalf of Roundy's Supermarkets Inc., to amend Ordinance No. 2014-3 approving a planned development at 784 Skokie Boulevard to allow for installation and operation of a gas station on the south side of the property.

Amy McEwan, Director of Development & Planning Services, discussed an application submitted by Roundy's Supermarkets Inc. for the property located at 784 Skokie Boulevard. The applicant is requesting a planned development at 784 Skokie Boulevard to allow for installation and operation of a gas station on the south side of the property. She provided a brief overview of the following: property's history, zoning, and proposed plan.

Matthew Pisko, Operations Director at Sevan Multi-Site Solutions explained that Kroger, through its Mariano's brand, is proposing a fuel station modeled after its 1,700 existing locations nationwide, describing it as an architecturally consistent, low-impact extension of the grocery store that offers customer discounts, operates primarily with excess parking, and is run by Kroger-trained employees.

President Ciesla, Trustees Hebl, Israel, and Cassidy suggested that the Plan Commission should carefully consider traffic density, egress, and signage.

Trustees Kohler and Ebhomielen spoke favorably in supporting grocery stores and the need for an additional gas station in this area.

RESULT:	**MOVED TO PLAN COMMISSION [6 – 0]**
MOVER:	Robert Israel, Trustee
SECONDER:	Michelle Kohler, Trustee
AYES:	Israel, Ross, Hebl, Ebhomielen, Kohler, Cassidy
NAYES:	None
ABSTAIN:	Kathryn Ciesla, President
ABSENT:	None

11. COMMUNITY AND SUSTAINABILITY

A. Resolution 2025-R-145 Approving and Accepting the Village of Northbrook 2025-2026 Climate Action Plan Priority Action Items

Ordinance 2014-3

An Ordinance Granting Special Permits for a Planned Development with a Floor Area Ratio No Greater Than 0.80, Retail Trade and Service Uses, and Multiple Family Dwellings in the O-4 District (Northshore 770 - 770 Skokie Boulevard) (Plan Commission Docket No. 13-01)

Passed by the Board of Trustees, 1/14/2014
Printed and Published 1/15/2014

Printed and Published in Pamphlet Form
by Authority of the
President and Board of Trustees
VILLAGE OF NORTHBROOK
COOK COUNTY, ILLINOIS

I hereby certify that this document
was properly published on the date
stated above.

/s/ Debra J. Ford
Village Clerk

Ordinance 2014-3

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Granting Special Permits for a Planned Development with a Floor Area Ratio No Greater Than 0.80, Retail Trade and Service Uses, and Multiple Family Dwellings in the O-4 District (Northshore 770 - 770 Skokie Boulevard) (Plan Commission Docket No. 13-01)

shall be, and is hereby, adopted as follows:

Section 1. BACKGROUND

Morningside Crossroads Partners, LLC ("***Developer***") is the contract purchaser of property generally located at the northwest corner of Dundee Road and Skokie Boulevard ("***Subject Property***"). The Subject Property is comprised of parcels located at 770 Skokie Boulevard, owned by CXA-10 Corporation, and 550 Dundee Road, owned by the Ralph J. Zengeler Family Trust, Trust #98250, and the Robert J. Lechner Family Trust, Trust #97450. The Developer desires to develop the Subject Property as a mixed-use planned development consisting of a luxury residential apartment building and a grocery-anchored commercial shopping center ("***Planned Development***").

The Developer has submitted an application to the Village requesting, among other relief, special permits for a mixed use planned development with a floor area ratio no greater than 0.80 which includes retail trade and service uses as well as multiple family residential uses ("***Requested Relief***"). The owners of the Subject Property have consented to the Developer's application for the Requested Relief.

On January 14, 2014, the President and the Board of Trustees of the Village ("***Corporate Authorities***") adopted Ordinance No. 14-2, approving various amendments to the Northbrook Zoning Code (1988), as amended ("***Zoning Code***") that enables the Development as proposed by the Developer as a special permit use in the O-4 Boulevard Office District.

The Corporate Authorities have determined that granting the Developer the Requested Relief in accordance with the terms of this Ordinance is in the best interest of the Village and its residents.

Section 2. DESCRIPTION OF SUBJECT PROPERTY.

The Subject Property consists of approximately 15.7 acres and is legally described in ***Exhibit A***, attached to and, by this reference, made a part of this Ordinance. The Property is located within the O-4 Boulevard Office District.

Section 3. PUBLIC HEARING.

A public hearing to consider the Requested Relief was duly published on August 15, 2013 in the *Northbrook Star*, and a public hearing was held before the Plan Commission on September 3, 2013 which public hearing was continued to September 17, 2013, October 1, 2013 and November 5, 2013. On November 19, 2013 the Plan Commission adopted a resolution making a formal recommendation (Plan Commission Resolution No. 13-PC-12), for the approval of Docket No. 13-01.

Section 4. SPECIAL PERMITS.

A. Mixed Use Planned Development. Subject to and contingent upon the conditions, restrictions, and provisions set forth in Section 5 of this Ordinance, a special permit for a Mixed Use Planned Development on the Subject Property containing no more than 511,435 square feet of gross floor area (Village of Northbrook SIC No. 9820.01) shall be, and is hereby, granted in accordance with and pursuant to Sections 11-602 and 11-603 of the Zoning Code and the home rule powers of the Village of Northbrook. This special permit shall specifically incorporate the following uses in accordance with and pursuant to Paragraph 6-105 C1 and Section 11-602 of the Zoning Code and the home rule powers of the Village of Northbrook:

1. Retail Trade & Service Uses. The development, operation, and maintenance of any and all of those Retail Trade and Service Uses allowed as either permitted, conditional, or special permit uses in the C-5 District and listed in Subsections 5-102 E or 5-102 G of the Zoning Code located in approximately 101,400 square feet of gross floor area within the Planned Development; provided, however, that the final square footage of the gross floor area of the retail portion of the Planned Development may be adjusted up or down by the Developer subject to the limitation set forth in Section 4.B of this Ordinance; and
2. Multiple Family Dwellings. The development, operation, and maintenance of up to 347 Multiple Family Dwelling units located in approximately 410,000 square feet of gross floor area within the Planned Development; provided, however, that the final square footage of the gross floor area of the residential portion of the Planned Development may be adjusted up or down by the Developer subject to the limitation set forth in Section 4.B of this Ordinance.

B. Floor Area Ratio. Subject to and contingent upon the conditions, restrictions, and provisions set forth in Section 5 of this Ordinance, a special permit for the development of the Planned Development on the Subject Property with a Floor Area Ratio of up to 0.80 (Village of Northbrook SIC No. 9970.01) shall be, and is hereby, granted in accordance with and pursuant to Paragraph 6-102 H and Section 11-602 of the Zoning Code and the home rule powers of the Village of Northbrook; provided that the gross floor area of the Planned Development may not exceed 511,435 square feet.

Section 5. SPECIAL PERMIT CONDITIONS.

The special permits granted in Section 4 of this Ordinance shall be and are expressly conditioned upon the following:

A. Approval of Development Concept Plan. Adoption by the Corporate Authorities, after the adoption of this Ordinance, of a Resolution approving the Development Concept Plan for the Planned Development in substantially the form attached to this Ordinance as ***Exhibit B*** ("***Development Concept Plan Resolution***").

B. Approval of Final Plan. Adoption by the Corporate Authorities, no later than July 14, 2015, of a Resolution approving a Final Plan for the Planned Development ("***Final Plan***") in accordance with and pursuant to (i) Paragraph 11-603 D4 of the Zoning Code and (ii) the special conditions required for approval of the Final Plan set forth in the Development Concept Plan Resolution.

C. Execution of Development Agreement. Execution by the Developer, or its successor entities or direct affiliates, upon approval of the Final Plan, of one or more development agreements with the Village prepared and approved by the Village Attorney providing for the use and development of the Subject Property in accordance with the Final Plan and other specified conditions and restrictions set forth in the development agreement ("***Development Agreement***").

D. Compliance with Approvals. Development, use, and maintenance of the Subject Property being in substantial compliance with the Final Plan and the Development Agreement, except for minor changes and site work approved by the Director of Development and Planning Services or the Village Engineer (for matters within their respective permitting authorities) in accordance with all applicable Village standards.

The special permits granted in Section 4 shall not be deemed or interpreted as authorizing or entitling the development or the improvement of the Subject Property in any manner whatsoever unless and until the conditions set forth in Sections 5.A through 5.C are satisfied.

Section 6. FAILURE TO COMPLY WITH CONDITIONS

Upon failure or refusal of the Developer or its successors in interest to the Subject Property to comply with any or all of the conditions, restrictions or provisions of this Ordinance, the special permits granted in Section 4 of this Ordinance shall, at the sole discretion of the Corporate Authorities, by ordinance duly adopted, be revoked and become null and void; provided, however, that the Corporate Authorities may not so revoke the special permits unless it shall first provide the Developer, or its successors in interest to the Subject Property, with two months advance written notice of the reasons for revocation and an opportunity to be heard at a regular meeting of the Corporate Authorities. In the event of revocation, the development and use of the Property shall be governed solely by the regulations of the O-4 Boulevard Office District, as the same may, from time to time, be amended. Further, in the event of such revocation of the special permits, the Village Manager and Village Attorney are hereby authorized and directed to bring such zoning enforcement action as may be appropriate under the circumstances. The Developer acknowledges on behalf of itself and its successors in interest to the Subject Property that public notices and hearings have been held with respect to the adoption of this Ordinance, has considered the possibility of the revocation provided for in this Section, and agrees not to challenge any such revocation on the grounds of any procedural infirmity or any denial of any procedural right, provided that the notice required by this Section is given.

Section 7. AMENDMENT TO SPECIAL PERMITS

Any amendment to the special permits granted in Section 4 of this Ordinance that may be requested after the effective date of this Ordinance may be granted only pursuant to the procedures, and subject to the standards and limitations, provided in the Zoning Code for amendment of special permit uses.

Section 8. EFFECTIVE DATE

This Ordinance shall be effective only upon the occurrence of all of the following events:

1. passage by the Corporate Authorities by a majority vote in the manner required by law; and
2. publication in pamphlet form in the manner required by law.

Adopted: 1/14/2014

RESULT:	**ADOPTED BY CONSENT VOTE [UNANIMOUS]**
MOVER:	Michael Scolaro, Trustee
SECONDER:	A.C. Buehler, Trustee
AYES:	Buehler, Scolaro, Heller, Ciesla, Israel, Frum
ABSENT:	James Karagianis

ATTEST:

/s/ Sandra E. Frum
Village President

/s/ Debra J. Ford
Village Clerk

EXHIBIT A

LEGAL DESCRIPTION OF SUBJECT PROPERTY

A TRACT OF LAND COMPRISED OF LOTS 3, 4 AND 5 IN "LANE PARK SUBDIVISION" IN THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, TOGETHER WITH A PART OF SAID SOUTHEAST QUARTER OF SAID SECTION 2 LYING SOUTH OF THE SOUTH LINE OF SAID LOT 4, WESTERLY OF THE WESTERLY LINE OF SKOKIE ROAD, AS NOW DEDICATED, AND NORTH OF THE NORTHERLY LINE OF DUNDEE ROAD, AS NOW DEDICATED, SAID TRACT OF LAND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF A LINE WHICH IS 50.00 FEET NORTH FROM AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2, WITH A LINE WHICH IS 185.00 FEET NORTHEASTERLY FROM AND PARALLEL WITH CENTERLINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, SAID POINT BEING THE SOUTHWEST CORNER OF LOT 5 AFORESAID; AND RUNNING THENCE NORTH 26 DEGREES 33 MINUTES 47 SECONDS WEST (ASSUMED) ALONG SAID LINE WHICH IS 185.00 FEET NORTHEASTERLY FROM AND PARALLEL WITH THE CENTERLINE OF THE RIGHT OF WAY CHICAGO AND NORTHWESTERN RAILWAY COMPANY, SAID LINE BEING ALONG THE WESTERLY LINE OF LOTS 3,4 AND 5 IN LANE PARK SUBDIVISION, AFORESAID, A DISTANCE OF 1420.35 FEET TO THE NORTHWEST CORNER OF SAID LOT 3; THENCE NORTH 89 DEGREES 56 MINUTES 29 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 3, A DISTANCE OF 548.86 FEET TO THE NORTHEAST CORNER OF SAID LOT 3; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOTS 3 AND 4, SAID EASTERLY LINE BEING 50.00 FEET WESTERLY FROM AND PARALLEL WITH THE CENTERLINE OF SKOKIE BOULEVARD, A DISTANCE OF 706.39 FEET TO AN ANGLE POINT IN SAID EASTERLY LINE OF LOT 4; THENCE SOUTH 21 DEGREES 49 MINUTES 59 SECONDS EAST ALONG SAID EASTERLY LINE OF LOT 4, A DISTANCE OF 121.27 FEET TO AN ANGLE POINT IN SAID LOT 4; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOT 4, SAID EASTERLY LINE BEING 60.00 FEET WESTERLY FROM AND PARALLEL WITH THE CENTERLINE OF SKOKIE BOULEVARD, A DISTANCE OF 349.12 FEET TO THE SOUTHEAST CORNER OF SAID LOT 4; THENCE CONTINUING SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG LAST DESCRIBED PARALLEL LINE, BEING THE WESTERLY LINE OF SKOKIE BOULEVARD AS DEDICATED BY PLAT RECORDED DECEMBER 31, 1935 AS DOCUMENT NO. 11735510, A DISTANCE OF 184.57 FEET TO A POINT OF CURVE IN SAID WESTERLY LINE; THENCE SOUTHWESTWARDLY ALONG THE ARC OF A CIRCLE CONVEX TO THE SOUTHEAST, TANGENT TO THE LAST DESCRIBED PARALLEL LINE AND HAVING A RADIUS OF 25.00 FEET, A DISTANCE OF 50.03 FEET, TO A POINT OF TANGENT WITH THE NORTHERLY LINE OF DUNDEE ROAD AS DEDICATED BY THE AFORESAID DOCUMENT NO. 11735510; THENCE SOUTH 88 DEGREES 05 MINUTES 13 SECONDS WEST ALONG SAID NORTHERLY LINE OF DUNDEE ROAD, A DISTANCE OF 208.51 FEET, TO AN INTERSECTION WITH A LINE WHICH EXTENDS NORTHWARD FROM A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 2, DISTANT 157.58 FEET EAST OF THE INTERSECTION OF SAID SOUTH LINE WITH A LINE 275.00 FEET NORTHEASTERLY OF (MEASURED PERPENDICULARLY THERETO) THE SAID CENTERLINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY; THENCE NORTH 00 DEGREES 01 MINUTES 39 SECONDS EAST ALONG THE LAST DESCRIBED LINE (WHICH FORMS A NORTHWEST ANGLE OF 90 DEGREES 01 MINUTES 39

SECONDS WITH THE SOUTH LINE OF SAID SOUTHEAST QUARTER), A DISTANCE OF 208.21 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF LOT 4 AFORESAID; THENCE WEST ALONG SAID SOUTH LINE OF LOT 4, A DISTANCE OF 334.57 FEET TO THE NORTHEAST CORNER OF SAID LOT 5; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOT 5, A DISTANCE OF 239.60 FEET TO THE SOUTHEAST CORNER OF SAID LOT 5, SAID SOUTHEAST CORNER BEING A POINT ON THE AFORESAID LINE WHICH IS 50.00 FEET NORTH FROM AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2; THENCE WEST ALONG SAID PARALLEL LINE, BEING THE SOUTH LINE OF SAID LOT 5, A DISTANCE OF 55.90 FEET TO THE POINT OF BEGINNING IN COOK COUNTY, ILLINOIS.

ALSO INCLUDING:

PARCEL 1:

THAT PART OF THE SOUTH 8 ACRES OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES EASTERLY OF A LINE DRAWN THROUGH SAID 8 ACRES PARALLEL TO AND 235.00 FEET EASTERLY OF AND MEASURED AT RIGHT ANGLE TO THE CENTER LINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, AND WHICH LIES WESTERLY OF A LINE DESCRIBED AS COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 2 AT A DISTANCE OF 77.58 FEET EAST OF A POINT OF ITS INTERSECTION WITH A LINE 275.00 FEET NORTHEASTERLY OF (MEASURED PERPENDICULARLY THERETO) THE SAID CENTER LINE OF THE RIGHT OF WAY; THENCE NORTH TO THE NORTH LINE OF SAID SOUTH 8 ACRES ALONG A LINE WHICH FORMS A NORTHWEST ANGLE OF 90 DEGREES 01 MINUTES 39 SECONDS WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 2, AFORESAID, EXCEPTING FROM SAID DESCRIBED PROPERTY THAT PART THEREOF DEDICATED OR USED FOR DUNDEE ROAD, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE WESTERLY 80 FEET OF THAT PART OF THE SOUTH 8 ACRES OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES WESTERLY OF THE WESTERLY LINE OF SKOKIE ROAD AS NOW DEDICATED, NORTH OF THE NORTHERLY LINE OF DUNDEE ROAD AS NOW DEDICATED, AND EASTERLY OF A LINE DESCRIBED AS COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2 DISTANT EASTERLY THEREON 77.58 FEET FROM A POINT OF INTERSECTION OF SAID SOUTH LINE WITH A LINE PARALLEL WITH, AND DISTANT NORTHEASTERLY 275 FEET MEASURED AT RIGHT ANGLES TO, THE CENTER LINE OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, RUNNING THENCE NORTHERLY TO THE NORTH LINE OF SAID 8 ACRES ALONG A LINE WHICH FORMS AN ANGLE OF 90 DEGREES 01 MINUTES 39 SECONDS WHEN MEASURED CLOCKWISE FROM AFORESAID SOUTH LINE OF THE SOUTHEAST QUARTER OF SOUTHEAST QUARTER OF SECTION 2, ALL IN COOK COUNTY, ILLINOIS.

PINS: 04-02-402-031, -032, -033; 04-02-422-009; 04-02-422-001, -006, -008

Commonly known as 770 Skokie Boulevard, Northbrook, Illinois 60062

EXHIBIT B

DEVELOPMENT CONCEPT PLAN RESOLUTION

1419845012

Doc#: 1419845012 Fee: $162.00
RHSP Fee:$9.00 RPRF Fee: $1.00
Karen A.Yarbrough
Cook County Recorder of Deeds
Date: 07/17/2014 09:23 AM Pg: 1 of 63

Ordinance 2014-23

BE IT ORDAINED by the President and Board of Trustees of the Village of Northbrook, County of Cook and State of Illinois THAT:

An Ordinance Granting Final Plan Approval, Yard and Setback Variations, and Waivers (NorthShore 770 - 770 Skokie Boulevard) (Plan Commission Docket No. 14-05)

shall be, and is hereby, adopted as follows:

SECTION 1. BACKGROUND

Morningside Crossroads Partners, LLC ("***Applicant***") proposes to develop the property generally located at the northwest corner of Dundee Road and Skokie Boulevard ("***Subject Property***") as a mixed-use planned development ("***Planned Development***"). The Subject Property is comprised of parcels located at 770 Skokie Boulevard, owned by CXA-10 Corporation, and 550 Dundee Road, owned by the Ralph J. Zengeler Family Trust, Trust #98250, and the Robert J. Lechner Family Trust, Trust #97450. The Subject Property will be acquired and subdivided into six new lots. Lots 1, 3, 4, 5, and 6 of the proposed subdivision, comprising 11.9 acres (collectively, the "***Commercial Parcel***") will be acquired by Morningside Crossroads Retail, LLC, an Illinois limited liability company ("***Commercial Developer***") which proposes to develop the Commercial Parcel with a grocery anchored shopping center, consisting of six separate buildings ("***Retail Buildings A, B, C, D, E, and F,***" respectively) and associated site improvements ("***Commercial Project***"). Lot 2 of the proposed subdivision, comprising 3.88 acres ("***Residential Parcel***") will be acquired by Morningside Crossroads Residential, LLC, an Illinois limited liability company ("***Residential Developer***") which proposes to develop the Residential Parcel with a luxury apartment building ("***Residential Building***") and associated site improvements ("***Residential Project***").

I hereby certify this to be a true and exact copy of the original

6-19-14
Date

Village Clerk

VILLAGE OF NORTHBROOK CORPORATE SEAL ILL

BOX 334 CT

On January 14, 2014, the President and the Board of Trustees of the Village ("***Corporate Authorities***") adopted (i) Ordinance No. 2014-02, approving various amendments to the Northbrook Zoning Code (1988), as amended ("***Zoning Code***") that enables the Planned Development as a special permit use in the O-4 Boulevard Office District; (ii) Ordinance No. 2014-03, granting the Applicant special permits for a Mixed Use Planned Development with a Floor Area Ratio of up to 0.80 incorporating Retail and Trade Services and Multiple Family Dwellings; and (iii) Resolution No. 2014-R-05 approving a development concept plan and tentative plat of subdivision for the Subject Property and providing conceptual approvals of certain special permit uses, variations, and waivers.

The Applicant has requested, (i) approval of a final plan for the Planned Development on the Subject Property pursuant to Section 11-603 of the Zoning Code; (ii) approval of certain yard and setback variations pursuant to Section 11-503 of the Zoning Code; and (iii) approval of waivers from the Village's parking area surface slope requirements and the Village's foundation landscaping requirement ("***Requested Relief***").

On May 13, 2014, the Corporate Authorities adopted Resolution No. 2014-R-63 approving redevelopment agreements for the Commercial Parcel and the Residential Parcel ("***Redevelopment Agreements***"), obligating the Corporate Authorities to adopt this Ordinance. The Corporate Authorities also adopted Resolution No. 2014-R-64 approving a final plat of subdivision for the Subject Property.

The Corporate Authorities have determined that the applicable standards and requirements for granting the Requested Relief have been satisfied, and that approval of the Requested Relief should be granted, subject to and contingent upon the conditions, restrictions, and provisions set forth in this Ordinance.

SECTION 2. DESCRIPTION OF SUBJECT PROPERTY.

The Subject Property consists of approximately 15.7 acres and is legally described in ***Exhibit A*** attached to and, by this reference, made a part of this Ordinance.

SECTION 3. PUBLIC HEARING.

Pursuant to public notice published in the *Northbrook Star* on March 13, 2014 a public hearing was held by the Plan Commission on April 1, 2014, to consider the Applicant's request for (i) final plan approval of the Planned Development; (ii) final subdivision plat approval; (iii) a text amendment to allow additional free standing signs by special permit in the O-4 Office Boulevard District; (iv) a special permit for an accessory drive through for a dry cleaning facility; (v) special permits for signage on both the Commercial Parcel and the Residential Parcel; (vi) various yard and setback variations; (vii) waivers and exceptions to certain Zoning Code provisions; and (viii) a variation of the Subdivision Code requirements to reduce the amount of the required Park District impact fee by no more than 50%. The Developer subsequently withdrew its request for items (iii) and (viii). The Plan Commission made its recommendation to approve the Applicant's requested relief on April 1, 2014 (Plan Commission Resolution 14-PC-03).

SECTION 4. APPROVAL OF FINAL PLAN.

Subject to and contingent upon the conditions, restrictions, and provisions set forth in Section 7, the final plan for the Planned Development on the Subject Property consisting of the following documents, all of which are incorporated in ***Exhibit B***, attached hereto, and, by this reference, made a part of this Ordinance, (collectively, the "***Final Plan***"), is determined to be in substantial compliance with the Development Concept Plan approved by Resolution No. 2014-R-05, and shall be, and is hereby, approved in accordance with and pursuant to Section 11-603 of the Zoning Code:

A. Development Summary Sheet, prepared by Camburas & Theodore, Ltd., consisting of one sheet, date stamped March 26, 2014;

B. Overall Site & Signage Plan, prepared by Terra Consulting Group, Ltd., consisting of Sheet C-3, with a latest revision date of April 30, 2014;

C. Engineering Plan Sheets, prepared by Terra Consulting Group, Ltd., consisting of the following sheets with a latest revision date of March 21, 2014:

1. Geometric Plan - Sheets C-4 & C-5;

2. Grading Plan - Sheets C-6 & C-7; and

3. Utility Plan - Sheets C-8 & C-9.

D. Photometric Plan, prepared by WLS Lighting Systems, consisting of one sheet, with a latest revision date of March 19, 2014, and

E. Retaining Wall Plan Sheets, prepared by Terra Consulting Group, Ltd., consisting of Sheets S-1 and S-2, with a latest revision date of March 19, 2014.

F. Landscaping and Other Hardscape Elements:

1. Landscape Plan, prepared by HKM Architects & Planners, Inc., consisting of Sheets L100 & L101, with a latest revision date of March 20, 2014;

2. Pedestrian Amenities, prepared by Camburas & Theodore, Ltd., consisting of Sheets PED-1, PED-2, L-2, date stamped March 26, 2014;

3. Gateway Feature, prepared by HKM Architects & Planners, Inc., consisting of Sheet L102, and Perspective Drawing Sheets View A and View B, with a latest revision date of March 20, 2014; and

4. Mariano's Trellis, prepared by Camburas & Theodore, Ltd., date stamped March 26, 2014, and consisting of Sheet TR-1.

G. Retail Buildings Elevation Sheets, prepared by Camburas & Theodore, Ltd., consisting of the following sheets date stamped March 26, 2014:

1. Retail Building A - Sheet A-2;

2. Retail Building B - Sheet A-2;

3. Retail Building C (Mariano's) - Sheet A-2.0; and

4. Retail Building D - Sheet A-2.

H. Residential Building Elevation Sheets, prepared by HKM Architects & Planners Inc., consisting of Sheets A200 and A201 with a latest revision date of March 20, 2014.

All revisions to any of the plans listed in this Section 4 that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Ordinance shall be incorporated into, and made a part of this Ordinance and the Final Plan with no further action required by the Corporate Authorities.

SECTION 5. YARD AND SETBACK VARIATIONS.

Subject to, and contingent upon, the conditions, restrictions, and provisions set forth in Section 7 of this Ordinance, the Subject Property shall be, and is hereby granted the following variations, all in accordance with and pursuant to Section 11-503 of the Zoning Code and the home rule powers of the Village of Northbrook.

A. to reduce the required front yard along Dundee Road from 50.00 feet to 2.50 feet to accommodate the proposed parking area;

B. to reduce the required front setback along Dundee Road from 80.00 feet to 62.50 feet to accommodate Retail Building A;

C. to reduce the required corner side yard along Skokie Boulevard from 50.00 feet to no less than 3.50 feet to accommodate the proposed parking area;

D. to reduce the required interior side yard along the west property line from 15.00 feet to 0 feet to accommodate the existing parking easement in the northwest corner and to reduce the required interior side yard from 15.00 to 0 feet elsewhere to accommodate the proposed parking area;

E. to reduce the required interior side setback along the west property line from 50.00 feet to 30.00 feet to accommodate Retail Building C and from 50 feet to 30.00 feet to accommodate the Residential Building;

F. to reduce the required rear yard along the north property line from 5 feet to 0 feet to accommodate the existing parking easement in the northwest corner;

G. to reduce the required sign setback along Dundee Road from 15 feet to 5 feet to accommodate a multi-tenant commercial ground sign located to the east of the Dundee Road access drive; and

H. to reduce the required sign setback along Skokie Boulevard from 15 feet to 7.00 feet to accommodate a multi-tenant commercial ground sign located to east of the proposed Dundee Road access drive.

SECTION 6. WAIVERS.

Subject to, and contingent upon the conditions, restrictions, and provisions set forth in Section 7 of this Ordinance, the following waivers shall be, and are hereby, granted to Subject Property:

A. A waiver to allow the slope of the surface of a portion of the parking area at the entrance driveway to the Planned Development Property to be no greater than six percent (6%) in accordance with Subparagraph 9-104C3(c) of the Northbrook Zoning Code.

B. A waiver to eliminate the foundation landscaping requirements for all structures within the Planned Development on the Subject Property, in accordance with Subparagraph 9-107B1(a) of the Northbrook Zoning Code.

SECTION 7. CONDITIONS OF APPROVALS.

The final plan approval granted in Section 4, the variations granted in Section 5, and the waivers granted in Section 6 of this Ordinance are contingent upon the development, use, and maintenance of the Subject Property being in substantial compliance with the following terms, conditions, and provisions:

A. Signage. The location of pylon signs shall be prohibited on the Subject Property. The respective owner of any lot on the Subject Property shall be required to submit for review and approval by the Architectural Control Commission the design for all future signs affixed to buildings that require a sign permit and that are not approved concurrently with this Ordinance.

B. Operation and Reciprocal Easement Agreement. The Applicant shall submit to the Village Manager and the Village Attorney the Operation and Reciprocal Easement Agreement ("***OREA***"), as defined in the Redevelopment Agreements, and shall ensure that the OREA is recorded against the Subject Property.

C. Gateway Feature. No later than 60 days after the execution of the Commercial Parcel Redevelopment Agreement, the Corporate Authorities may approve by resolution, an alternate plan for the Gateway Feature presented by, or acceptable to, the Commercial Developer incorporating a revised design for the feature. Such plan shall be incorporated into the Final Plan and shall replace the plan described in Section 4.E.3 above. In the event that the Corporate Authorities do not approve such a resolution within this 60 day period, the Commercial Developer will be allowed to construct the Gateway Feature in the manner depicted in Section 4.E.3

D. Rooftop Mechanical Equipment. All mechanical equipment located on the roof of any building on the Subject Property shall be fully screened by a parapet wall or other screening structure constructed of materials compatible with the principal building façade to the height of such equipment.

E. Safety Bollards. Safety bollards, in a manner and design approved by the Village's Director of Development and Planning Services, shall be installed on the Subject Property:

1. along all curbless areas where vehicles travel perpendicular to such curbless areas;

2. between parking spaces and commercial building storefronts where there is a potential for a motorist to drive into a storefront;

3. at the west end of the main Skokie Boulevard entrance along the walkway in front of Retail Building D and the northeast corner of Retail Building C; and

4. at the west end of the main Residential Building entrance along the drop-off/pick-up area for the Residential Building.

F. Retaining Walls. The color and design of the surface of the retaining walls along the north and west property lines of the Subject Property shall be reviewed and approved by the Village's Director of Development and Planning Services.

G. Emergency Access Connection. An emergency access drive in the northwest

corner of the Subject Property connecting to the property to the north is currently depicted on the Overall Site and Signage Plan for the Subject Property. If such access is provided, signage designating "For Emergency Access Only" must be provided and a barrier installed to prevent regular vehicle access, both of which must be approved by the Village's Fire Chief. The Applicant shall provide documentation, satisfactory to the Village Attorney, of an easement or access agreement requiring that this access be maintained between the properties. If the Applicant is unable to obtain such easement, the Applicant shall not be required to install the Emergency Access Connection.

H. Vehicular Access. Vehicular access may be provided to the Subject Property only at the following four access points, subject to the following conditions:

1. Northerly Skokie Boulevard Entrance/Exit: Only Left-in/Right-in/Right-out access shall be allowed;

2. Central Skokie Boulevard Entrance/Exit: Full access shall be allowed via signalized driveway constructed in alignment with the 633 Skokie Boulevard Driveway;

3. Southerly Skokie Boulevard Entrance/Exit: Only Right-in/Right-out access shall be allowed; and

4. Dundee Road Entrance/Exit: Only Right-in/Right-out/Left-in access shall be allowed.

I. Public Right of Way Improvements. The Commercial Developer shall, contingent upon approval by IDOT, construct the Developer Constructed Public Right of Way Improvements, as defined in, and in the manner described in the Commercial Parcel Redevelopment Agreement.

J. Retail Buildings E and F. The Commercial Developer, or other designated representatives, shall be required to submit applications for the following zoning relief for Retail Buildings E and F at such time as the Commercial Developer desires to proceed with their development as depicted in the preliminary concept plans submitted to the Village:

1. a special permit for an accessory drive-through to a banking facility;

2. a special permit for an accessory drive-through to a restaurant facility;

3. a special permit to allow a wall sign higher than 20 feet from grade (SIC No. 9966.00);

4. exceptions for the location and number of loading spaces; and

5. final plan approval of the building elevations and the accessory drive-through site plan elements for Retail Buildings E and F.

SECTION 8. FAILURE TO COMPLY WITH CONDITIONS.

Upon failure or refusal of the Applicant, the Commercial Developer, or the Residential Developer to comply with any or all of the conditions, restrictions or provisions of this Ordinance, the final plan approval granted in Section 4, the variations granted by Section 5, and the waivers granted in Section 6 of this Ordinance shall, at the sole discretion of the Board of Trustees, by ordinance duly adopted, be revoked and become null and void as to the particular parcel that is not in compliance;

provided, however, that the Board of Trustees may not so revoke the final plan approval, the variations, or the waivers unless it shall first provide the Applicant, the Commercial Developer, or the Residential Developer, as the case may be, with two months advance written notice of the reasons for revocation and an opportunity to be heard at a regular meeting of the Board of Trustees. In the event of revocation, the development and use of the portion of the Subject Property which is subject to such revocation shall be governed solely by the regulations of the O-4 Boulevard Office District and Village Ordinance No. 2014-03, as the same may, from time to time, be amended. Further, in the event of such revocation of the relief granted herein, the Village Manager and Village Attorney are hereby authorized and directed to bring such zoning enforcement action as may be appropriate under the circumstances against the applicable property owner. The Applicant, the Commercial Developer, and the Residential Developer acknowledge that public notices and hearings have been held with respect to the adoption of this Ordinance, have considered the possibility of the revocation provided for in this Section, and agree not to challenge any such revocation on the grounds of any procedural infirmity or any denial of any procedural right, provided that the notice to the Applicant, the Commercial Developer, and the Residential Developer required by this Section has been given.

SECTION 9. AMENDMENT TO APPROVALS.

Any amendment to any provision of this Ordinance that may be requested by the Applicant, the Commercial Developer, or the Residential Developer, as the case may be, after the effective date of this Ordinance may be granted only pursuant to the procedures, and subject to the standards and limitations, provided in the Zoning Code for amendment of such relief.

SECTION 10. EFFECTIVE DATE.

A. This Ordinance shall be in full force and effect only upon the occurrence of all of the following events:

1. Passage by the Board of Trustees of the Village of Northbrook by a majority vote in the manner required by law; and

2. Publication in pamphlet form in the manner required by law;

3. the occurrence of the "Evidence of Title Date" as defined in the Redevelopment Agreements; and

4. recordation of this Ordinance, together with such exhibits as the Village Clerk shall deem appropriate for recordation, with the Cook County Recorder of Deeds. The Applicant shall bear the full cost of such recordation.

B. In the event that the Evidence of Title Date does not occur prior to October 31, 2014, or such later date as the Corporate Authorities may approve by resolution duly adopted, the Village shall have the right, without objection by the Applicant, the Commercial Developer, or the Residential Developer to revoke this Ordinance.

Adopted: 5/13/2014

RESULT:	**ADOPTED [UNANIMOUS]**
MOVER:	James Karagianis, Trustee
SECONDER:	Michael Scolaro, Trustee
AYES:	Karagianis, Buehler, Scolaro, Heller, Ciesla, Israel, Frum

ATTEST:

/s/ Sandra E. Frum
Village President

/s/ Debra J. Ford
Village Clerk

EXHIBIT A

LEGAL DESCRIPTION FOR THE SUBJECT PROPERTY

A TRACT OF LAND COMPRISED OF LOTS 3, 4 AND 5 IN "LANE PARK SUBDIVISION" IN THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, TOGETHER WITH A PART OF SAID SOUTHEAST QUARTER OF SAID SECTION 2 LYING SOUTH OF THE SOUTH LINE OF SAID LOT 4, WESTERLY OF THE WESTERLY LINE OF SKOKIE ROAD, AS NOW DEDICATED, AND NORTH OF THE NORTHERLY LINE OF DUNDEE ROAD, AS NOW DEDICATED, SAID TRACT OF LAND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF A LINE WHICH IS 50.00 FEET NORTH FROM AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2, WITH A LINE WHICH IS 185.00 FEET NORTHEASTERLY FROM AND PARALLEL WITH CENTERLINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, SAID POINT BEING THE SOUTHWEST CORNER OF LOT 5 AFORESAID; AND RUNNING THENCE NORTH 26 DEGREES 33 MINUTES 47 SECONDS WEST (ASSUMED) ALONG SAID LINE WHICH IS 185.00 FEET NORTHEASTERLY FROM AND PARALLEL WITH THE CENTERLINE OF THE RIGHT OF WAY CHICAGO AND NORTHWESTERN RAILWAY COMPANY, SAID LINE BEING ALONG THE WESTERLY LINE OF LOTS 3,4 AND 5 IN LANE PARK SUBDIVISION, AFORESAID, A DISTANCE OF 1420.35 FEET TO THE NORTHWEST CORNER OF SAID LOT 3; THENCE NORTH 89 DEGREES 56 MINUTES 29 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 3, A DISTANCE OF 548.86 FEET TO THE NORTHEAST CORNER OF SAID LOT 3; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOTS 3 AND 4, SAID EASTERLY LINE BEING 50.00 FEET WESTERLY FROM AND PARALLEL WITH THE CENTERLINE OF SKOKIE BOULEVARD, A DISTANCE OF 706.39 FEET TO AN ANGLE POINT IN SAID EASTERLY LINE OF LOT 4; THENCE SOUTH 21 DEGREES 49 MINUTES 59 SECONDS EAST ALONG SAID EASTERLY LINE OF LOT 4, A DISTANCE OF 121.27 FEET TO AN ANGLE POINT IN SAID LOT 4; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOT 4, SAID EASTERLY LINE BEING 60.00 FEET WESTERLY FROM AND PARALLEL WITH THE CENTERLINE OF SKOKIE BOULEVARD, A DISTANCE OF 349.12 FEET TO THE SOUTHEAST CORNER OF SAID LOT 4; THENCE CONTINUING SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG LAST DESCRIBED PARALLEL LINE, BEING THE WESTERLY LINE OF SKOKIE BOULEVARD AS DEDICATED BY PLAT RECORDED DECEMBER 31, 1935 AS DOCUMENT NO. 11735510, A DISTANCE OF 184.57 FEET TO A POINT OF CURVE IN SAID WESTERLY LINE; THENCE SOUTHWESTWARDLY ALONG THE ARC OF A CIRCLE CONVEX TO THE SOUTHEAST, TANGENT TO THE LAST DESCRIBED PARALLEL LINE AND HAVING A RADIUS OF 25.00 FEET, A DISTANCE OF 50.03 FEET, TO A POINT OF TANGENT WITH THE NORTHERLY LINE OF DUNDEE ROAD AS DEDICATED BY THE AFORESAID DOCUMENT NO. 11735510; THENCE SOUTH 88 DEGREES 05 MINUTES 13 SECONDS WEST ALONG SAID NORTHERLY LINE OF DUNDEE ROAD, A DISTANCE OF 208.51 FEET, TO AN INTERSECTION WITH A LINE WHICH EXTENDS NORTHWARD FROM A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 2, DISTANT 157.58 FEET EAST OF THE INTERSECTION OF SAID SOUTH LINE WITH A LINE 275.00 FEET NORTHEASTERLY OF (MEASURED PERPENDICULARLY THERETO) THE SAID CENTERLINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY; THENCE NORTH 00 DEGREES 01 MINUTES 39 SECONDS EAST ALONG THE LAST DESCRIBED LINE (WHICH FORMS A NORTHWEST ANGLE OF 90 DEGREES 01 MINUTES 39

SECONDS WITH THE SOUTH LINE OF SAID SOUTHEAST QUARTER), A DISTANCE OF 208.21 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF LOT 4 AFORESAID; THENCE WEST ALONG SAID SOUTH LINE OF LOT 4, A DISTANCE OF 334.57 FEET TO THE NORTHEAST CORNER OF SAID LOT 5; THENCE SOUTH 26 DEGREES 33 MINUTES 47 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOT 5, A DISTANCE OF 239.60 FEET TO THE SOUTHEAST CORNER OF SAID LOT 5, SAID SOUTHEAST CORNER BEING A POINT ON THE AFORESAID LINE WHICH IS 50.00 FEET NORTH FROM AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2; THENCE WEST ALONG SAID PARALLEL LINE, BEING THE SOUTH LINE OF SAID LOT 5, A DISTANCE OF 55.90 FEET TO THE POINT OF BEGINNING IN COOK COUNTY, ILLINOIS.

ALSO INCLUDING:

PARCEL 1:

THAT PART OF THE SOUTH 8 ACRES OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES EASTERLY OF A LINE DRAWN THROUGH SAID 8 ACRES PARALLEL TO AND 235.00 FEET EASTERLY OF AND MEASURED AT RIGHT ANGLE TO THE CENTER LINE OF THE RIGHT OF WAY OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, AND WHICH LIES WESTERLY OF A LINE DESCRIBED AS COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF SECTION 2 AT A DISTANCE OF 77.58 FEET EAST OF A POINT OF ITS INTERSECTION WITH A LINE 275.00 FEET NORTHEASTERLY OF (MEASURED PERPENDICULARLY THERETO) THE SAID CENTER LINE OF THE RIGHT OF WAY; THENCE NORTH TO THE NORTH LINE OF SAID SOUTH 8 ACRES ALONG A LINE WHICH FORMS A NORTHWEST ANGLE OF 90 DEGREES 01 MINUTES 39 SECONDS WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 2, AFORESAID, EXCEPTING FROM SAID DESCRIBED PROPERTY THAT PART THEREOF DEDICATED OR USED FOR DUNDEE ROAD, ALL IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THE WESTERLY 80 FEET OF THAT PART OF THE SOUTH 8 ACRES OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, WHICH LIES WESTERLY OF THE WESTERLY LINE OF SKOKIE ROAD AS NOW DEDICATED, NORTH OF THE NORTHERLY LINE OF DUNDEE ROAD AS NOW DEDICATED, AND EASTERLY OF A LINE DESCRIBED AS COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2 DISTANT EASTERLY THEREON 77.58 FEET FROM A POINT OF INTERSECTION OF SAID SOUTH LINE WITH A LINE PARALLEL WITH, AND DISTANT NORTHEASTERLY 275 FEET MEASURED AT RIGHT ANGLES TO, THE CENTER LINE OF THE CHICAGO AND NORTHWESTERN RAILWAY COMPANY, RUNNING THENCE NORTHERLY TO THE NORTH LINE OF SAID 8 ACRES ALONG A LINE WHICH FORMS AN ANGLE OF 90 DEGREES 01 MINUTES 39 SECONDS WHEN MEASURED CLOCKWISE FROM AFORESAID SOUTH LINE OF THE SOUTHEAST QUARTER OF SOUTHEAST QUARTER OF SECTION 2, ALL IN COOK COUNTY, ILLINOIS.

PINs: 04-02-402-031, -032, -033; 04-02-422-009; 04-02-422-001, -006, -008

Commonly known as: 770 Skokie Boulevard, Northbrook, Illinois 60062

EXHIBIT B

FINAL PLANS

The Final Plan for the Subject Property shall consist of the following plans and specifications which are attached hereto and by this reference made a part of this Ordinance.* In the event of any conflict or inconsistency among the plans and specifications, the later dated plan or specification shall control.

A. Development Summary Sheet, prepared by Camburas & Theodore, Ltd., consisting of one sheet, date stamped March 26, 2014;

B. Overall Site & Signage Plan, prepared by Terra Consulting Group, Ltd., consisting of Sheet C-3, with a latest revision date of April 30, 2014;

C. Engineering Plan Sheets, prepared by Terra Consulting Group, Ltd., consisting of the following sheets with a latest revision date of March 21, 2014:
   1. Geometric Plan - Sheets C-4 & C-5;
   2. Grading Plan - Sheets C-6 & C-7; and
   3. Utility Plan - Sheets C-8 & C-9.

D. Photometric Plan, prepared by WLS Lighting Systems, consisting of one sheet, with a latest revision date of March 19, 2014, and

E. Retaining Wall Plan Sheets, prepared by Terra Consulting Group, Ltd., consisting of Sheets S-1 and S-2, with a latest revision date of March 19, 2014.

F. Landscaping and Other Hardscape Elements:
   1. Landscape Plan, prepared by HKM Architects & Planners, Inc., consisting of Sheets L100 & L101, with a latest revision date of March 20, 2014;
   2. Pedestrian Amenities, prepared by Camburas & Theodore, Ltd., consisting of Sheets PED-1, PED-2, L-2, date stamped March 26, 2014; and
   3. Gateway Feature, prepared by HKM Architects & Planners, Inc., consisting of Sheet L102, and Perspective Drawing Sheets View A and View B, with a latest revision date of March 20, 2014.
   4. Mariano's Trellis, prepared by Camburas & Theodore, Ltd., date stamped March 26, 2014, and consisting of Sheet TR-1.

G. Retail Buildings Elevation Sheets, prepared by Camburas & Theodore, Ltd., consisting of the following sheets date stamped March 26, 2014:
   1. Retail Building A - Sheet A-2;
   2. Retail Building B - Sheet A-2;
   3. Retail Building C (Mariano's) - Sheet A-2.0; and
   4. Retail Building D - Sheet A-2.

H. Residential Building Elevation Sheets, prepared by HKM Architects & Planners Inc., consisting of Sheets A200 and A201 with a latest revision date of March 20, 2014.

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* Pursuant to Section 4 of this Ordinance, all revisions to any of the plans listed in this Exhibit B that are reviewed, accepted, and approved by either the Village Engineer or the Village's Director of Development and Planning Services subsequent to the date of adoption of this Ordinance shall be incorporated into, and made a part of this Ordinance and the Final Plan with no further action required by the Corporate Authorities.

EXHIBIT B - Final Plans

SITE AREA 697,513 SQ.FT. (15.78 ACRES)
OVERALL SITE AREA BEFORE DEDICATIONS

DUNDEE ROW = 7,956 SQ.FT.
SKOKIE BOULEVARD AT ENTRY ROW= 4,420 SQ.FT.
SKOKIE BOULEVARD AT MID SITE TAPER ROW =253 SQ.FT.

SITE AREA AFTER DEDICATIONS 674,884
SQ.FT. (15.49 ACRES)

COMMERCIAL DEVELOPMENT

SHOPPING CENTER PARKING CHART	
TOTAL COMMERCIAL BUILDING SQUARE FOOTAGE	101,895 SQ.FT.
1 SPACE PER 250 SQ.FT. (A)	408
AMOUNT OF RESTAURANT SPACE	15,140 SQ.FT.
10% OF FLOOR AREA RESTAURANT	10,144
AMOUNT OF RESTAURANT SPACE OVER 10%	4,996
1 SPACE PER 70 FOR THE AMOUNT OVER 10% (B)	72
TOTAL NUMBER OF COMMERCIAL PARKING SPACES REQUIRED (A+B)	480 SPACES
ACTUAL TOTAL PARKING : INCLUDED IN COUNT(14 ADA SPACES)	563 SPACES

ACTUAL BUILDING AREA

RETAIL A:	7,100 SQ.FT.
RETAIL B:	8,400 SQ.FT
RETAIL C:	71,320 SQ.FT.
RETAIL D:	6,975 SQ,FT.
RETAIL E:	4,000 SQ.FT.
PANERA	4,100 SQ.FT
TOTAL GLA:	101,895 SQ.FT.

RESIDENTIAL DEVELOPMENT

UNIT TYPE	NO. OF UNITS	AV. SQ.FT./UNIT	TOTAL SQ.FT./UNIT
1 BEDROOM	148	753 s.f.	111,444 s.f.
2 BEDROOM	199	1,127s.f.	224,273 s.f.
TOTAL	347		335,717 s.f.

RESIDENTIAL BUILDING FAR	TOTAL FLR. AREA		PARKING	GROSS FLOOR AREA
	598,284 s.f.		188,744 s.f.	409,540 s.f.

PARKING RESIDENTIAL

INTERNAL	595	BASEMENT, 1 ST. FLR.2 ND.FLR., INCLUDES: 12 ACCESSIBLE SPACES 90 TANDEM SPACES 68 INTERNAL GUEST PARKING SPACES
EXTERNAL	13	INCLUDES 1 ACCESSIBLE STALL
TOTAL PARKING	608	RESIDENTIAL PARKING SPACES
RATIO	1.75	
SIZE	9'X18' FOR INTERNAL STALLS ,DIMENSIONED TO CENTER OF STRUC. COL.	
TOTAL	608 SPACES (total site parking=1,171 spaces)	

PROPOSED FAR

RESIDENTIAL 409,540 SQ.FT.
RETAIL DEVELOPMENT 101,895 SQ.FT.
PROPOSED TOTAL FAR : 511,435 / 674,884 = .76

LOT COVERAGE

PERVIOUS: 2.95 AC
IMPERVIOUS: 12.83 AC

CROSSROADS Development Partners
MORNINGSIDE

DEVELOPMENT SUMMARY

NorthShore 770

770 SKOKIE BLVD. ROAD
NORTHBROOK ILLINOIS

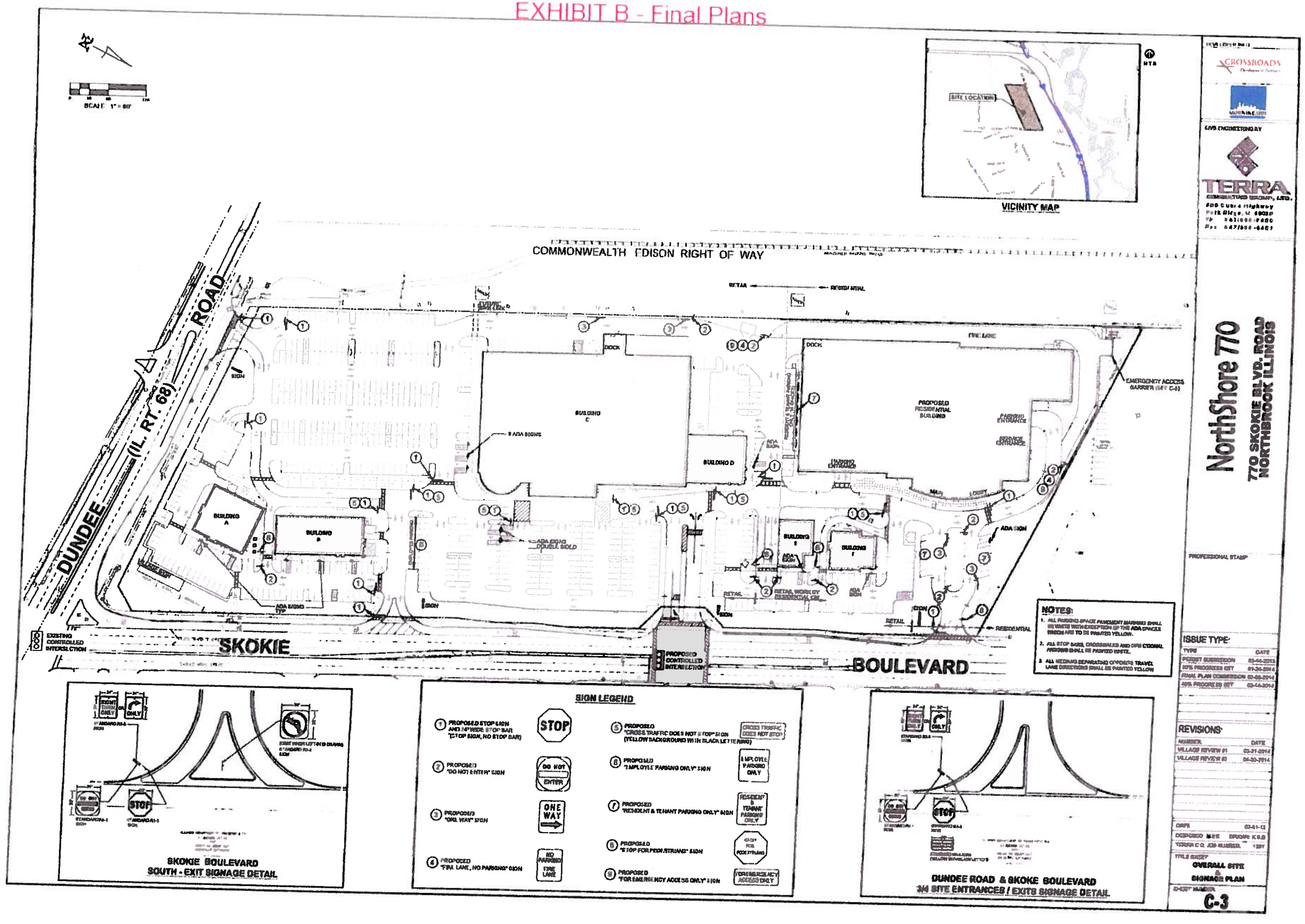
3-1-14

CTI

Doc#: 1419845012 Fee: $162.00
RHSP Fee:$9.00 RPRF Fee: $1.00
Karen A.Yarbrough
Cook County Recorder of Deeds
Date: 07/17/2014 09:23 AM Pg: 1 of 63

RECEIVED
VILLAGE OF NORTHBROOK
MAR 26 2014
DEPARTMENT OF
DEVELOPMENT & PLANNING

EXHIBIT B - Final Plans



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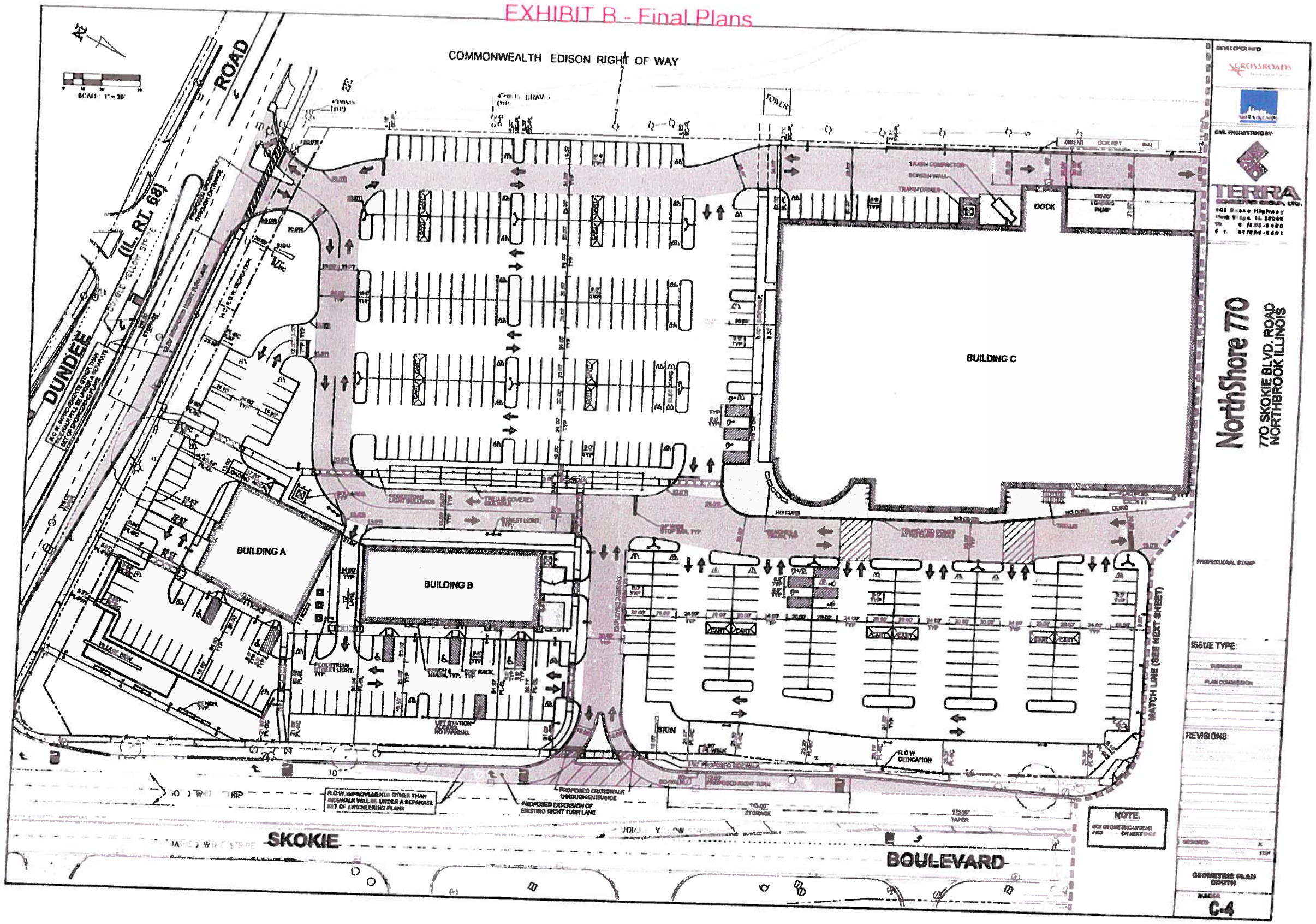

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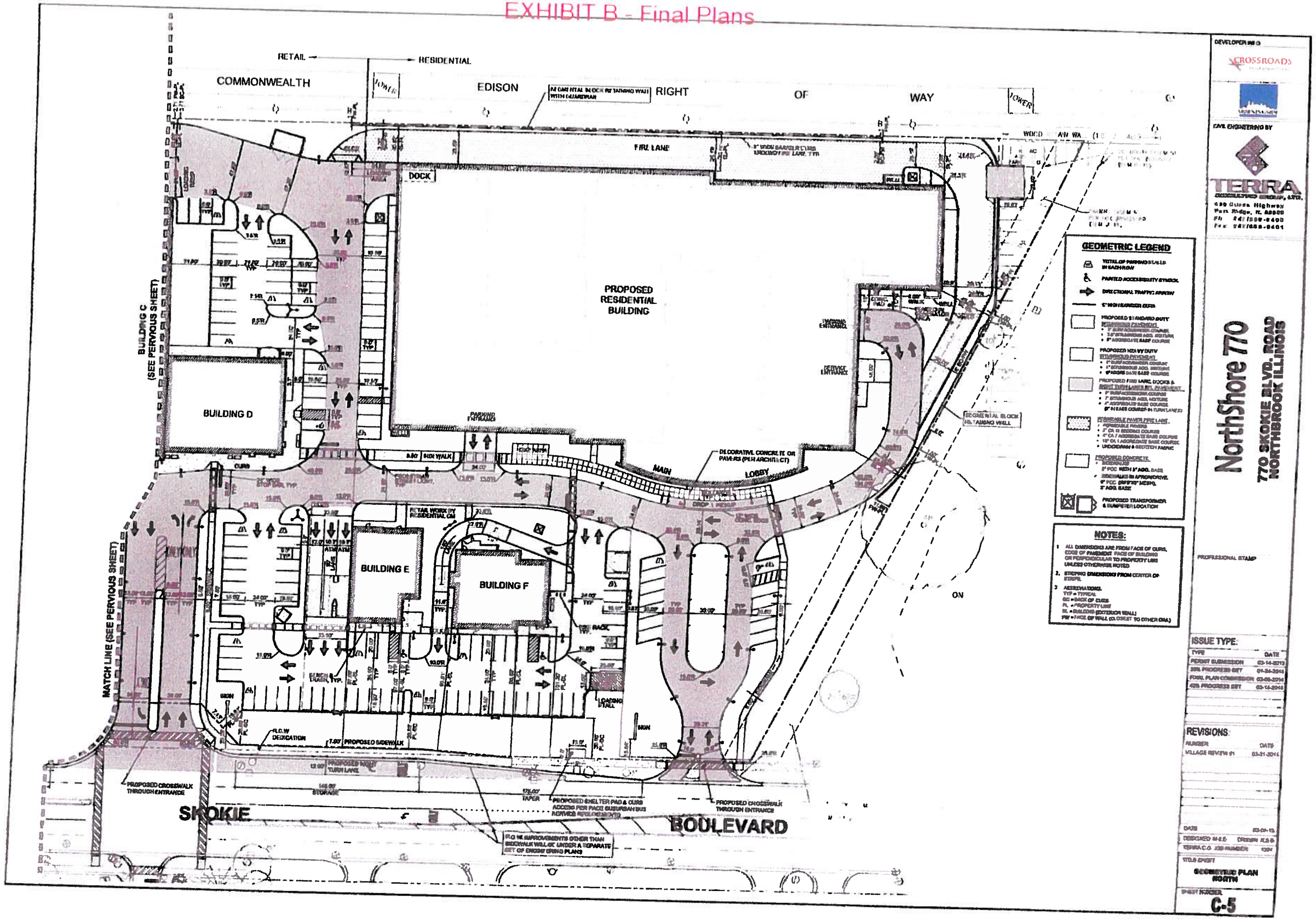

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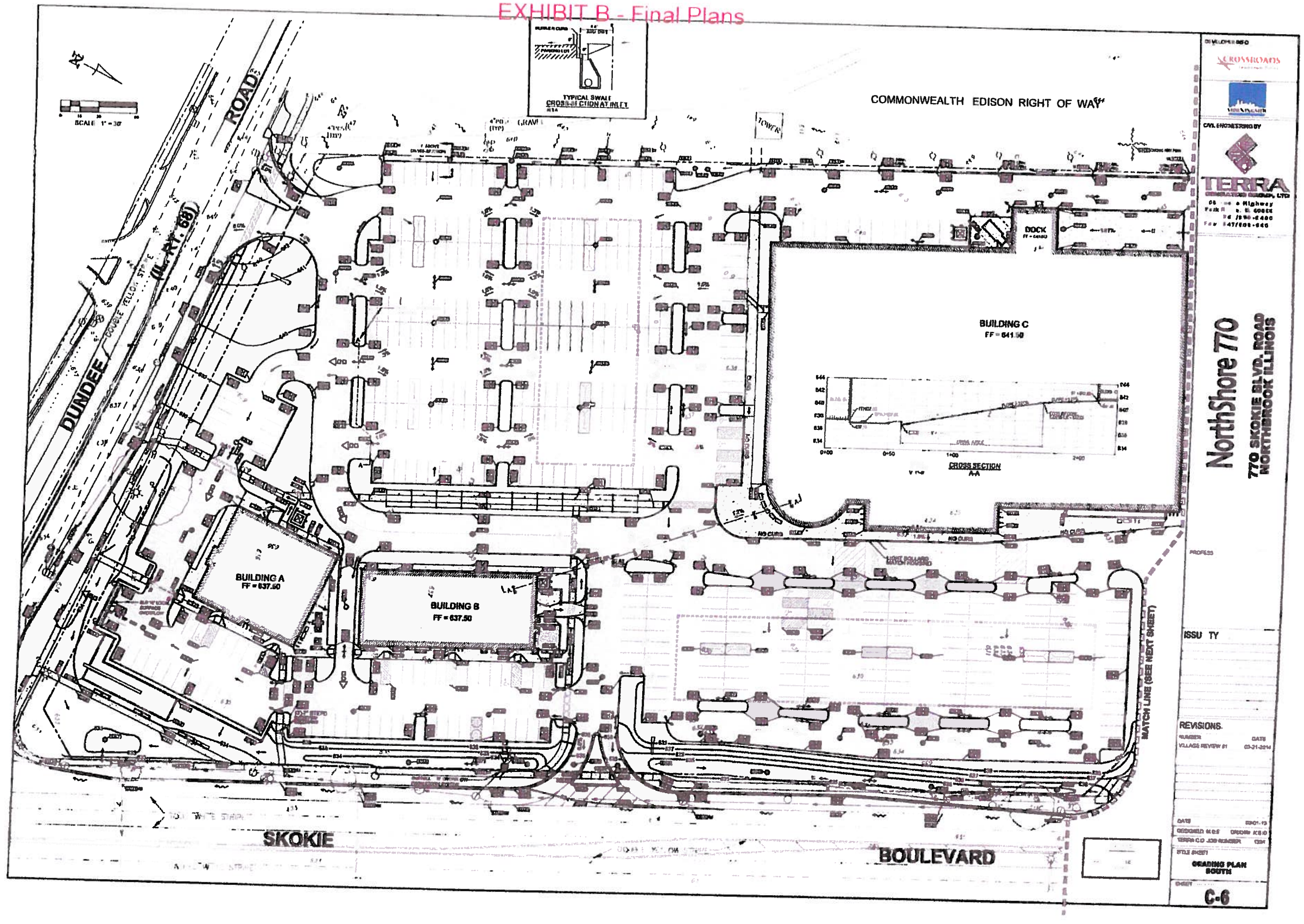

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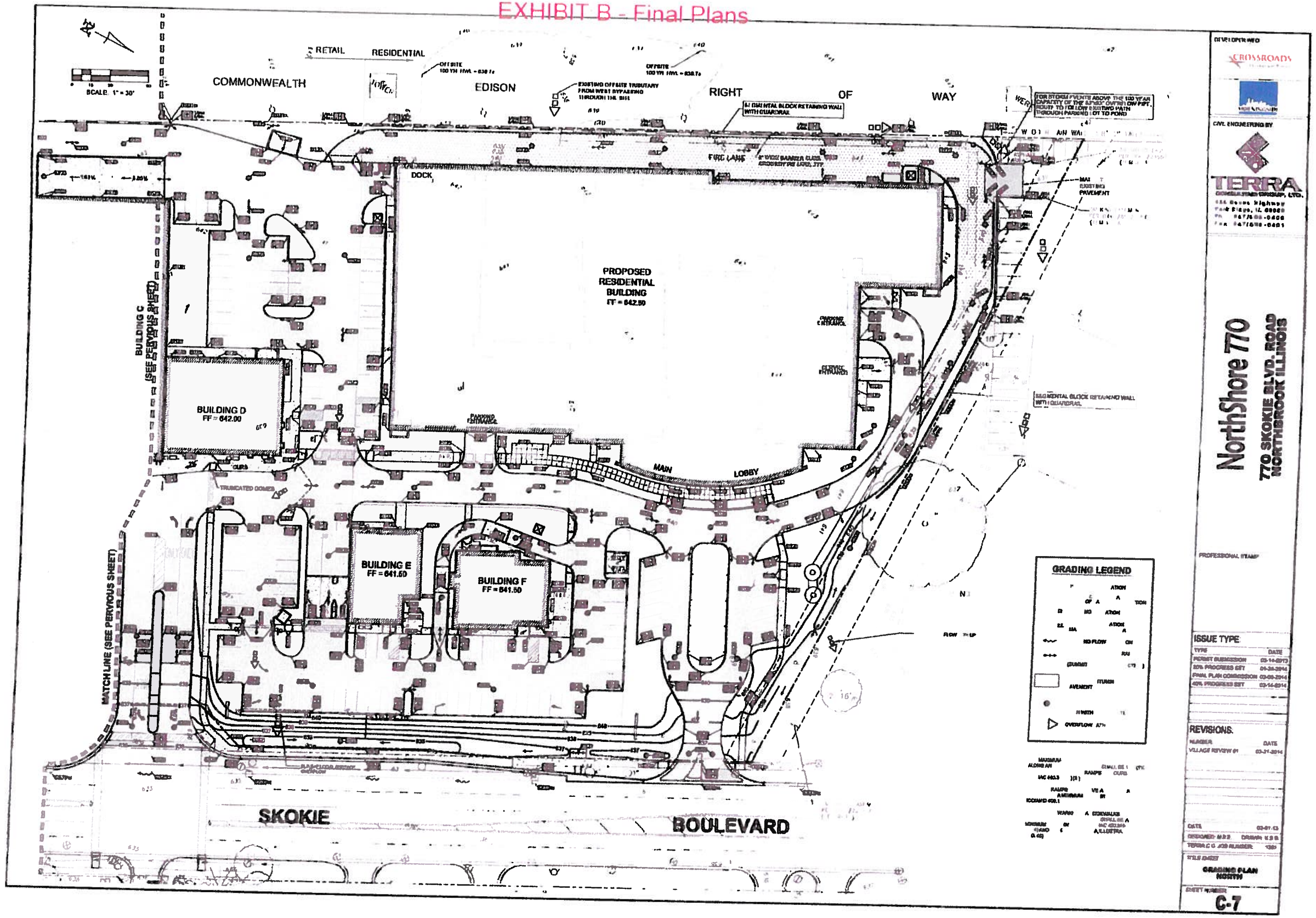

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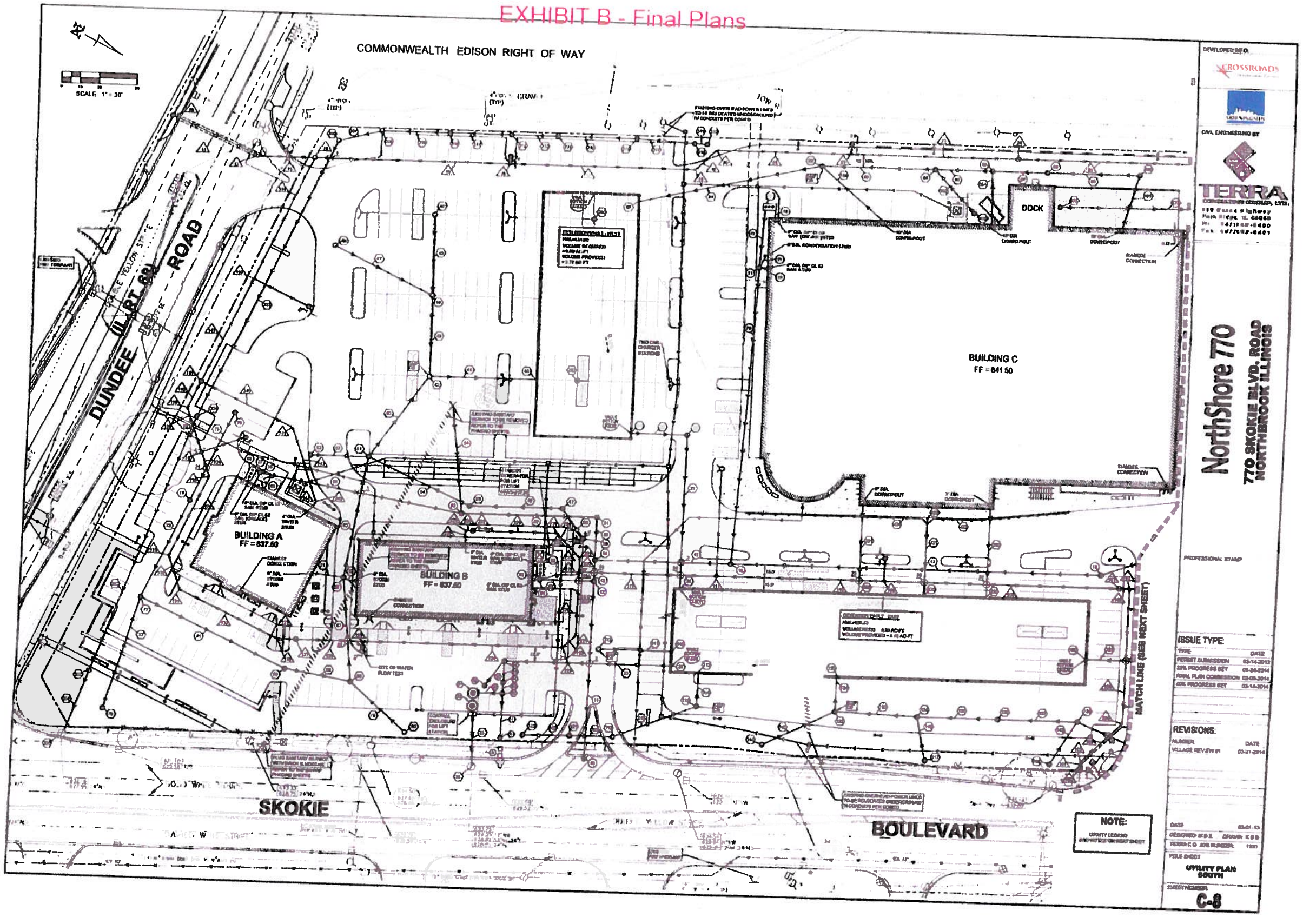

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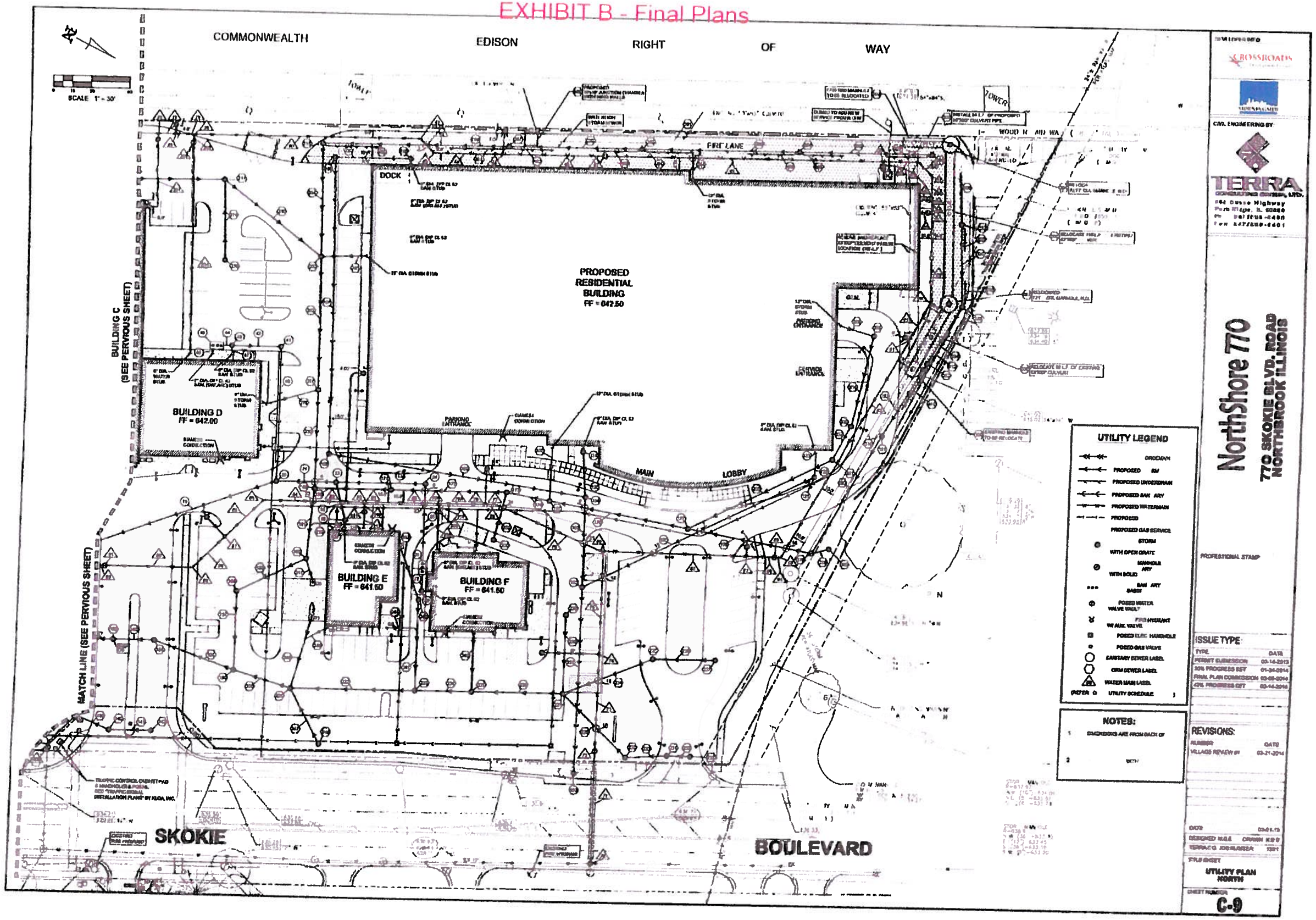
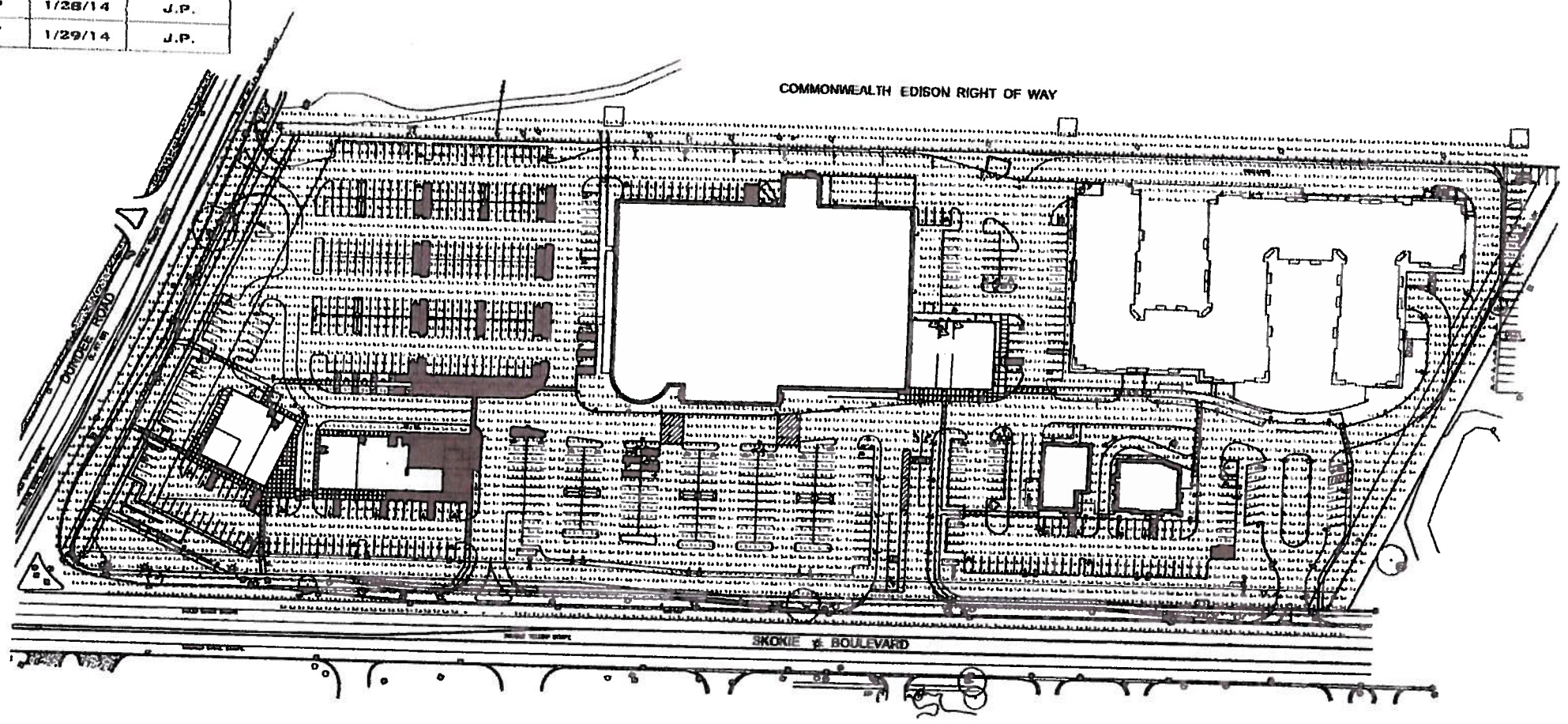


EXHIBIT B - Final Plans

REVISIONS		
Rev #	Date	By:
1	2/15/13	J.P.
2	3/7/13	J.P.
3	3/12/13	J.P.
4	5/21/13	J.P.
5	6/3/13	J.P.
6	1/28/14	J.P.
7	1/29/14	J.P.
8	2/3/14	J.P.
9	3/13/14	J.P.
10	3/18/14	J.P.
11	3/19/14	J.P.

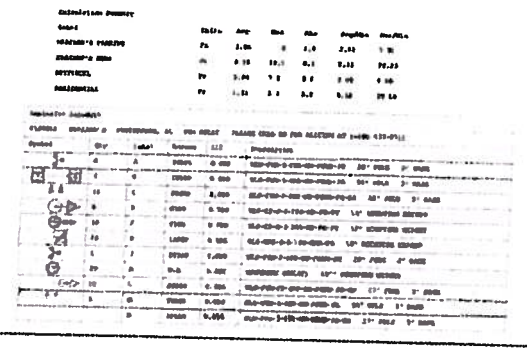


AS A RESULT OF THE COLOR OF THE LIGHT SOURCE (5000K, CRI-60+), THE "SEE-ABILITY" PRODUCED BY THIS LIGHTING SOLUTION WILL APPEAR AT LEAST 30% BRIGHTER THAN THIS PHOTOPIC MODEL SUGGESTS.

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufactured luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions.

NOTE:
STREET LIGHTING NOT TO HAVE 3' HIGH CONCRETE BASE. POLES ON WALK TO GO TO THE GROUND.



1919 WINDSOR PLACE
FORT WORTH, TX 76110
WWW.WLSLIGHTING.COM

WLS LIGHTING SYSTEMS

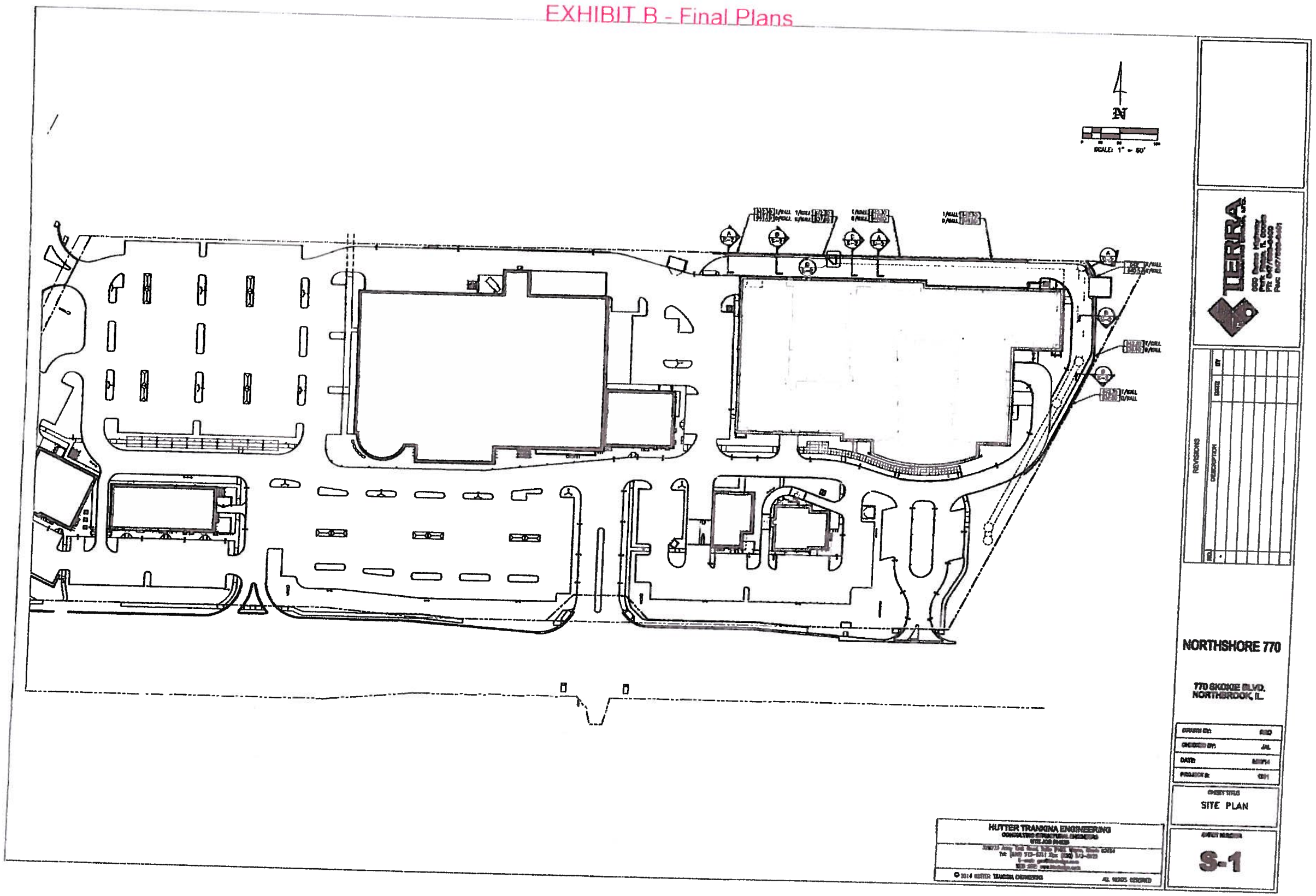
Consider the Impact!

800-633-8711

MARIANO'S
NORTHBROOK, IL

WL8-8901 | DATE - 1/28/13 | SCALE: 1"=60' | PM: HOLLY | BY: J.P. | SHEET 1 OF 4

EXHIBIT B - Final Plans



TERRA

REVISIONS
NO. DESCRIPTION DATE BY

NORTHSHORE 770

770 SKOKIE BLVD.
NORTHBROOK, IL

DRAWN BY: RSD
CHECKED BY: JAL
DATE: MM/YY
PROJECT #: 0000

SHEET TITLE
SITE PLAN

SHEET NUMBER
S-1

HUTTER TRANDINA ENGINEERING
CONSULTING STRUCTURAL ENGINEERS
WWW.HTE-INC.COM
[illegible] Tel: (630) 513-0711 Fax: (630) 513-0713
E-mail: [illegible]
[illegible] www.htedesign.com

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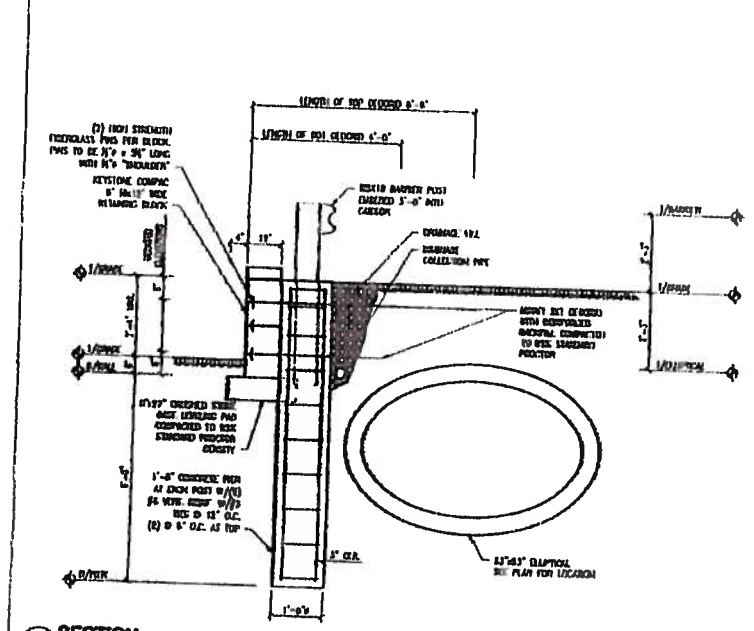
EXHIBIT B - Final Plans



A SECTION
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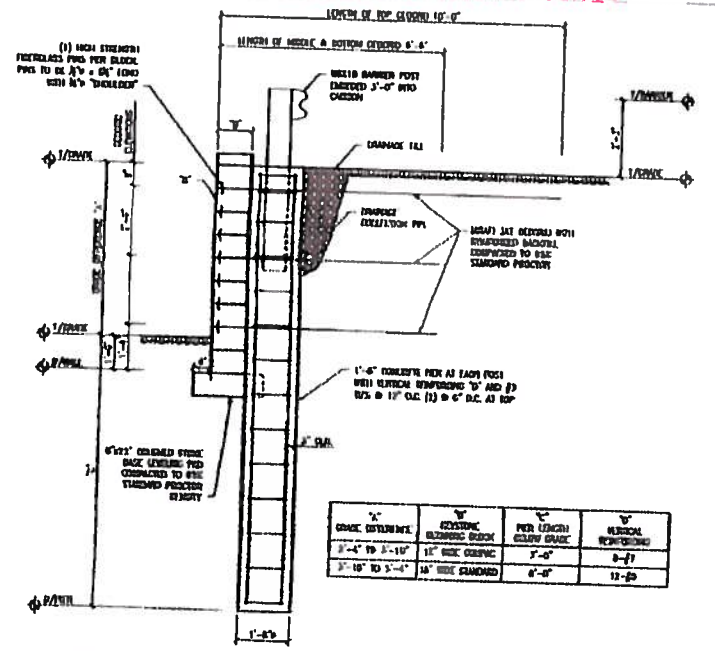

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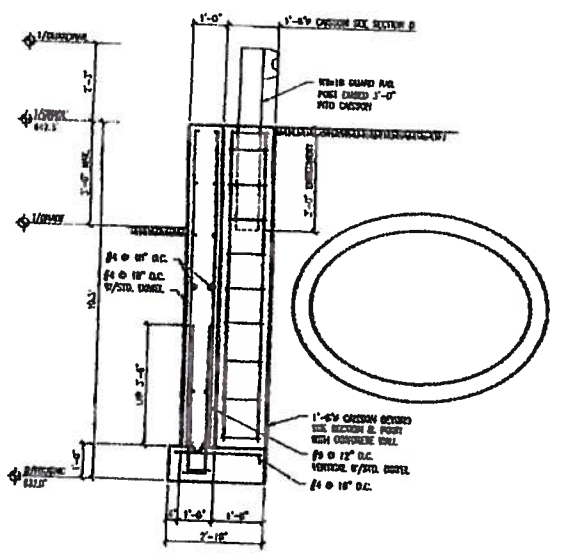

C SECTION
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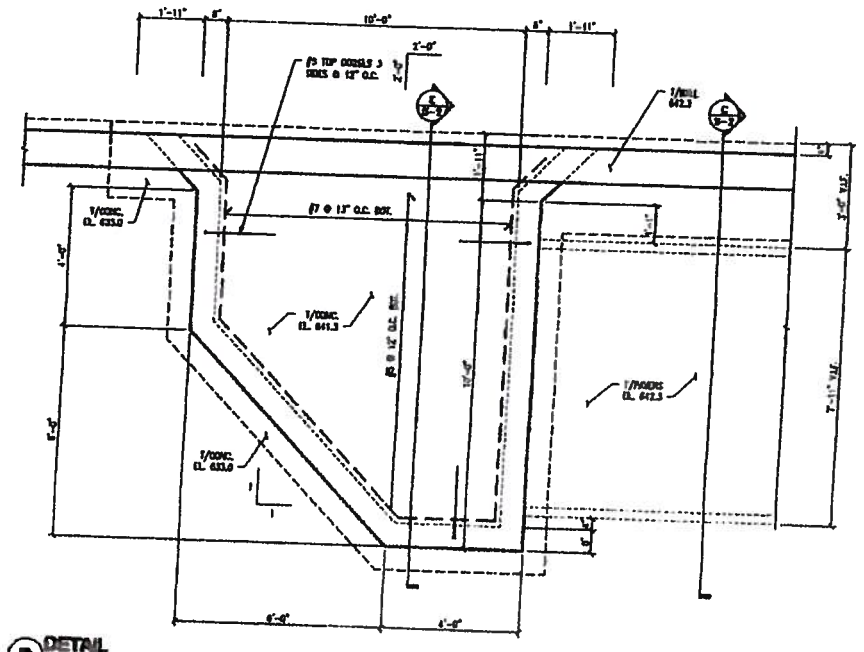

D DETAIL
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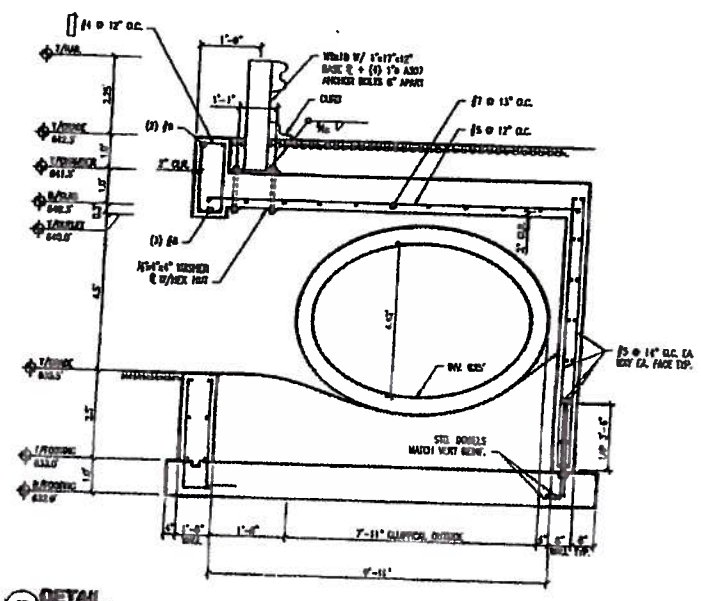
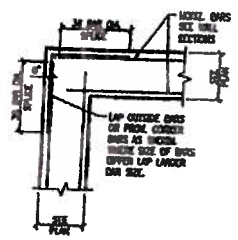


E DETAIL
SCALE: 1/2"=1'-0"



F CORNER BAR DETAIL
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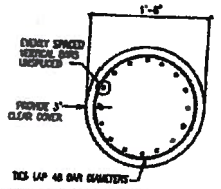


G CAISSON SECTION

NUTTER TERRANOVA ENGINEERING
CONSULTING STRUCTURAL ENGINEERS

© 2014 NUTTER TERRANOVA ENGINEERING ALL RIGHTS RESERVED

TERRA

REVISIONS	BY
DATES	
DESCRIPTION	
NO.	

NORTHSHORE 770

770 SKOKIE BLVD.
NORTHBROOK, IL.

DRAWN BY:	RRD
CHECKED BY:	JWL
DATE:	2/20/14
PROJECT #:	1331

SHEET TITLE
SECTIONS & DETAILS

SHEET NUMBER
S-2

EXHIBIT B - Final Plans

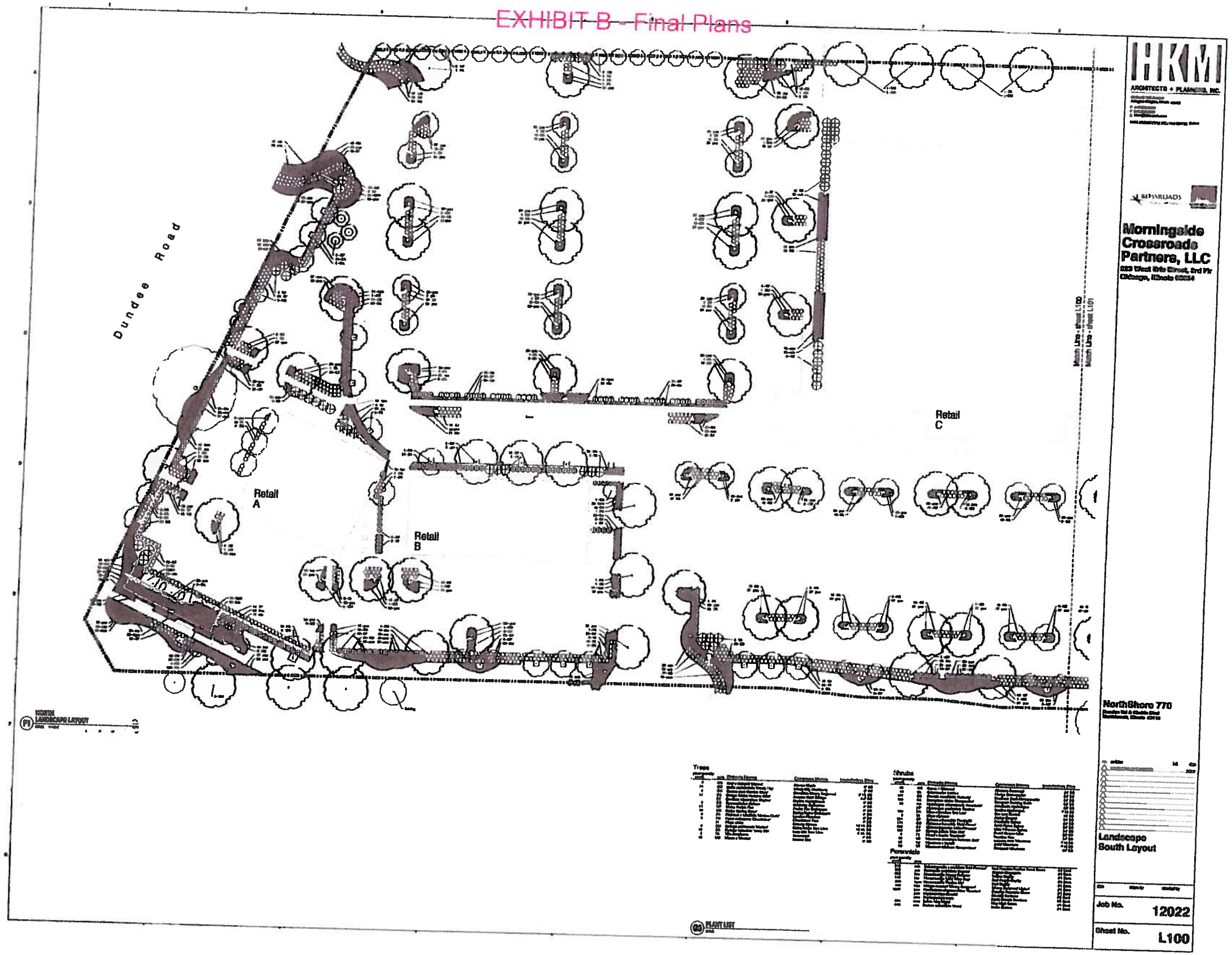
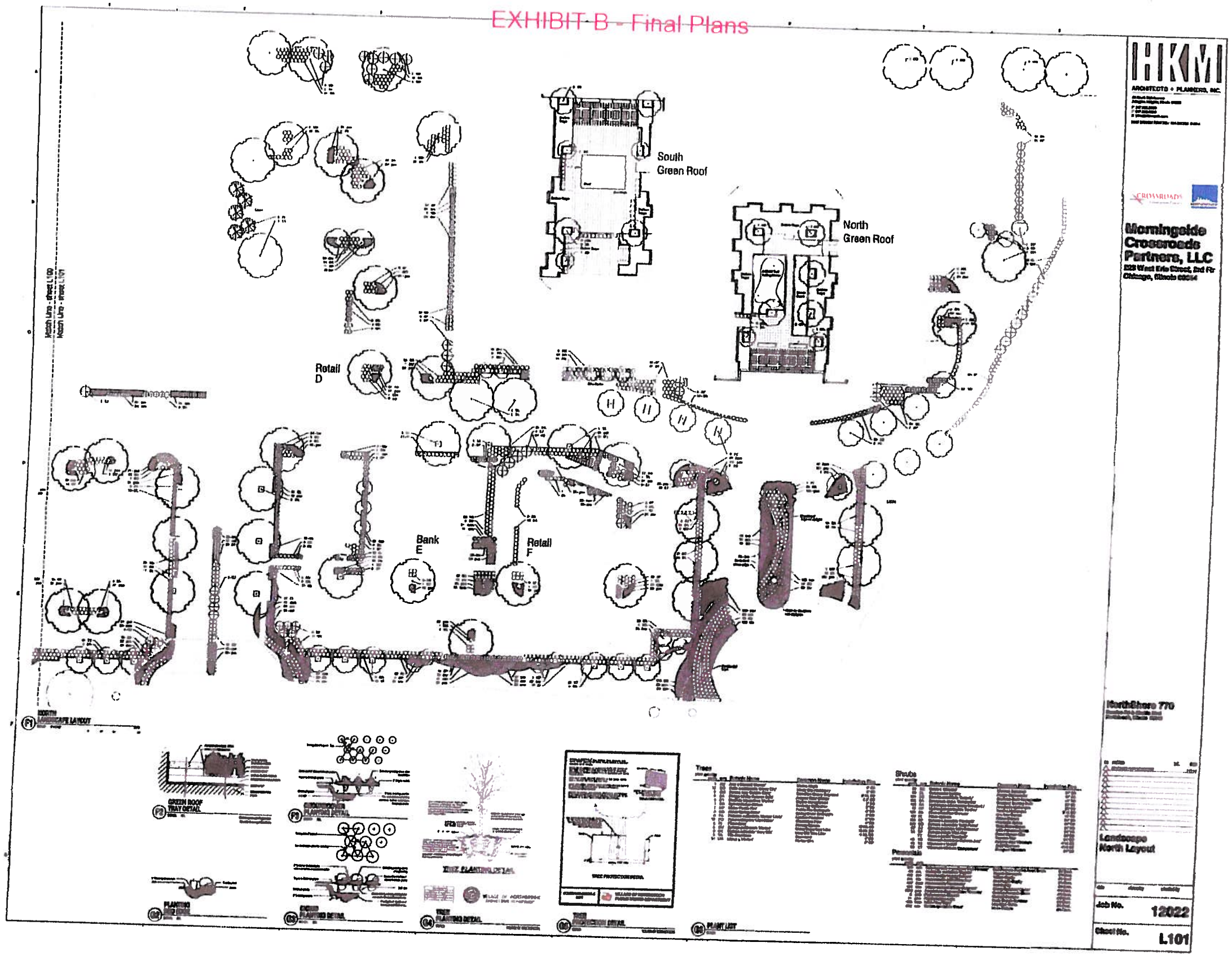


EXHIBIT B - Final Plans



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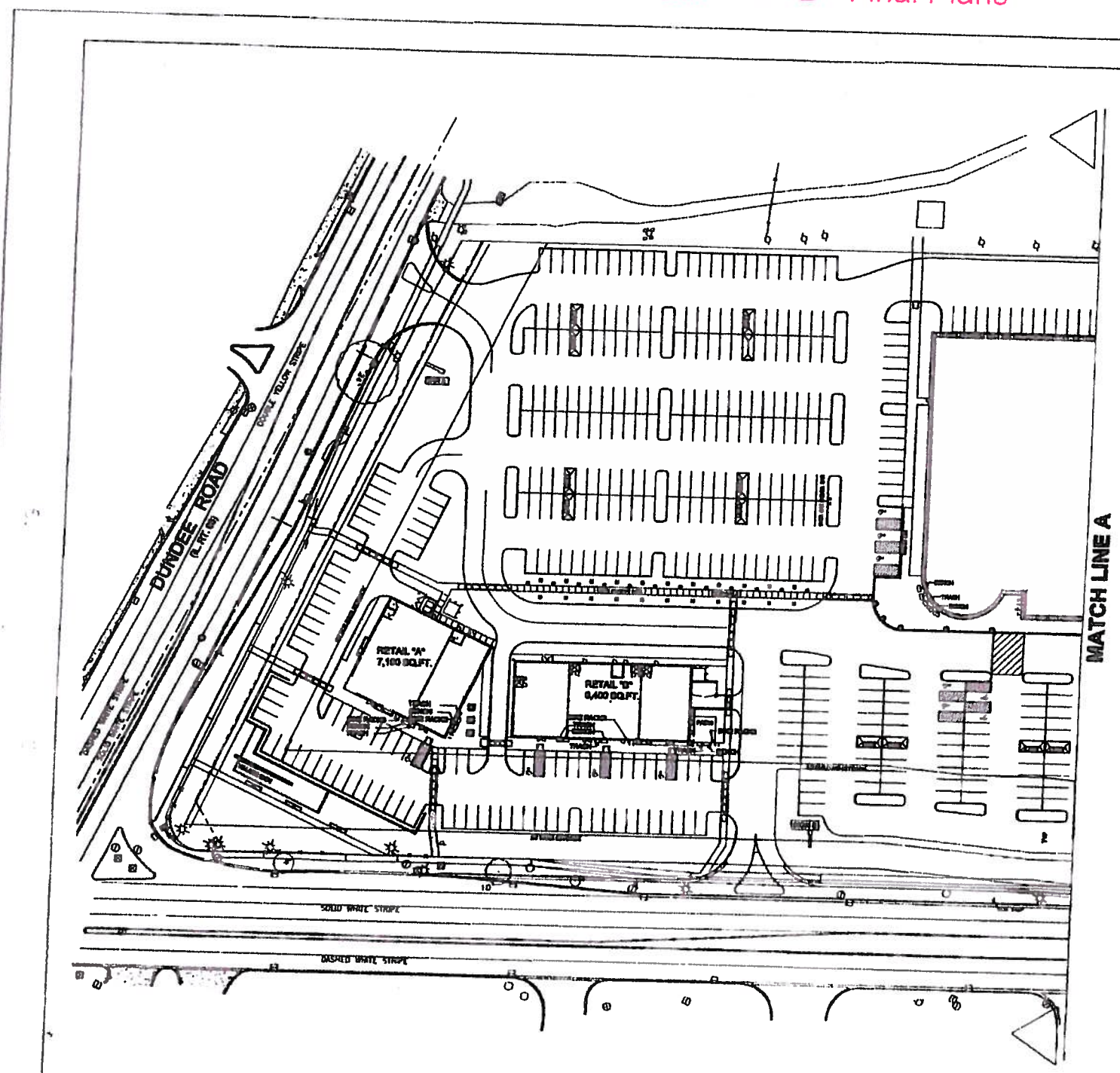



FORMS AND SURFACES BENCH



FORMS AND SURFACES BIKE RACK



FORMS AND SURFACES TRASH RECEPTACLE

MARCH-1-14

DEVELOPER INFO:

NorthShore 770

770 SKOKIE BLVD. ROAD
NORTHBROOK ILLINOIS

ISSUE TYPE:

REVISIONS:

PEDESTRIAN ARCHITECTED

PED-1

MAR 26 2014

MAR 26 2014

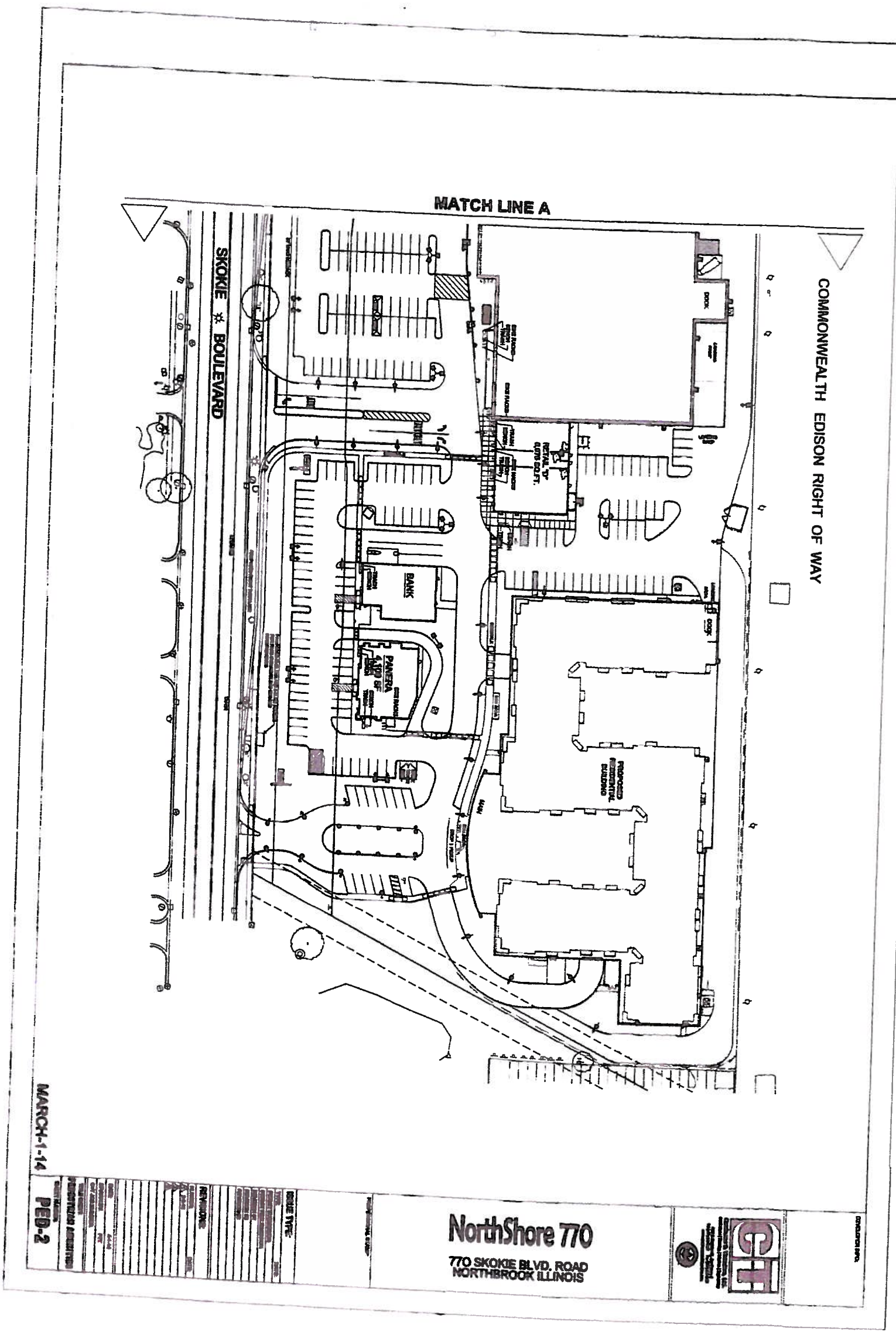

EXHIBIT B - Final Plans

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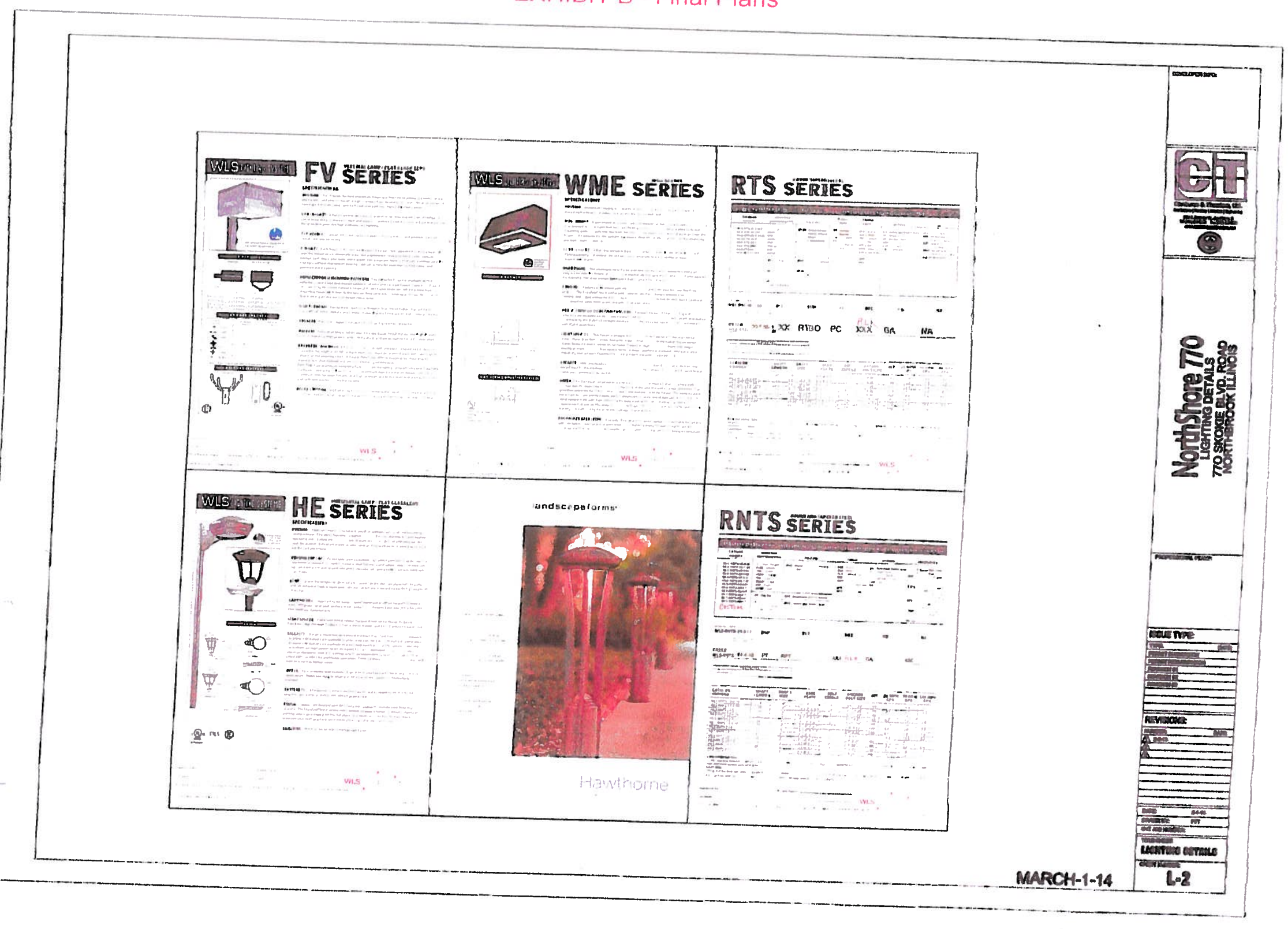


MAR 26 2014

EXHIBIT B - Final Plans

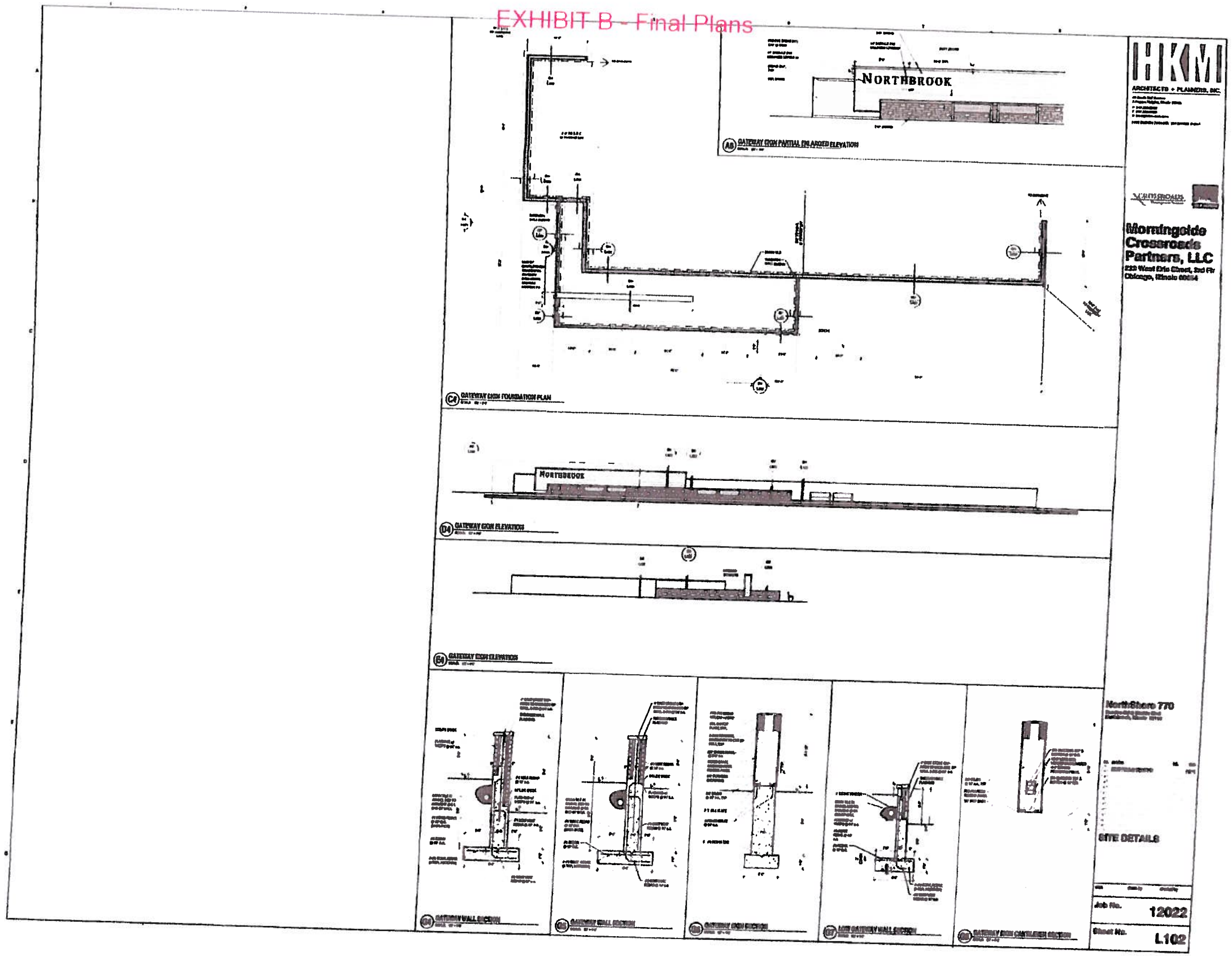
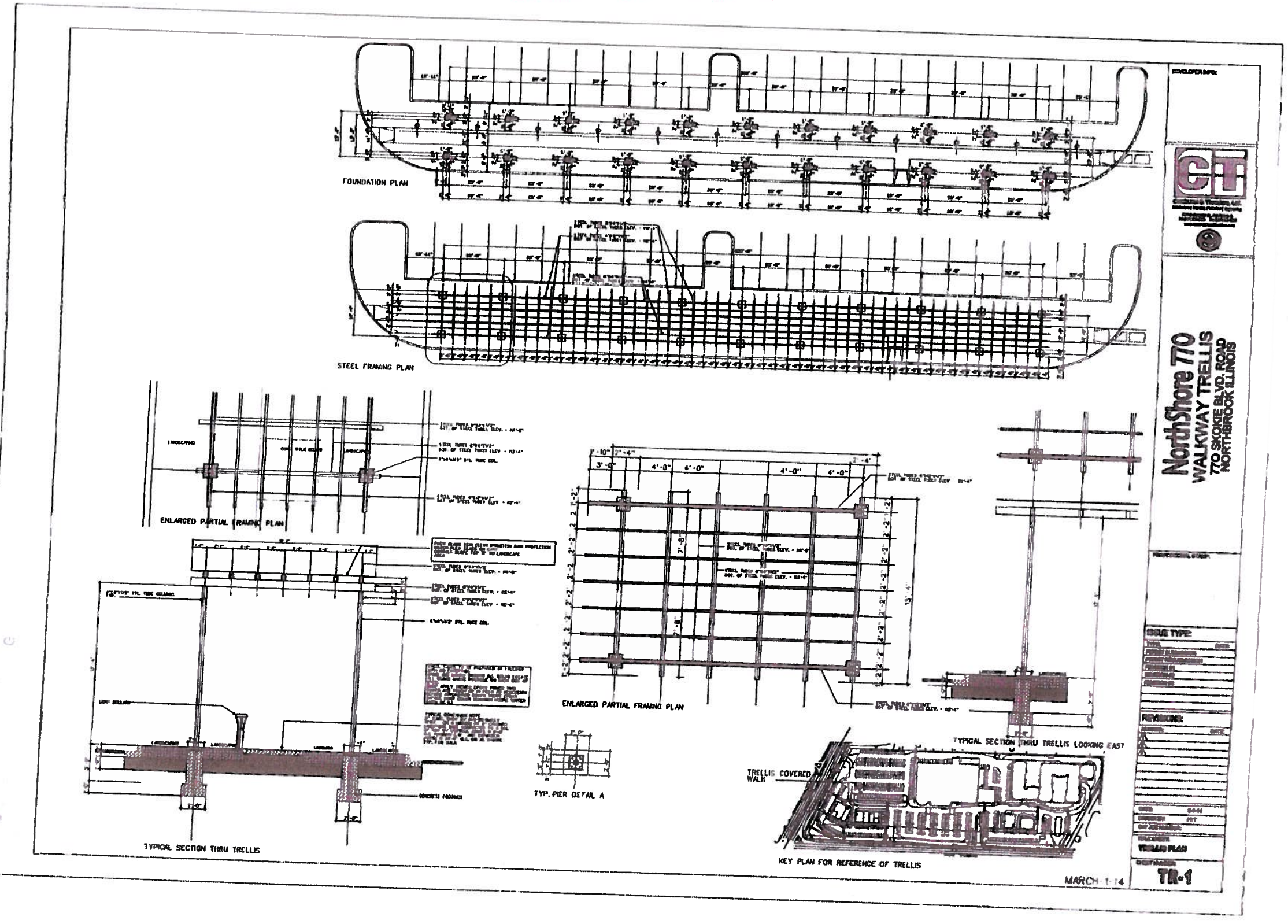
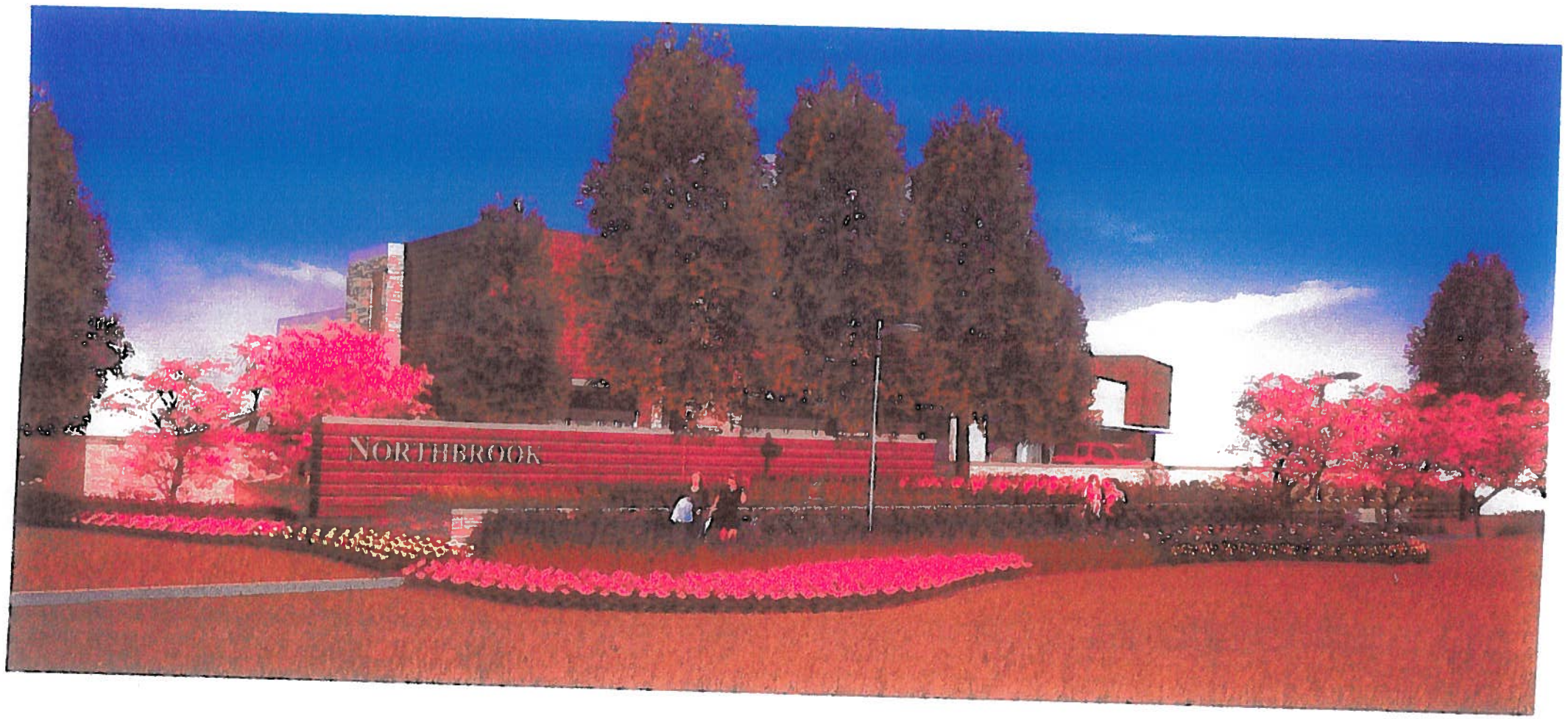


EXHIBIT B - Final Plans



MAR 26 2014

EXHIBIT B - Final Plans



Gateway Signage - View A

Northshore 770
Northbrook, Illinois

43 South Vail Avenue
Arlington Heights, Illinois 60005
Job No 12022 ©2014
March 20, 2014 HKM ARCHITECTS + PLANNERS, INC.

EXHIBIT B - Final Plans



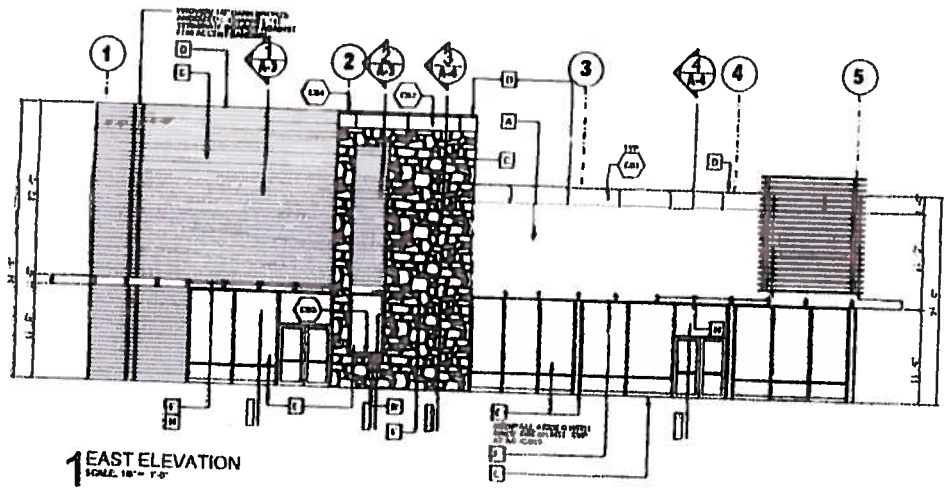
Gateway Signage - View B

Northshore 770
Northbrook, Illinois

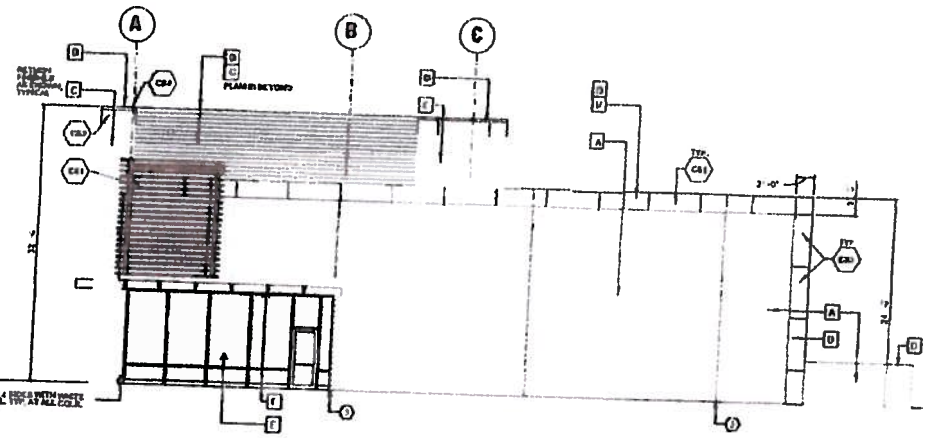
43 South Vail Avenue
Arlington Heights Illinois 60005
Job No 12022 ©2014

March 20, 2014 HKM ARCHITECTS + PLANNERS SC

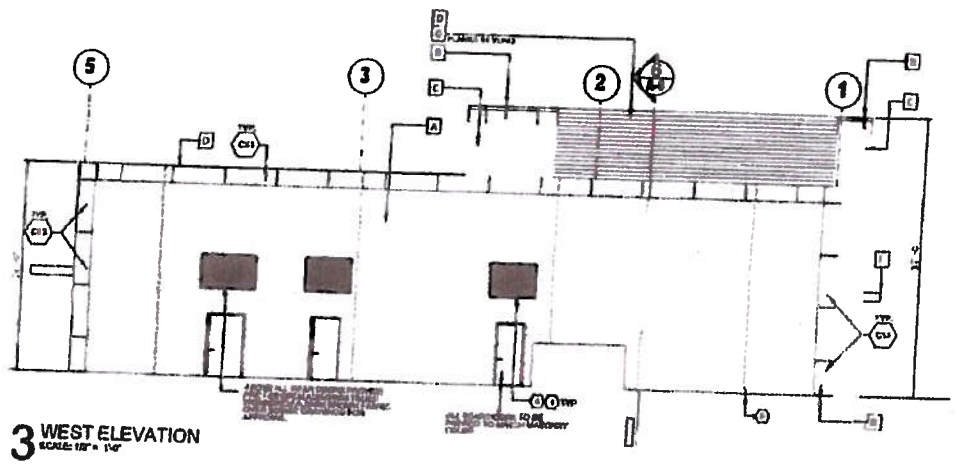
EXHIBIT B - Final Plans



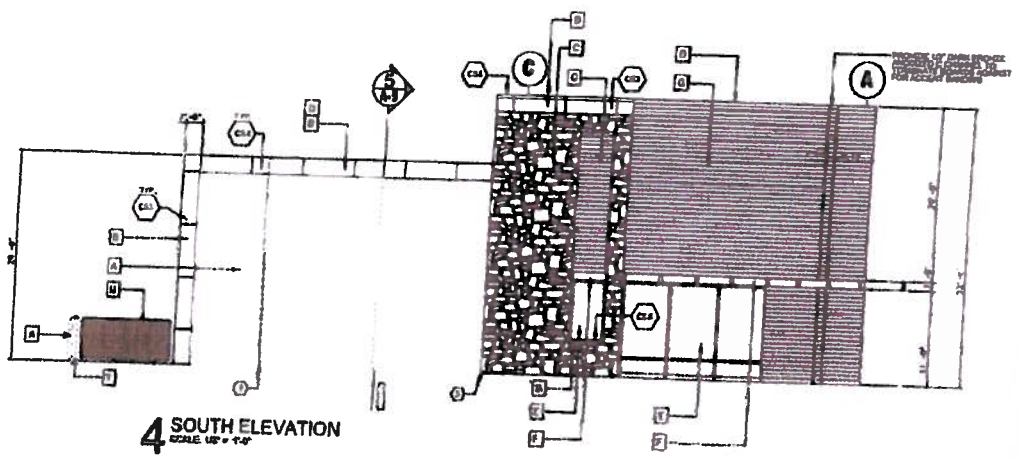
1 EAST ELEVATION



2 NORTH ELEVATION



3 WEST ELEVATION



4 SOUTH ELEVATION

FINISH NOTES

GENERAL NOTES

KEYED NOTES

CAST STONE SHAPES

PENETRATION ENVELOPE REQUIREMENTS

DEVELOPER BY/O
CROSSROADS
MORNINGSIDE

Architects & Planners, Ltd.

NorthShore 770

RETAIL BUILDING A
770 SKOKIE BLVD. ROAD
NORTHBROOK ILLINOIS

PROFESSIONAL STAMP

ISSUE TYPE:

TYPE	DATE
LA ESSONNE	2-7-14
BOD INCREASE (FINAL)	2-18-14
PERMIT SUBMISSION	2-17-14
ARCH REVIEW SUB.	3-4-14

REVISIONS:

NUMBER	DATE
1	
2	
3	

DATE 2-17-14
DRAWN BY PTT
CAD SUB NUMBER

SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER
A-2

VILLAGE OF NORTHBROOK
DEPARTMENT OF DEVELOPMENT & PLANNING
MAR 26 2014

VILLA OF O

OK

MAR 26 2014

D E V E L O P M E N T

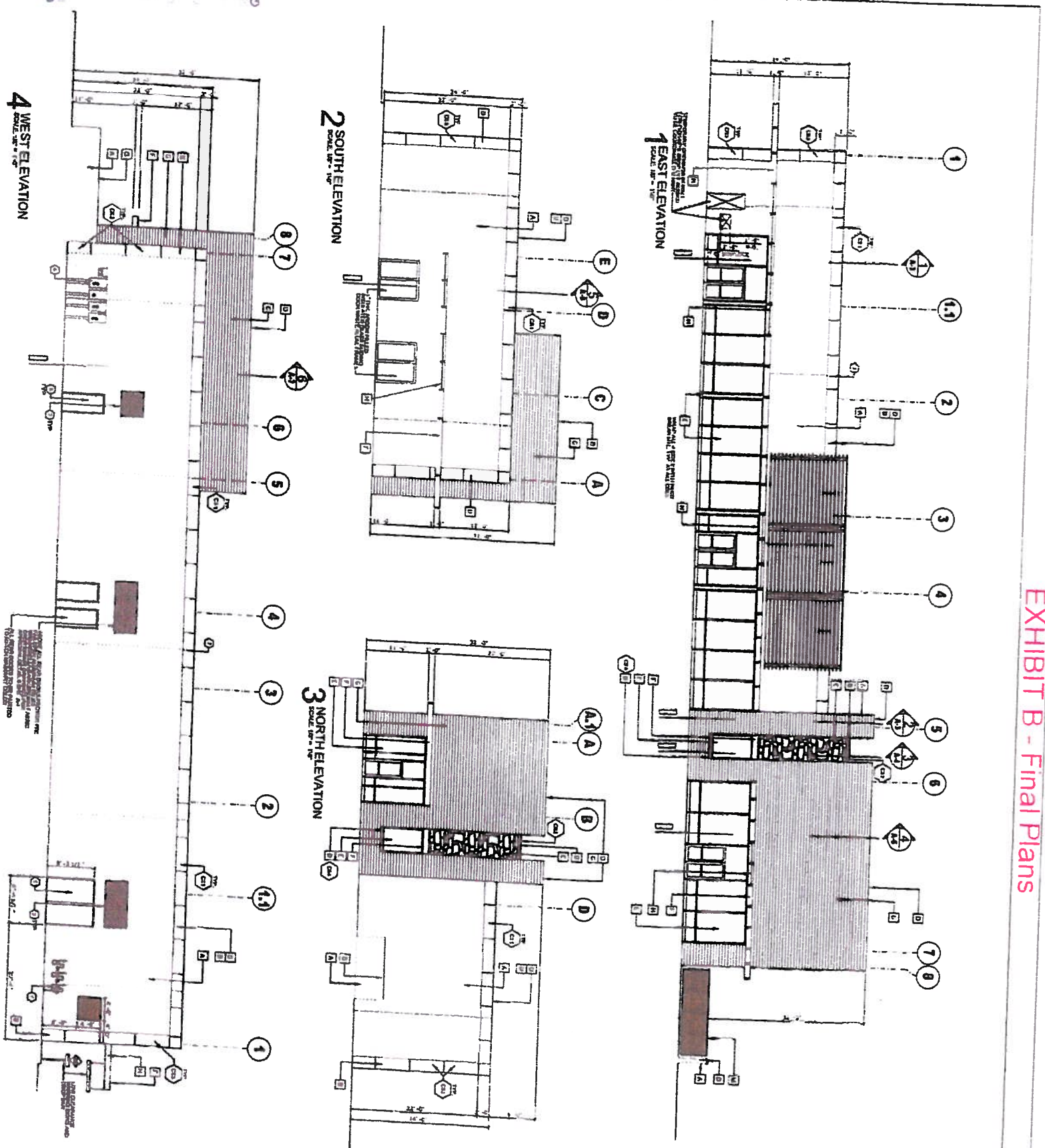


EXHIBIT B - Final Plans

GENERAL NOTES

KEYED NOTES

FINISH NOTES

CAST STONE SHAPES

REVISIONS

ISSUE TYPE:

PROFESSIONAL STAMP

NorthShore 770

RETAIL BUILDING B

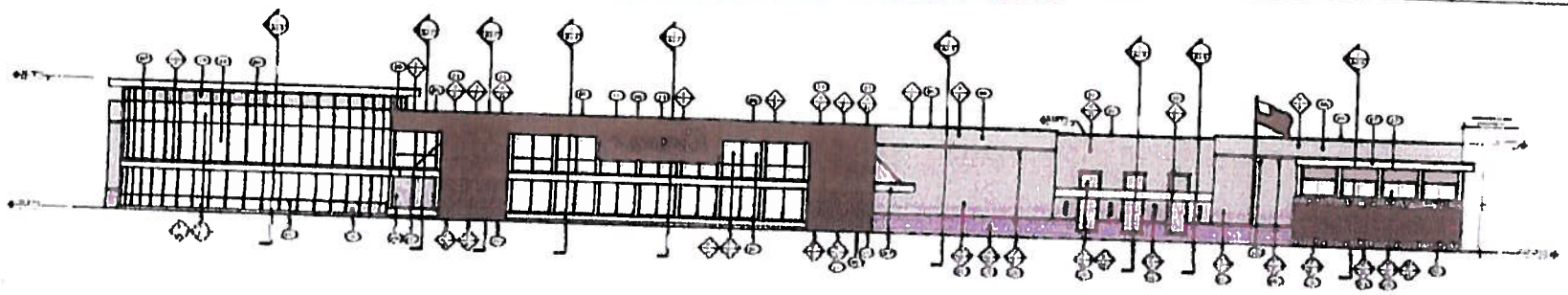
770 SKOKIE BLVD. ROAD
NORTHBROOK ILLINOIS

DEVELOPMENT

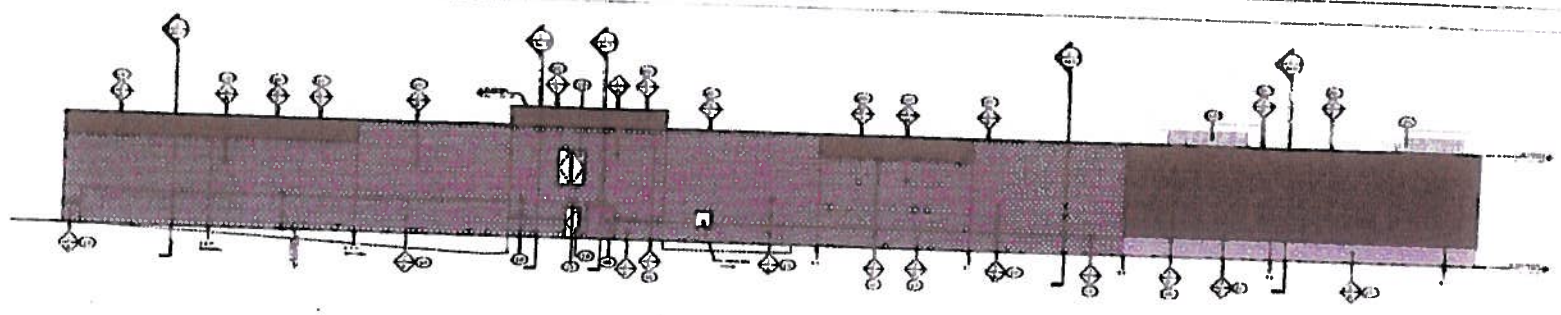
EXTERIOR ELEVATIONS

A-2

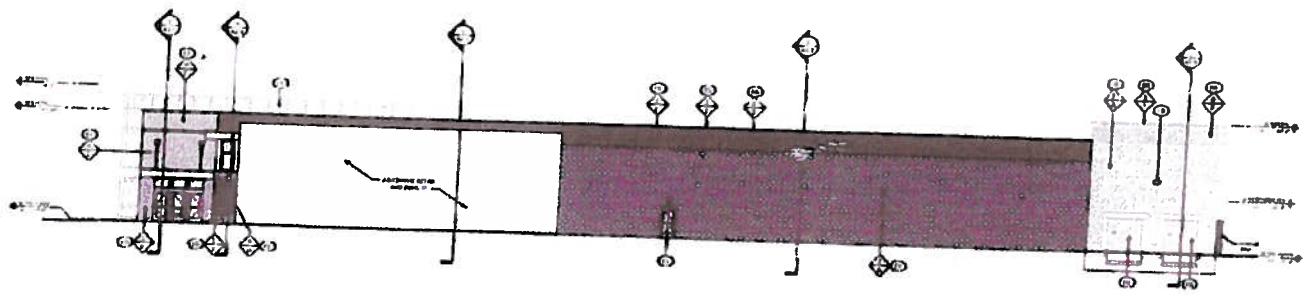
EXHIBIT B - Final Plans



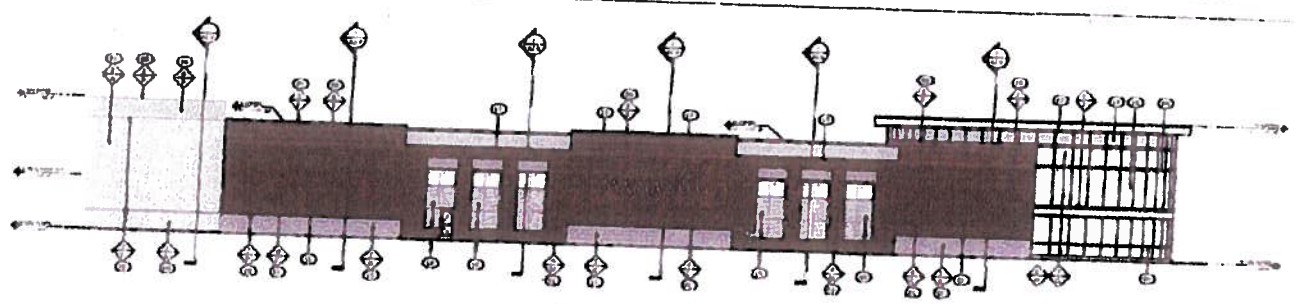
1 EAST ELEVATION (FRONT)



2 WEST ELEVATION (REAR)



3 NORTH ELEVATION (LEFT SIDE)



4 SOUTH ELEVATION (RIGHT SIDE)

ELEVATION KEY NOTES

MATERIAL AND COLOR SCHEDULE

CAMBURAS & THEODORE
2554 S. Clearbrook Dr. Ste 202
Arlington Heights, IL
847-253-2100
847-253-2122

CT

ROUNDY'S
MARIANO'S
SKOKIE BLVD. & DUNDEE ROAD
NORTHBROOK, ILLINOIS 60062

1793

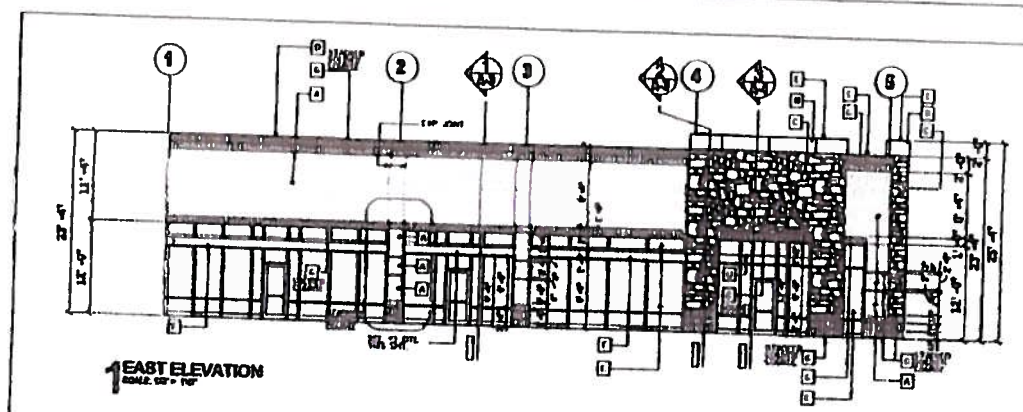
EXTERIOR ELEVATIONS

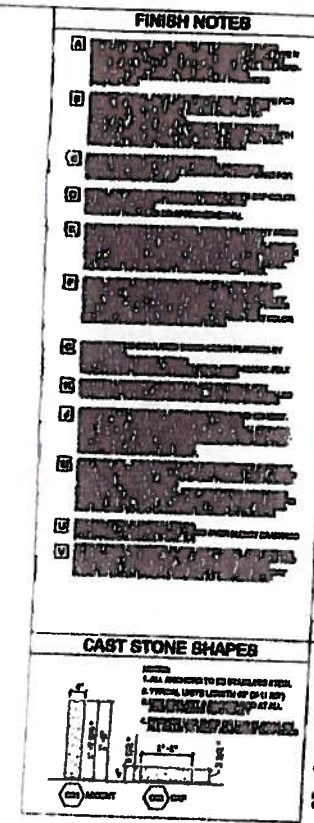
A2.0

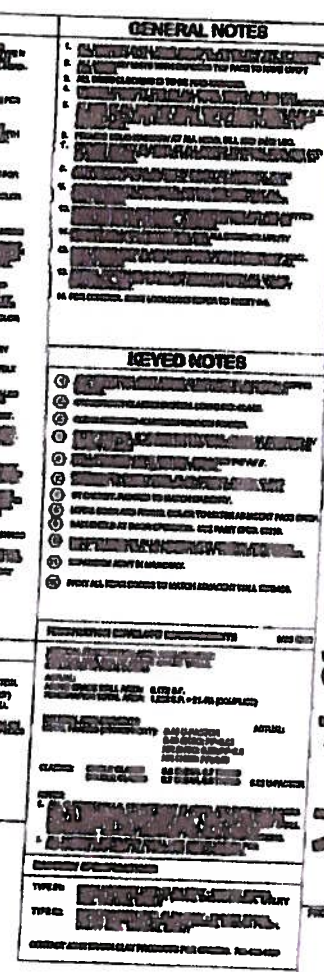
V K G D

MAR 26 2014

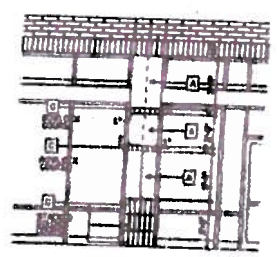
EXHIBIT B - Final Plans











Feb.1-14

MAR 26 2014

EXHIBIT B - Final Plans

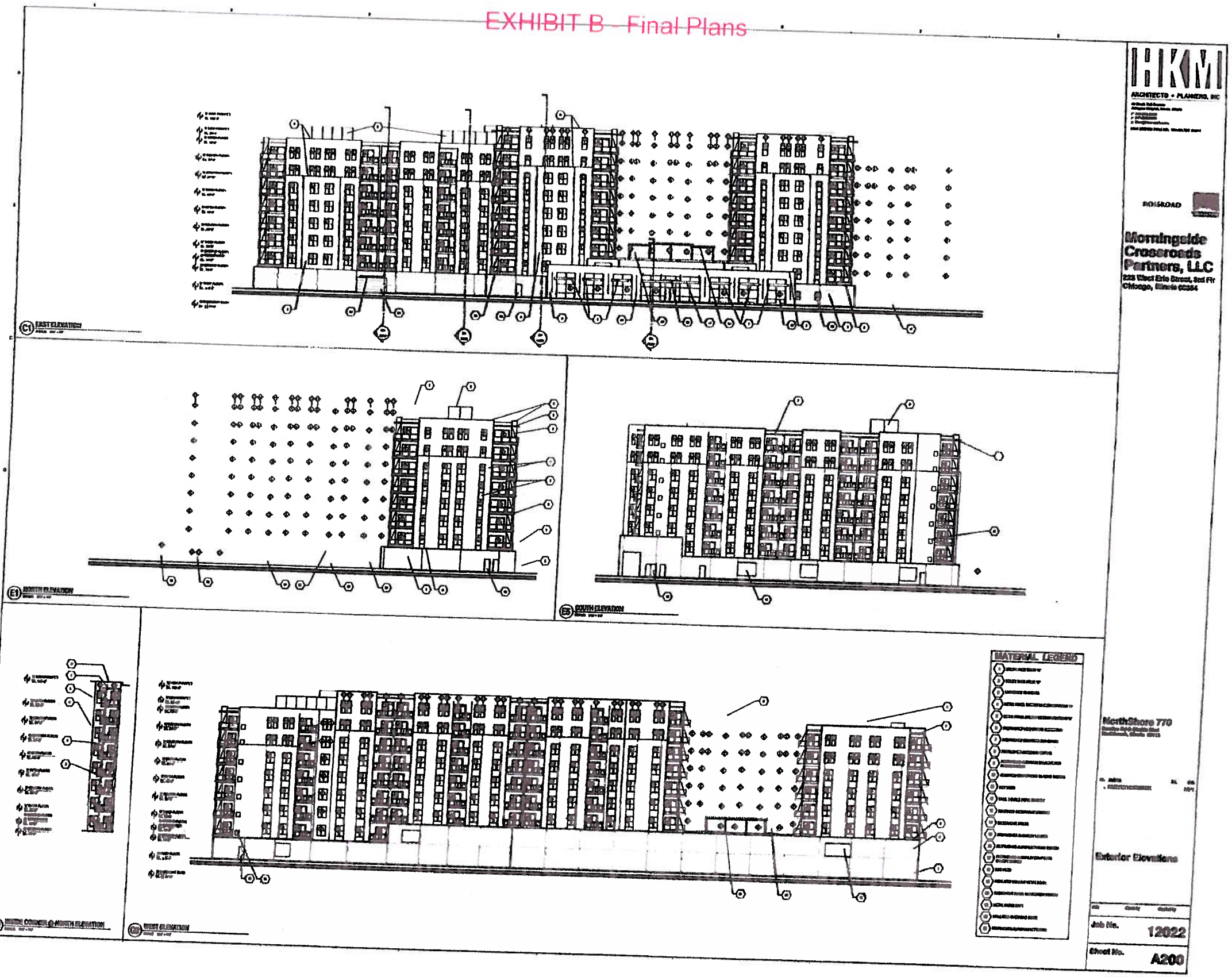
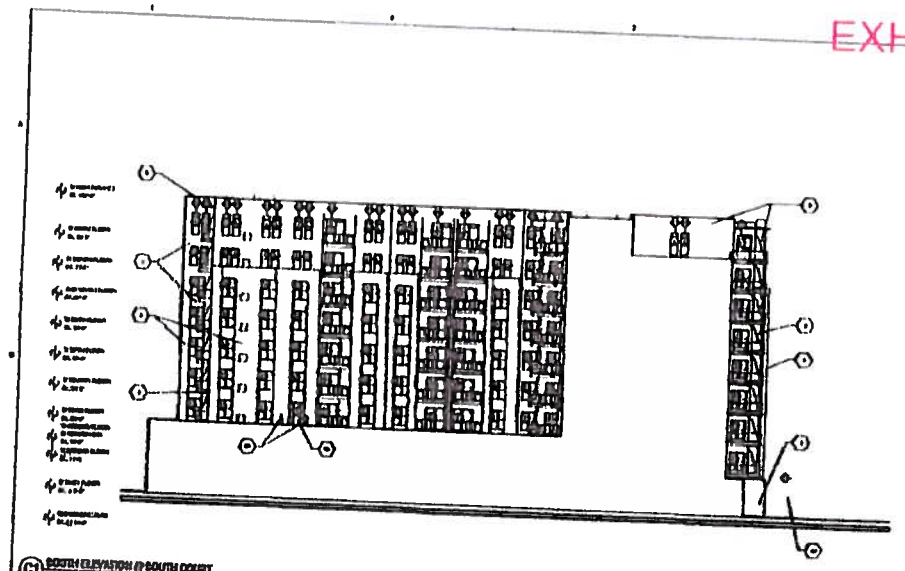
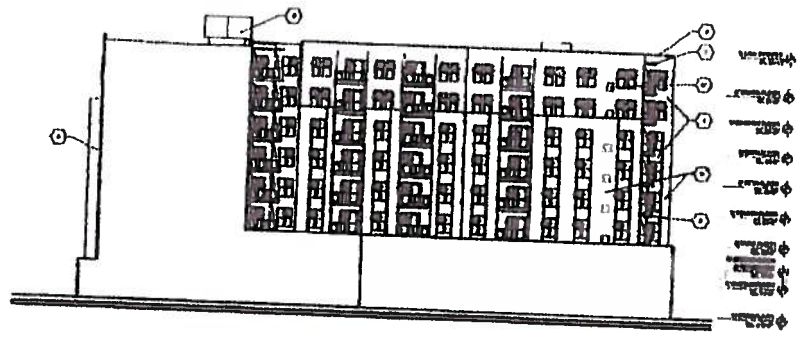


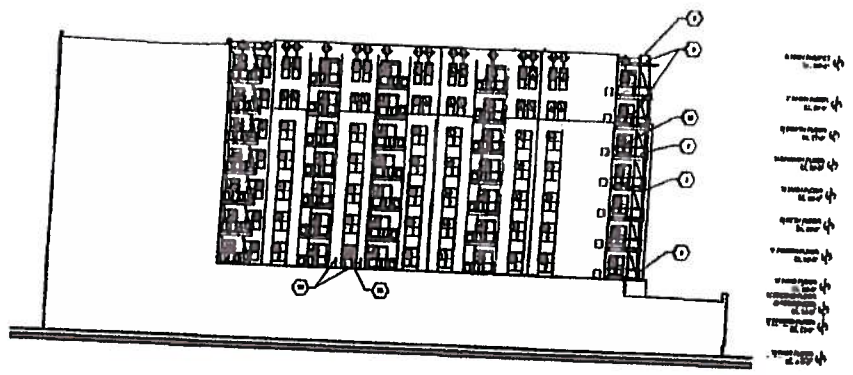
EXHIBIT B - Final Plans



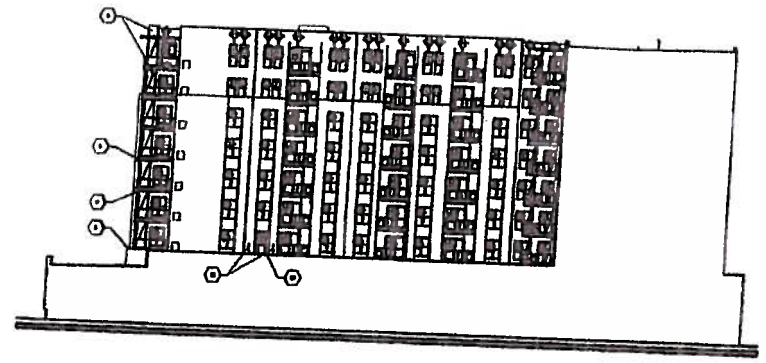
C1 SOUTH ELEVATION @ SOUTH COURT



C2 SOUTH ELEVATION @ SOUTH COURT

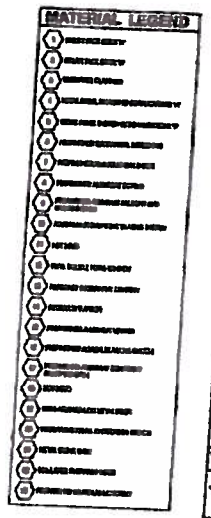


E1 SOUTH ELEVATION @ NORTH COURT



E2 NORTH ELEVATION @ NORTH COURT

MATERIAL LEGEND



HKM
ARCHITECTS + PLANNERS, INC.

CROSSROADS

Morningside Crossroads Partners, LLC
233 West Erie Street, 3rd Flr
Chicago, Illinois 60654

NorthShore 770

Exterior Elevations

Job No. 12022

Sheet No. A201

northbrook

DEVELOPMENT & PLANNING SERVICES DEPARTMENT

FORMAL APPLICATION – ZONING & SUBDIVISION RELIEF**

Prior to submitting this formal application, contact the Development & Planning Services Department of Northbrook to determine if your application requires a Preliminary Review by the Board of Trustees. The following materials are the minimum required for the processing of a formal application by the Village of Northbrook's Plan Commission and Board of Trustees. A public hearing or public meeting for an application will not be scheduled until all required materials have been submitted and revised as necessary to meet Code requirements, as determined by Village staff. If you have questions regarding the completion of this application please contact the Development & Planning Services Department at 847-664-4050.

***Applications for zoning relief from the Zoning Board of Appeals must use a different application form.**

The initial submittal MUST contain:

☒ **1 electronic version (PDF)** of ALL application materials **(refer to application section regarding instructions for naming files).**

Applicant Information

Legal Name Roundy's Supermarkets, Inc.

Company Roundy's

Address 875 E Wisconsin Ave

City, State, Zip Milwaukee WI 53208

[redacted]

Primary Contact Person

Name Brieanna Ramsey

Company Roundy's

Address 875 E Wisconsin Ave

City, State, Zip Milwaukee WI 53208

[redacted]

Consultants *(as applicable)*

Attorney

Name

Company

Address

City, State, Zip

Phone No.

Email

Architect/Planner

Name Brian Sheridan

Company Galloway, Inc.

Address 5500 Greenwood Plaza Blvd, Suite 200

City, State, Zip Greenwood Village, CO 80111

[redacted]

Civil Engineer

Name Timothy B. Kratz

Company SEVAN ENGINEERING, PC

Address 3025 Highland Pkwy., Ste. 850

City, State, Zip Downers Grove, IL 60515

[redacted]

Other

Name

Company

Address

City, State, Zip

Phone No.

Email

Property Information *(if more than one parcel is involved in the request please include the information for all parcels)*

Site Location/Address: 784 Skokie Blvd.

Property Index Numbers: 04024220100000

Size of Property: 268,723 SF (square feet/acres)

Size of Building Space, if applicable: 239 (square feet)

Comprehensive Plan Land Use Designation[1]:

Current Zoning: O4 Boulevard Office District

Current Use of the Property: Mixed Use Retail/Restaurant/Grocery

Is any portion of the property within the 100-year floodplain?[1] Yes: _____ No: X

Requested Action(s) *(check all that are applicable)*

- ☐ Comprehensive Plan Amendment
- ☐ Annexation (*separate form required*)
- ☐ Rezoning from _____ to _____
- ☒ Special Permit for fuel center
- ☐ Renewal of Special Permit Ord. No. _____
- ☐ Amendment to Existing Special Permit
  Ord. No. _____
- ☒ Site Plan Approval
- ☐ Zoning Code Text Amendment
- ☐ Zoning Variation (in conjunction with other relief) for _____
- ☐ Planned Development
- ☐ Subdivision - Tentative Plat
- ☐ Subdivision - Final Plat
- ☐ Subdivision - Variations/Waiver for _____
- ☐ Exception for _____
- ☐ Other _____

☒ **Plat of Survey & Parcel Legal Description(s)**

Attach the most recent plat of survey of the Subject Property, certified by a registered land surveyor, showing existing lot lines and dimensions, lot area, all easements, all public and private rights-of-way, and all streets across and adjacent to the subject property.

☒ **Conformity with Comprehensive Plan**

Include a written statement explaining the conformity, or lack of conformity, of the approval being requested to the Village's Official Comprehensive Plan and Official Map. Where the approval being requested does not conform to the Official Comprehensive Plan or Official Map, provide reasons justifying the requested approval.

☒ **Surrounding Property Owners Addresses**

Please attach the names and mailing addresses of all property owners of record (not tenants) within 250 feet of the property, excluding public rights-of-way, based on current County tax records. See page 9 of this document for instructions on how to obtain the addresses.

[1] As found on the Village website www.northbrook.il.us/Government/Departments/Planning/GIS/index.php

SITE OWNERSHIP AND CONTROL

Current Property Owner Information

Legal Name: Menard Inc

Primary Contact: Tim Enyeart

Address 5101 Menard Drive

City, State, Zip Eau Claire, WI, 54703

[redacted]

Proposed Property Owner Information

Legal Name: _____

Primary Contact: _____

Address _____

City, State, Zip _____

Phone No. _____

Email _____

Attach a copy of a title policy or deed showing current ownership of the property. If property is held in a trust, also include a certified copy of the trust agreement or a simple affidavit (under oath before a notary) as to who are the beneficiaries of the trust. *(Check which document(s) are attached):*

- ☐ Deed
- ☐ Title Policy or Title Commitment ***(Required for Subdivision Applications & Plats of Consolidation Applications)***
- ☐ Certified Copy of Trust Agreement OR a simple Affidavit Identifying Trust Beneficiaries

☒ **Complete Attachment A, listing all individuals/entities that have a beneficial interest in the legal entity that currently owns the property**

☒ **Complete Attachment B, listing all individuals/entities that have a beneficial interest in the legal entity that is proposed to own the property upon receiving necessary approvals.**

Applicants Involvement with the Property

If the Applicant does not own the property, please also provide documentation showing the applicant's interest in the property *(Check which document is attached. The dollar amounts in documents may be blacked-out)*:

- ☐ Owner (see the previous box)
- ☐ Real Estate Contract
- ☒ Lease
- ☐ Other _____

☐ **Complete Attachment C, listing all individuals/entities that have a beneficial interest in the legal entity that is the Applicant.**

Additional Required Attachment(s)

Submit all relevant attachments specified in the below worksheet(s) that correspond with your application request(s) selected on page two of this application; the worksheets can be found on the Village of Northbrook website www.northbrook.il.us. *(Check all that are applicable)*

- ☐ Comprehensive Plan Amendment Worksheet
- ☐ Annexation Worksheet
- ☐ Rezoning Worksheet
- ☒ Special Permit Worksheet
- ☒ Site Plan Approval Worksheet
- ☐ Zoning Code Text Amendment Worksheet
- ☐ Zoning Variation Worksheet
- ☐ Planned Development Worksheet
- ☐ Subdivision Worksheet – Tentative Plat
- ☐ Subdivision Worksheet - Final Plat
- ☐ Subdivision Worksheet - Variations/Waiver
- ☐ Plat of Consolidation Worksheet

Filing Fees

All applications require payment of a non-refundable fee, as well as additional funds that are held in escrow to off-set anticipated recoverable expenses. Please attach a check with your application and indicate below the amount of the fee submitted. A copy of the fee schedule is attached to the application form.

$ 500 Amount of Non-Refundable Fee

$ 6500 Amount of Escrow

$ 7000 Total Application Fee (Non-Refundable Fee plus Escrow)

The escrow covers such items as Village attorney time (currently billing at approx. $400.00 per hour), public notice expenses, public meetings ($50.00 per mtg), & staff review time. If these expenses exceed the initial escrow deposit, the applicant is responsible for additional payment to the Village prior to completing approval process. If the expenses are less than the escrow deposit, the applicant will be issued a refund.

Northbrook Ethics Code *(potential conflicts of interest)*
On a separate sheet of paper list the name, address, nature, and extent of any current or potential interest that any Village officer or employee may have in, or with respect to the owner, the applicant, or the property. **If none, check here:** X

Repeat Application

Has any other application for this property been submitted to the Village and denied within the last two years?
____ yes _X_ no (check one)
If yes, attach a statement of the grounds justifying reconsideration.

Applicant/Owner Acknowledgments

By execution of this application in the space provided below, the Applicant and Owner(s) do hereby certify, acknowledge, agree and affirm to the Village of Northbrook that:

1. The Village and its representatives have the right, and are hereby granted permission and license, to enter upon the property, and into any structures located thereon, for purposes of conducting any inspections that may be necessary in connection with this application.

2. I (We) have carefully read this application, the Northbrook Zoning Code and Northbrook Subdivision & Development Code and fully understand the terms and provisions of each.

3. I (We) waive any rights to exemption from disclosure under the Illinois Freedom of Information Act of any and all documents and information submitted in connection with this application.

4. I (We), in accordance with the requirements of the Annual Fee Ordinance, the Northbrook Zoning Code and the Northbrook Subdivision & Development Code, agree to pay all applicable filing fees and be responsible for the payment of all reimbursable expenses associated with the processing of this application.

Applicants may attach additional materials or exhibits to this application if necessary or helpful in explaining the relief requested.

Signature of Applicant: Brieanna Ramsey Date 11/6/25
Print Name & Title: Brieanna Ramsey // Sr. Asset Manager
Signatures of Property Owner(s): Date 11/7/25
Print Name & Title: Theron J. Berg, GM Properties **Property Address:**
****If more than one applicant or property owner, please copy this page and have additional applicants/property owners sign form.**

Note: Village review and approval of rezoning, special permit, and subdivision applications may be dependent upon the Applicant first receiving necessary approvals from State and County regulatory agencies such as, but not limited to, the Illinois Department of Transportation, Illinois Environmental Protection Agency, the Metropolitan Water Reclamation District of Greater Chicago, & the Cook County Highway Department.

ATTACHMENT B - Proposed Property Owner (if applicable) – Beneficial Interest

Please check which of the following describes the proposed property owner's beneficial interest in the property and complete this sheet as instructed for each type of beneficial interest:

☒ Corporation	If the **proposed property owner** is a corporation, please list the name and addresses of all officers and directors of the corporation and all shareholders who own individually or beneficially 5% or more of the stock of the corporation. In addition, this application must be accompanied by a resolution of the corporation authorizing the execution and submittal of this application.
☐ Partnership or LLC	If **proposed property owner** is a partnership or an LLC, please list all partners, general and/or limited, with an individual or beneficial interest of 5% or greater.
☐ Trust	If **proposed property owner** is a trust, please provide the trust number _____ and name and address of the Trustee _____, as well as list below the names and address of all beneficiaries of the Trust, together with their respective interests in the trust. The application shall be further verified by the **proposed property owner** in his capacity as trustee or by the beneficiary as a beneficial owner of an interest in the Trust and the application shall be signed individually by as many beneficiaries as are necessary to constitute greater than 50% ownership of the beneficial interest of the Trust

Name: John R. Menard Jr.

Address: 5101 Menard Dr. Eau Claire, WI 54703

Ownership or Trust Interest: >5 %

Name: _____

Address: _____

Ownership or Trust Interest: _____ %

Name: _____

Address: _____

Ownership or Trust Interest: _____ %

Name: _____

Address: _____

Ownership or Trust Interest: _____ %

Name: _____

Address: _____

Ownership or Trust Interest: _____ %

Name: _____

Address: _____

Ownership or Trust Interest: _____ %

ATTACHMENT B - Proposed Property Owner (if applicable) – Beneficial Interest

Please check which of the following describes the proposed property owner's beneficial interest in the property and complete this sheet as instructed for each type of beneficial interest:

☒ Corporation	If the **proposed property owner** is a corporation, please list the name and addresses of all officers and directors of the corporation and all shareholders who own individually or beneficially 5% or more of the stock of the corporation. In addition, this application must be accompanied by a resolution of the corporation authorizing the execution and submittal of this application.
☐ Partnership or LLC	If **proposed property owner** is a partnership or an LLC, please list all partners, general and/or limited, with an individual or beneficial interest of 5% or greater.
☐ Trust	If **proposed property owner** is a trust, please provide the trust number _____ and name and address of the Trustee _____ _____, as well as list below the names and address of all beneficiaries of the Trust, together with their respective interests in the trust. The application shall be further verified by the **proposed property owner** in his capacity as trustee or by the beneficiary as a beneficial owner of an interest in the Trust and the application shall be signed individually by as many beneficiaries as are necessary to constitute greater than 50% ownership of the beneficial interest of the Trust

Name: Roundy's Supermarket, Inc.
Address: 875 E. Wisconsin Ave.
Milwaukee, WI 53208
Ownership or Trust Interest: 100 %

Name: _____
Address: _____
Ownership or Trust Interest: _____ %

Name: _____
Address: _____
Ownership or Trust Interest: _____ %

Name: _____
Address: _____
Ownership or Trust Interest: _____ %

Name: _____
Address: _____
Ownership or Trust Interest: _____ %

Name: _____
Address: _____
Ownership or Trust Interest: _____ %

ATTACHMENT C - Applicant – Beneficial Interest

Please check which of the following describes the beneficial interest in the legal entity that is the applicant and complete this sheet as instructed for each type of beneficial interest:

❑ Corporation	If **applicant** is a corporation, please list the name and addresses of all officers and directors of the corporation and all shareholders who own individually or beneficially 5% or more of the stock of the corporation. In addition, this application must be accompanied by a resolution of the corporation authorizing the execution and submittal of this application.
❑ Partnership or LLC	If **applicant** is a partnership or an LLC, please list all partners, general and/or limited, with an individual or beneficial interest of 5% or greater.
❑ Trust	If the **applicant** is a trust, please provide the trust number _____ and name and address of the Trustee _____ _____, as well as list below the names and address of all beneficiaries of the Trust, together with their respective interests in the trust. The application shall be further verified by the **applicant** in his capacity as trustee or by the beneficiary as a beneficial owner of an interest in the Trust and the application shall be signed individually by as many beneficiaries as are necessary to constitute greater than 50% ownership of the beneficial interest of the Trust

Name: _____

_____

Address: _____

_____

Ownership or Trust Interest: _____%

Name: _____

_____

Address: _____

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Ownership or Trust Interest: _____%

Name: _____

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Address: _____

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Ownership or Trust Interest: _____%

Name: _____

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Address: _____

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Ownership or Trust Interest: _____%

Name: _____

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Address: _____

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Ownership or Trust Interest: _____%

Name: _____

_____

Address: _____

_____

Ownership or Trust Interest: _____%

Written Explanation of Application

To	From
Village of Northbrook Planning and Zoning Dept. 1225 Cedar Lane Northbrook, IL 60062	Joseph Bermudez, Senior Project Manager Sevan Multi-Site Solutions 3025 Highland Parkway | Suite: 850 Downers Grove, IL 60515
Re:	**Date**
Written Explanation of Application Mariano's Fuel Center 784 Skokie Blvd. Northbrook, IL 60062	1/22/2026

Dear Village of Northbrook Planning Staff,

Sevan Multi-Site Solutions, on behalf of the applicant, Roundy's Supermarkets Inc., is submitting the attached documents to be presented to the Plan Commission for recommendation to the Village Board for approval of our Site Plan and amend the Planned Development for Fuel Sales Use. The documents detail the request for a proposed Mariano's retail fuel center consisting of five (5) multi-product fuel dispensers, one (1) fuel canopy, and transaction kiosk in the parking lot located south of the Mariano's grocery store located at 784 Skokie Blvd. within the 770 Northshore Shopping Center.

Property:
The Northshore 770 property is zoned O4, Boulevard Office, which permits Fuel Sales use. This shopping center is anchored by Mariano's Grocery store which has 4 tenant spaces on the Northside of the building which includes Kriser's Natural Pet (retail), Hair Cuttery (retail service), Fuddruckers (Restaurant) and one (1) vacant space. Surrounding the anchor tenant building are Panera Bread, PNC Bank, a three commercial tenant building and four tenant commercial building which house a variety of retail, service retail, and fast casual restaurants.

Project Background:
Mariano's is a brand of Roundy's Supermarkets Inc. who is a subsidiary of The Kroger Co. The Kroger Co. owns and operates approximately 1,500 retail fuel centers in combination with their grocery stores across the country in 37 states. The fuel program is designed to be a benefit to existing customers by providing loyalty discounts and one-stop convenience. The proposed retail fuel center is a category extension of the existing grocery operations and will be managed and staffed by well-trained grocery store employees (typically one employee per shift).

Site Plan:
The fuel center is scheduled to be built within an approximately 10,900 S.F. section of the underutilized southern parking lot of Mariano's removing 85 parking stalls. The PUD requires 480 parking stalls and currently offers 563, the removal of these parking stalls would still allow the PUD to comply with the parking requirement. Mariano's utilized 355 of these parking stalls, the subtraction would result in 270 parking spaces for Mariano's.

We hired Colliers Engineering and Design to conduct a parking analysis where parking counts were observed on weekdays and weekends during peak and nonpeak hours. This study concluded that the Mariano's at

peak hours utilizes 196 stalls on a weekday and 182 stalls at peak hours on weekend day. This allows us to remain over 70 stalls over the parking demand that the Mariano's grocery store with the development of the Fuel Center.

The site plan also includes restructuring of 6 parking lot islands to accommodate proper separation of the Fuel Center from the parking lot and shared access drive of the property. This is a minimal net loss of green space that does not alter the character of the landscape plan.

Traffic:
A traffic impact study was conducted by Colliers Engineering and Design which concluded the fuel center trip generation would operate near or at the same level in the future as if it was not built. Traffic within the site will not be affected as the fuel center stacking, fuel delivery, and consumer traffic will be contained within the Mariano's parking area being scheduled for development.

Utilities/Stormwater:
Power and communication services will be bored to the store where they will feed from existing systems. The sanitary lead will tie into a manhole north of the proposed kiosk location. The water service lead will tie into the existing Mariano's water lead West of the proposed Kiosk building which runs along the west property line and serves Mariano's. Existing storm systems will be mostly untouched including the underground detention vault North of the fuel center. All catch basins that receive runoff from the proposed fuel center dispenser pad will have stormwater quality treatment units installed prior to discharge.

A pre-application meeting with Metropolitan Water Reclamation District (MWRD) was held on October 6th which confirmed schedule A, B, & C permits were required for our sanitary connection while stormwater volume control will only be required if we cause more than 1/10th of an acre of impervious surface increase. The development will not increase the impervious area or change drainage patterns. The existing detention and volume control system that currently serves the entire shopping center will remain as is.

The underground petroleum storage tank system is designed, installed, and operated per local, state, and federal guidelines.

Signage:
A combination of Brand and price signage are proposed for the dispensers, canopy and alteration of the existing Mariano's panel on the multi-tenant monument sign to include electronic price reading boards.

Architecture and Building Design Standards:
The kiosk and canopy columns will mimic the existing Mariano's Grocery store masonry details, have two (2) restrooms, and a transition drawer. There is a 145' x 24' canopy for weather protection for the 5 fuel dispensers which creates locations for 10 vehicles to be fueled.

Operations:
The fuel center will operate 24 hours with credit card purchases while the kiosk will operate at the same hours as the Mariano's Grocery Store (6am-10pm, 7 days a week) and will have 2-3 employees. There will

be an outdoor sales area which includes beverage coolers, merchandisers containing: firewood, empty gas cans, windshield washing solvent, rock salt, etc. Customer's transactions will be handled directly at the pump via credit/debit cards or they may walk up to the transaction kiosk where they will be able to make purchases through a transition window. The kiosk will house two restrooms, one being an employee only restroom access from the employee area and a unisex restroom for customers to access from outside the kiosk.

Mariano's customers have come to expect the convenience of being able to redeem their earned fuel points for reduced fuel prices with grocery shopping trips. A significant portion of the sales at Mariano's fuel center are typically associated with a grocery shopping trip, hence a tremendous portion of those using the fuel center will be Mariano's shoppers already in the parking area. Additional fuel customers, as with any fuel center, will come from "pass by" trips already on Skokie Blvd., so there will be a negligible increase in traffic as concluded in our traffic impact study.

Sincerely,

Joseph Bermudez | Senior Project Manager
[redacted]
www.sevansolutions.com
Elmwood Park, IL 60707
INTEGRITY | RESPECT | TEAMWORK | EXCELLENCE | CHARITY

784 Skokie Boulevard – Mariano's Gas Station (PCD-25-18)

Fuel Sales.

a. ***Location***. Fuel pump canopies shall be located a minimum of 100 feet from any interior side or rear property line that adjoins residentially developed property.

Response: There are no neighboring residential properties, so this item is satisfied by current setback of canopy from West and South property lines.

b. ***Height***. Fuel pump canopy height shall not exceed the height of the principal building or 15 feet, whichever is greater.

Response: The principal building is Mariano's grocery store which is approximately 50' +/- 3' which is significantly greater than the 19' height from grade of the fuel center canopy.

c. ***Materials***. Fuel pump canopy roofs shall be steel construction. Plastic and similar materials are prohibited.

Response: The fuel pump canopy roof is steel structural construction with sheet metal fascia.

d. ***Lighting***. Fuel pump canopy lighting shall be fully recessed.

Response: Fuel pump canopy lighting fixtures have been reviewed and approved by Village of Northbrook planning staff which are the recessed model for Mariano's Fuel Canopies.

Sustainability Addendum

To	From
Village of Northbrook Sustainability Coordinator 1225 Cedar Lane Northbrook, IL 60062	Joseph Bermudez, Senior Project Manager Sevan Multi-Site Solutions 3025 Highland Parkway | Suite: 850 Downers Grove, IL 60515
Re:	**Date**
Sustainability Addendum Mariano's Fuel Center 784 Skokie Blvd. Northbrook, IL 60062	11/24/2025

Dear Members of the Planning Staff, Planning Commission, and Village Board,

Our project was reviewed by the Sustainability Coordinator, Kate Carney, which through the Village of Northbrook's Climate Action Plan (CAP) mission to reduce carbon emissions, our project was provided a series of action items to consider which are listed below with our responses.

Transportation and Land Use
In the Transportation and Land Use section of the CAP, recommendations are made to enhance active mobility and fossil fuel-free transit:

TL 5- 8 Consider installing EV charging stations for patron use. If this will not be realized, consider including capabilities for future electric vehicle charging installation. This could include conduit, wiring, electrical service panels, and power capacity near parking areas, terminated in outlets or junction boxes to meet demand for at least 2 EV charging ports.

- This project currently is not considering EV stations as part of this development.

TL 7- 1 The Village has enacted a nine-month ban on gas powered leaf blowers – ensure compliance on site.

- This is noted, the landscaping maintenance is handled by the landlord who should be following the Village ordinance.

Buildings and Energy
The Building Energy section of the CAP provides the following items pertaining to reducing our community-wide carbon footprint and preserving wildlife:

BE 2- 1 Consider incorporating a renewable energy installation to offset emissions generated from the development. Work with CPACE, Illinois Shines, or similar programs for incentives. If installation will not be realized, consider reserving space for a solar-ready roof zone and plan for structural design loads and electrical service to allow for future installation of a dual pole circuit breaker if possible.

- This project currently does not include solar panels but in the instance this was a requirement, the canopy roof could house these as required by code.

BE 2- 2 If the site is suitable, make the canopy solar ready.

- This project currently does not include solar panels but in the instance this was a requirement, the canopy roof could house these as required by code.

BE 4- 1 Consider green power purchase options such as those provided by ComEd and Nicor.

- This building will utilize the existing electrical service provided to the Mariano's grocery store and will not be utilizing natural gas.

BE 5- 1 Explore opportunities for the property to utilize smart lights that can save energy through conservation. Achieve 100% LED installation if possible.

- This development will utilize all LED light fixtures.

BE 5- 4 Require purchase and installation of ENERGY STAR appliances when available.

- This development will utilize the latest energy efficient appliances as it applies to coolers and roof top units (RTUs) for the kiosk.

BE 7- 2 Consider the benefits of replacing fossil fuel burning heating equipment with air-source heat-pumps, or other efficient electric heating options.

- The kiosk building is scheduled to utilize an electric heater.

Waste Management

The CAP points to procedures that may facilitate waste reduction (with a goal of at least 50% landfill wasted diverted by 2030) in its Waste Management section:

WM 1- 1 Consider phasing out single-use products. This would apply to (but not limited to) bags (both paper and plastic), utensils, napkins, and take-out containers.

- This operation will include only the use of single use grocery bags for customers who request them when making purchases at the kiosk building.

WM 2- 5 Assure compliance with the Cook County Construction & Demolition Debris Diversion Ordinance and encourage contractors and subcontractors to exceed minimum requirements where applicable.

- All codes and requirements will be followed during the

Water and Wastewater

In the Water and Wastewater category, the CAP states to prioritize mitigating stormwater before it enters the
sewer system through multiple capture techniques:

WW 1- 1 Consider landscaping practices that reduce water consumption and chemical use on site.

- Existing landscaping practices will not be interrupted as we are doing a minimal net loss of green space with islands being relocated.

WW 2- 1 Prioritize managing stormwater before it enters the sewer system through a combination of overland flow, detention, and infiltration strategies (for example, permeable surfaces) where feasible.

- We are implementing a sand/oil separator at our storm drains to treat water before it enters the

storm system.

WW 2- 3 Consider revegetation, tree preservation planting and maintenance, de-paving and porous pavement, green infrastructure like bioswales and Eco-roofs in site development.

- We are planning to relocate some existing islands but most of the development is within an underutilized paved parking area.

WW 3- 3 Reduce or offset impervious surfaces where possible and consider use of lighter colored pavements and building materials to lessen the impact of urban heat island effect.

- Majority of this area will now be covered by a canopy which will help reduce the heat island effect.

Greenspace and Ecosystem Health

The Plan's Greenspace category includes the following for expansion of tree canopy coverage, transforming beneficial lawns, and mitigation of heat island impacts:

GS 1- 12 Plan for diversity of native tree cover and performance-based tree island within landscaping plan and parking lots with goals on percentage of pavement shaded. Consider a mix of canopy trees, shrubs, groundcovers, and raingarden components appropriate to the lot and its surroundings in any new landscaping where possible.

- Landscaping work planned is to utilize existing species of shrubs within the landscape islands being relocated to wok within the existing greater landscape design plan.

GS 1- 5 Consider including exterior lighting design a policy to protect native plants, species, biodiversity, and improve night sky quality.

- Exterior lighting is being designed within the parameters of the Village lighting ordinance as demonstrated in our photometric plan.

GS 4- 8 Consider utilizing shade and water absorbing trees and replacing turf landscaping with native prairie, wild flower, and savanna plantings.

- This scope will not apply to this development.

Sincerely,

Joseph Bermudez | Senior Project Manager

[redacted]

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Comment Response Letter

February 20, 2026

Recipient: Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Project: Marian's Retail Fuel Center No. 533
784 Skokie Blvd
Northbrook, IL 60062

RE: Response to Comments
PCD-25-18-784 Skokie Boulevard – Mariano's Gas Station

To Swati Pandey,

As Agents for Kroger, the applicant, we respectfully submit the responses below, **in red**, to the comment provided dated February 20, 2026.

Comment Response Below:
DPS COMMENTS:

1. The submittal 2 response letter states that Sheet C1.10 Demolition Plan was added to engineering set but it was not included. Submit Sheet C1.10 with the engineering plan set.
   Response: Sheet C1.10 is NOT included with the planning review set. This sheet will be included in the engineering construction permit set to be submitted at a later date.

2. Site Plan:
   a. Label aisles as 11 spaces since each aisle has lost a space.
   Response: Adjusted aisle labels as noted.

   b. Sheet C1.20: Label the dimension of this end space.
   Response: Added the dimensions of the end parking space as noted.

   c. Sheet C1.20: Is this light pole shown in error?
   Response: Due to the adjustment of the storm drain when adjusting the site for the 10' landscape islands, we had to shift the parking light pole to the location show here to avoid both the storm drain to the left and the detention basin to the north.

TREE COMMENTS:

1. Page 2 is missing from the parking island tree planting detail. Details can be found at https://www.northbrook.il.us/366/Engineering-Standards-Specifications.
   Response: Page 2 was added to sheet L1.21.

2. Please include, on the plans, a table showing proposed soil volumes for the 3 north islands containing trees. Island square footage was provided. The islands should provide adequate soil volume for the proposed tree based on the

tree's size at maturity. Structural soil will be required to provide adequate volume. Provide calculations for needed quantities of structural soil.
Response: A table is provided on sheet L1.20 titled "SOIL VOLUMES" with island square footage and soil volumes. Islands are labeled on the sheet with respective numbers.

3. Above comments can be handled at time of permit submittal. Ok to proceed to plan commission.
Response: Noted.

Regards,

Joseph Bermudez

Senior Project Manager
Sevan Multi-Site Solutions
Agent for The Kroger Co.

Comment Response Letter

February 19, 2026

Recipient: Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Project: Marian's Retail Fuel Center No. 533
784 Skokie Blvd
Northbrook, IL 60062

RE: Response to Comments
PCD-25-18-784 Skokie Boulevard – Mariano's Gas Station

To Swati Pandey,

As Agents for Kroger, the applicant, we respectfully submit the responses below, **in red**, to the comment provided dated December 16, 2025.

Comment Response Below:
DPS COMMENTS:

1. The submittal 2 response letter states that Sheet C1.10 Demolition Plan was added to engineering set but it was not included. Submit Sheet C1.10 with the engineering plan set.
   Response: Sheet C1.10 is included in the engineering plan set.

2. Site Plan:
   a. All new landscape islands should be a minimum of 10 feet width. The parking lot landscape islands must comply with area, design, and landscape material requirements per Section 10-106.F.2.a. Revise and match all plans.
   Response: Islands were adjusted to ensure minimum width of 10 feet. See sheet C1.20 for dimensions regarding the adjusted parking islands.

   b. Confirm if any parking spaces are lost due to expanded landscape islands, and revise the parking plan numbers and adjust for accuracy. Label the landscape islands, parking spaces, and drive aisles.
   Response: An additional 6 spaces were lost to accompany the expanded islands. See sheet C1.03 for adjusted parking site plan numbers.

   c. On the parking site plan – revise the parking numbers in front of Building A, and revise the total.
   Response: The parking numbers were revised in front of building A to ensure proper parking count.

3. Ground Sign - Confirm the following:
   a. Will both existing ground signs (Dundee and Skokie) be redesigned per the sign plan submitted?
   Response: Yes, the existing Mariano's face will be modified in both signs.

   b. Besides the digital display of the price board, is the rest of the sign static?

Response: Correct, the non-digital display half of the sign will be a replicate of what is existing today, just scaled down.

TREE COMMENTS:

1. Page 2 is missing from the parking island tree planting detail. Details can be found at https://www.northbrook.il.us/366/Engineering-Standards-Specifications.
   Response: Page 2 was added to sheet L1.21.

2. Please include, on the plans, a table showing proposed soil volumes for the 3 north islands containing trees. Island square footage was provided. The islands should provide adequate soil volume for the proposed tree based on the tree's size at maturity. Structural soil will be required to provide adequate volume. Provide calculations for needed quantities of structural soil.
   Response: A table is provided on sheet L1.20 titled "SOIL VOLUMES" with island square footage and soil volumes. Islands are labeled on the sheet with respective numbers.

3. Above comments can be handled at time of permit submittal. Ok to proceed to plan commission.
   Response: Noted.

Regards,

Joseph Bermudez

Senior Project Manager
Sevan Multi-Site Solutions
Agent for The Kroger Co.

Comment Response Letter

January 27, 2026

Recipient: Village of Northbrook
1225 Cedar Lane
Northbrook, IL 60062

Project: Mariano's Retail Fuel Center No. 533
784 Skokie Blvd
Northbrook, IL 60062

RE: Response to Comments
PCD-25-18-784 Skokie Boulevard – Mariano's Gas Station

To Swati Pandey,

As Agents for Kroger, the applicant, we respectfully submit the responses below, **in red**, to the comment provided dated December 16, 2025.

Comment Response Below:
DPS COMMENTS:

1. Written Explanation – The narrative makes reference to the proposed use as a 'special permit' in the first and second paragraph of the document. Revise, as "Fuel Sales" is a permitted use in the O-4 district (subject to additional regulations) per the current Zoning Code. However, an amendment to the existing Planned Development through a public hearing process is required.
   Response: The written explanation has been updated per the provided comment.

2. "Fuel Sales" within the O-4 district is a permitted use, however, it must comply with additional standards. See Fuel Sales Standards document attached and respond to each standard.
   Response: See completed Fuel Sales Standards response sheet.

3. Provide a plan exhibit showing the area of scope of work and the existing improvements being removed. The parking spaces and other improved structures can be shown with dashed lines.
   Response: C1.10 Demolition Site Plan sheet was added to the set.

4. Is the structure covering the pedestrian sidewalk within the parking lot (that runs north-south) going to be removed?
   Response: No, Structure to remain.

5. Parking:
   a. Provide a parking plan showing the parking lot (and available parking spaces) for the entire Planned Development. Considering the scope of work and substantial removal of existing parking spaces, a parking assessment based on the parking regulations noted in the Zoning Code is required. The parking plan must show the available parking spaces for the entire commercial development for Northshore 770 (Planned Development). Confirm the total number of existing parking spaces available on-site within the Planned Development. See an aerial attached depicting the extent of The Planned Development. Response: The parking plan was provided and the comments received will be addressed in this response.

b. Provide a breakdown of commercial tenants within the Planned Development and provide the name, type of use, and square footage (information typically available in the rent roll with the landlord), for parking calculation.
Response: See sheet C0.03 for the parking plan where this is shown within the tables provided.
c. Are any ADA spaces being eliminated? Show the total number of ADA spaces on the parking plan within the Planned Development to show compliance with the IL Accessibility Code.
Response: No ADA spaces are being removed. See sheet C1.20 for ADA parking spaces being added.

6. Explain the loading/unloading process/operations for the facility. What is the process and expected frequency of fuel delivery? Would deliveries interfere with the access to the gas station or with the drive aisles?
Response: See sheet C1.21 which depicts the turning model for the fuel delivery truck. The truck will enter off Dundee Road then be able to maneuver to the fuel tanks parking within the proposed fuel center lot lines to avoid interference with the shared critical access road or customers accessing the fuel dispensers. Fuel deliveries

7. Show on-site pedestrian walkway connections within parking lot and between development on the property. See Section 10-105 of the Zoning Code. Revise Site Plan and match other plans.
Response: See sheet C1.20 for provided ADA path of travel.

8. Elevation plan: Label the canopy and building dimensions on the plan. Also label the dimensions of the signs shown on the elevation plan. Please note, wall signs shall not exceed 100 square feet or 5 percent of the wall to which it is affixed, whichever is less. For additional information, see Article 11 – Sign Standards of the Zoning Code.
Response: Please see revised elevations in document 6 - Elevations and Floor Plan – 01.26.26 which include the dimensions on our elevations. An additional document labeled 16 – Exterior Signage Details has been provided to provide details on signage dimensions.

9. Explain how the waste disposal process will be handled for the new building.
Response: There will be routine schedules for trash bins on premise to be emptied and consolidated which will then be wheeled over to the large dumpster servicing the Mariano's Grocery store which has capacity to include any refuse from the Fuel Center.

10. Confirm that all new proposed outdoor lighting fixtures shall be so designed, arranged and operated as to prevent direct rays of light from being cast onto any adjacent property or street.
Response: All light fixtures will be arranged, shielded, and operated in a manner that rays of light will not be casted onto adjacent properties or street.

11. Traffic Impact Study: Page 15 – The first paragraph references, "City of Arden Hills….". Revise. Make sure all data and study is accurate pertaining to the site in Northbrook.
Response: The Traffic Impact Study has been revised to address any reference errors.

12. Please be advised per previous approval documents of the Planned Development (Ordinance no. 2014-23), all signage is subject to design review prior to issuance of a sign permit.
Response: Noted.

TREE COMMENTS:

1. Use Village details for tree protection, tree planting, shrub planting, and parking island tree planting. Details can be found at https://www.northbrook.il.us/366/Engineering-Standards-Specifications.
Response: Village details are provided on sheet L1.21.
2. Change out the proposed serviceberries in the 3 north islands with medium size shade trees off the Village's approved tree replacement list (attached).
Response: Serviceberries are replaced with medium trees witchhazel and state street miyabe maple. See sheet L1.20.
3. Provide tree planting volumes for the 3 north islands.

Response: Tree planting volumes provided on sheet L1.20.

4. Landscaping comments can be handled with permit submittal. Ok to proceed to plan commission.
   Response: Noted.

Regards,

Joe Bermudez
Senior Project Manager
Sevan Multi-Site Solutions
Agent for The Kroger Co.

1110 American Parkway Building 10 Suite F-200B
Allentown, Pennsylvania 18109
Main: 877 627 3772

Colliers
Engineering & Design

VIA EMAIL
January 22, 2026

Steve Pautsch, P.E., PTOE
Civiltech Engineering, Inc.
Two Pierce Place, Suite 1400
Itasca, IL 60143

RE: Response to Comments Letter
784 Skokie Boulevard
Village of Northbrook, Cook County, Illinois
CED Project No.: 25012699A

Dear Mr. Pautsch,

On behalf of the applicant, Mariano's (Northbrook), Colliers Engineering & Design is pleased to submit this response to your technical memorandum, dated December 9, 2025, addressing the review comments for the proposed Mariano's Gas Station which is proposed to be a supplemental use to the existing Mariano's Grocery Store located in the City of Northbrook, Cook County, Illinois.

Our detailed responses to the comments provided are provided below:

Comment #1: Clarify whether the traffic impact study will be submitted to the Illinois Department of Transportation. IDOT may require background traffic growth to be calculated using rates provided by the Chicago Metropolitan Agency for Planning (CMAP) projected to 5 years past the build-out year (2032). If the study does not require IDOT review, then the background growth as shown is acceptable.

Response #1: Comment acknowledged. Based on coordination with IDOT, they will require a Transportation Impact Study for their review and approval. This additional analysis will be provided as part of a future TIS submission to IDOT.

Comment #2: On page 10, update sentence that says growth rates were estimated based on data published in the MNDOT TCDS map.

Response #2: Comment addressed. The Transportation Impact Study, dated January 22, 2026, has been revised to accommodate this change.

Comment #3: Tables 4 through 7 are very difficult to read. Improve formatting by adding thicker vertical lines between each of the three scenarios and thin lines between each column.

Response #3: Comment addressed. The Transportation Impact Study, dated January 22, 2026, has been revised to accommodate this change.

Comment #4: According to local practice, do not optimize traffic signal timings at the intersection of Skokie Boulevard and Dundee Road. This will provide for direct comparison of impacts between the scenarios.

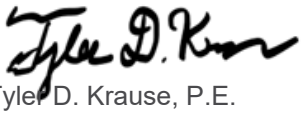
Response #4: Comment addressed. The Transportation Impact Study, dated January 22, 2026, has been revised to accommodate this change.

Comment #5: In the first paragraph of the Summary and Conclusions section, fix the typo referencing the wrong location.

Response #5: Comment addressed. The Transportation Impact Study, dated January 22, 2026, has been revised to accommodate this change.

We trust that the responses in this letter satisfactorily address the comments provided as part of the technical memorandum, dated December 9, 2025. If you have any questions, or require further clarification, please do not hesitate to contact me.

Sincerely,



Tyler D. Krause, P.E.
Colliers Engineering & Design
Senior Project Manager| Traffic Planning

TDK

cc: Swati Pandey, AICP, Village of Northbrook
Joe Bermudez, Seven Multi Site Solutions

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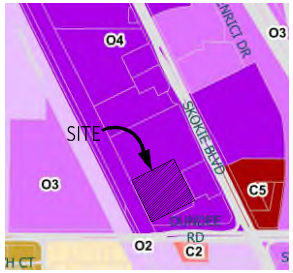
MARIANO'S

MARIANO'S - M533
RETAIL FUEL CENTER

784 SKOKIE BLVD
NORTHBROOK, IL, 60062
(COOK COUNTY)



N
LOCATION MAP
SCALE: NTS



N
ZONING MAP
SCALE: NTS

PROJECT DESCRIPTION	
CONSTRUCTION OF A RETAIL FUEL CENTER IN AN EXISTING SHOPPING CENTER CONSISTING OF: • ONE (1) 3,956 SF CANOPY • ONE (1) 239 OSF KIOSK BUILDING • FIVE (5) DISPENSER ISLANDS	
SITE NOTES	
1	THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY COMPASS SURVEYING LTD DATED: 08.19.2025
PARCEL INFORMATION:	
PARCEL NUMBER(S)	2356077
OWNER/LESSOR:	THE KROGER CO.
ACRES:	±15.78 AC

BUILDING CODE REVIEW	
ACCESSIBILITY CODE	ILLINOIS ACCESSIBILITY CODE
BUILDING CODE	2018 INTERNATIONAL BUILDING CODE
ELECTRICAL CODE	2017 NATIONAL ELECTRIC CODE
ENERGY CODE	2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
MECHANICAL CODE	2018 INTERNATIONAL MECHANICAL CODE
PLUMBING CODE	2014 ILLINOIS PLUMBING CODE
FIRE CODE	2018 INTERNATIONAL FIRE CODE
ZONING ORDINANCE REVIEW	
ZONING ORDINANCE	VILLAGE OF NORTHBROOK
ZONING MAP	VILLAGE OF NORTHBROOK ZONING MAP
SITE ZONING	O4 - BOULEVARD OFFICE
PERMITTED USE	NO - SPECIAL USE

BULK REGULATIONS			
ITEM	REQUIRED	PROPOSED	ORDINANCE
LOT REQUIREMENTS:			
MIN. LOT AREA	20,000 SF	±393,882 SF (± 8.35 AC)	BULK REGULATIONS ARTICLE 6
MIN. LOT WIDTH	300'	490'	BULK REGULATIONS ARTICLE 6
BUILDING REQUIREMENTS:			
MAX. BUILDING HEIGHT	110'-0"	CANOPY 19'-6"	TABLE: 6-110
MAXIMUM FLOOR AREA	0.50	±71,087 S.F./±364,346 S.F. = 0.19	
BUILDING SETBACK REQUIREMENTS:			
FRONT SETBACK (SOUTH) KIOSK/CANOPY	80'	126'/73.9'	BULK REGULATIONS ARTICLE 6
SIDE SETBACK (WEST) KIOSK/CANOPY	50'	114'/76.7'	
REAR SETBACK (NORTH) KIOSK/CANOPY	30'	764'/722.6'	
PARKING REQUIREMENTS:			
MIN. STANDARD SPACE SIZE	9'x20'	9'x20'	ARTICLE 9 PART I.B.9.104(C)(3)(i)
TOTAL PARKING:			
	EXISTING	PROPOSED	SPACES LOST
PARKING SPACES	355	270	85

NOTES:
1. FUEL CENTER TO UTILIZE TRASH ENCLOSURE AT THE GROCERY STORE

PROJECT DIRECTORY			
	DESCRIPTION	ADDRESS	CONTACT
SITE	OWNER/ DEVELOPER	ROUNDY'S INC. 701 4 WINE ST CINCINNATI, OH 45202	513.762.4000
	PROJECT MANAGER	SEVAN MULTI-SITE SOLUTIONS 3025 HIGHLAND PARKWAY SUITE 850 DOWNERS GROVE, IL 60515	JOE BERMUDEZ 253.508.3104
	SURVEYOR	COMPASS SURVEYING LTD 2631 GINGER WOODS PKWY AURORA, IL 60502	630.820.9100
DESIGN CONTACT	CIVIL ENGINEER	SEVAN ENGINEERING, PC 3025 HIGHLAND PARKWAY DOWNERS GROVE, IL 60515	TIMOTHY KRATZ, PE 586.899.2473
GOVERNMENT	PLANNING DEPARTMENT (TOWNSHIP)	VILLAGE OF NORTHBROOK PLAN COMMISSION 1225 CEDAR LANE NORTHBROOK, IL 60062	MICHAELA KOHLSTEDT STAFF LIAISON 847.664.4057
	ENGINEER	VILLAGE OF NORTHBROOK 1225 CEDAR LANE NORTHBROOK, IL 60062	847.272.5050
	BUILDING DEPARTMENT	VILLAGE OF NORTHBROOK DEVELOPMENT AND PLANNING SERVICES DEPARTMENT 1225 CEDAR LANE NORTHBROOK, IL 60062	847.664.4050
	DEPARTMENT OF TRANSPORTATION	ILLINOIS DEPARTMENT OF TRANSPORTATION 2300 S DIRKSEN PKWY SPRINGFIELD, IL 62764	217.782.7820

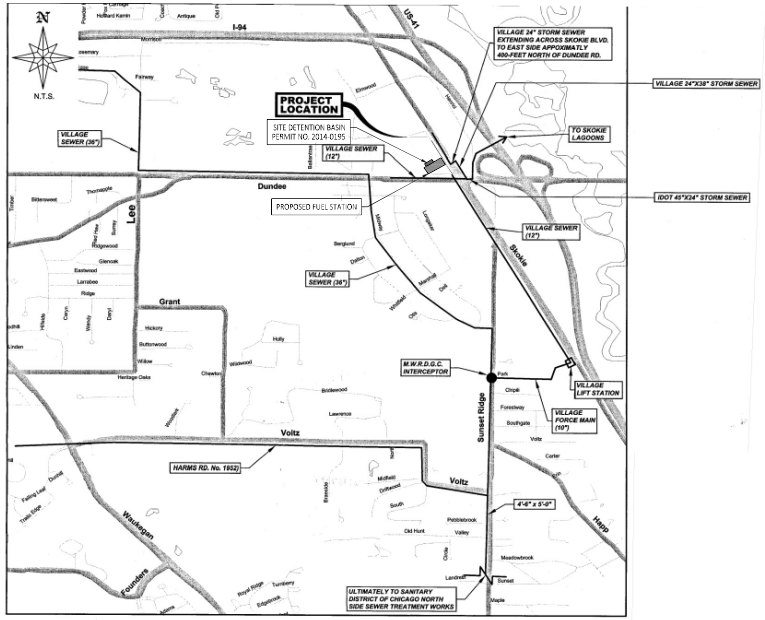
SURFACE WATER DRAINAGE CERTIFICATE:

THE UNDERSIGNED HEREBY CERTIFY, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS DEVELOPMENT OF ANY PART THEREOF, OR, IF SUCH SURFACE WATER DRAINAGE WILL NOT BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATER INTO PUBLIC AREAS, OR DRAINS WHICH THE OWNERS HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THIS SUBDIVISION.

DATED THIS _____ DAY OF _____, 2026

_____
ENGINEER

SHEET INDEX										
		11.07.2025 SITE PLAN/SPECIAL USE	01.12.2026 SITE PLAN RESUBMITTAL	01.13.2026 MWRD	02.18.2026 PLANNING COMMENTS		5	6	7	8
GENERAL		0	1	2	3					
C0.01	COVER SHEET	●	●	●	●					
C0.02	GENERAL NOTES			●						
C0.03	MWRD GENERAL NOTES			●						
SURVEY										
1 OF 1	BOUNDARY AND TOPOGRAPHIC SURVEY	●	●	●	●					
CIVIL										
C1.02	COMPOSITE SITE PLAN	●	●	●	●					
C1.03	COMPOSITE SITE PARKING PLAN		●	●	●					
C1.10	DEMOLITION SITE PLAN			●						
C1.11	EROSION AND SEDIMENTATION CONTROL PLAN			●						
C1.20	SITE DIMENSION PLAN	●	●	●	●					
C1.21	TRUCK TURN PLAN	●	●	●	●					
C1.30	GRADING PLAN	●	●	●	●					
C1.31	STORMWATER MANAGEMENT PLAN	●	●	●	●					
C1.40	UTILITY PLAN	●	●	●	●					
C5.00	DETAILS - SOIL EROSION			●						
C5.01	DETAILS - SITE			●						
C5.02	DETAILS - UTILITY			●						
C5.03	DETAILS - CITY OF NORTHBROOK			●						
LANDSCAPE										
L1.20	LANDSCAPE PLAN, SCHEDULE AND DETAILS	●	●	●	●					
L1.21	LANDSCAPE DETAILS			●	●					
PHOTOMETRIC SITE PLAN										
1 OF 1	PHOTOMETRIC PLAN	●	●	●						
ARCHITECTURE										
A-1	FLOOR PLAN	●	●							
A-2	BUILDING ELEVATIONS	●	●							



N
MWRD SEWER ROUTING MAP
SCALE: NTS

Call Before You Dig
JULIE
ILLINOIS ONE-CALL SYSTEM

PLOT: Z:\Drawn\Clients\Roundy's Supermarkets Inc\Design\001-M533 Northbrook, IL\Architectural\C0.01.dwg
PLOT DATE: 02/18/2026 - 8:47am
PLOTTED BY: Matthew Lewis

sevan
ENGINEERING, P.C.
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Downers Grove, IL 60515
info@sevan.com www.sevan.com
INTEGRITY | RESPECT | TEAMWORK
EXCELLENCE | CHARITY

CLIENT

SEAL

I HEREBY CERTIFY THAT THESE DRAWINGS HAVE BEEN PREPARED UNDER MY DIRECT SUPERVISION AND, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, COMPLY WITH THE BUILDING CODES AND ORDINANCES OF THE LOCAL MUNICIPALITY.

LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062.068956
STATE OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.07.2025	SITE PLAN/SPECIAL USE
1	01.12.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

COVER SHEET

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.07.2025
DRAWN BY:	EB
CHECKED BY:	TBK
PROJ. MGR:	JB

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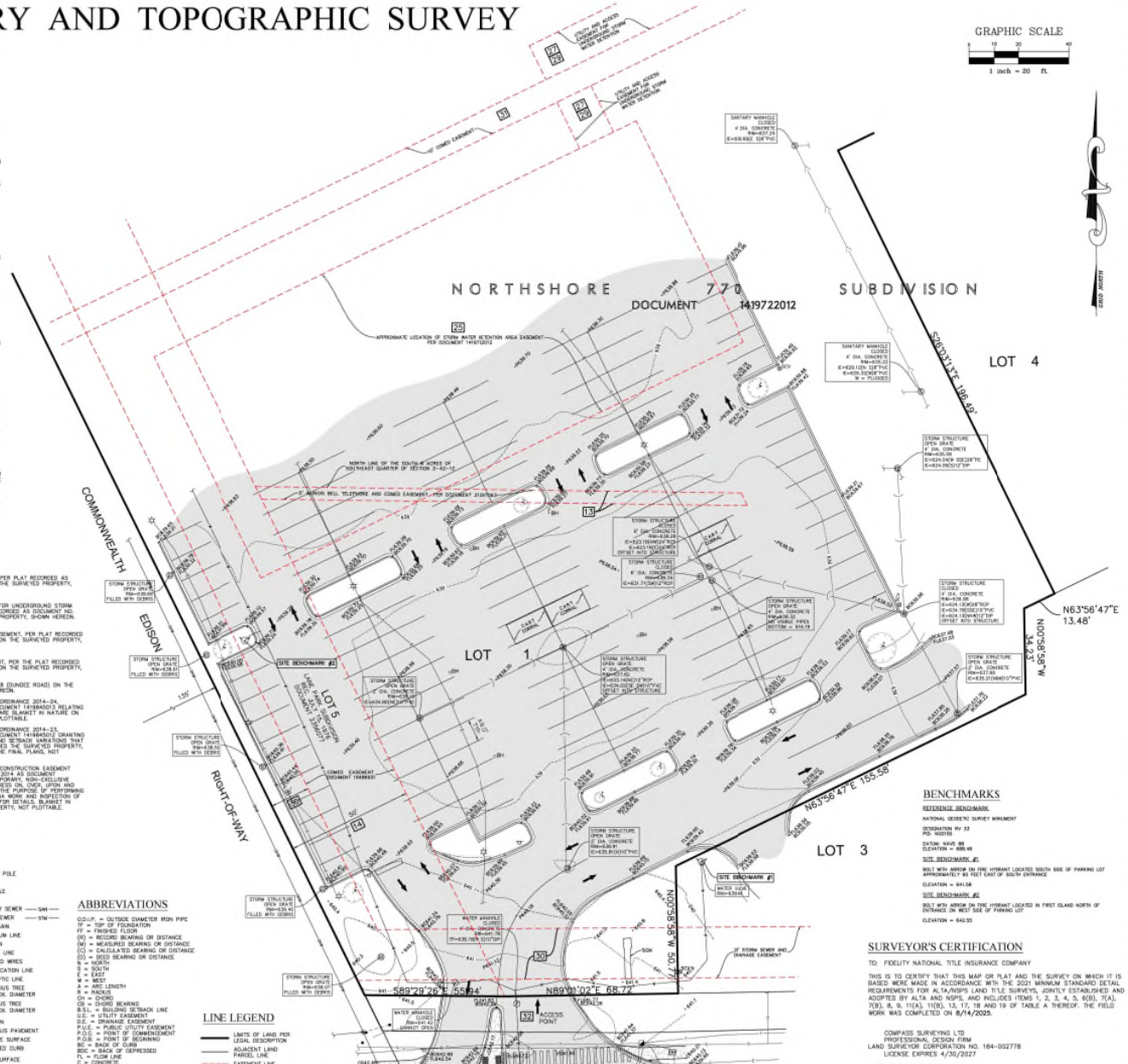
SHEET NUMBER

C0.01

BOUNDARY AND TOPOGRAPHIC SURVEY



GRAPHIC SCALE

1 inch = 20 ft.

LEGAL DESCRIPTION

PARCEL 1:

LOT 1 IN NORTHSHORE 770 SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, RECORDED JULY 16, 2014 AS DOCUMENT NUMBER 1419722012, EXCEPT THAT PART TAKEN FOR ROAD PURPOSES AFFECTING LOT 1, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

NON-EXCLUSIVE EASEMENTS FOR THE BENEFIT OF PARCEL 1 FOR INGRESS, EGRESS, USE AND ENJOYMENT AS CREATED BY OPERATION AND RECIPROCAL EASEMENT AGREEMENT RECORDED AS DOCUMENT NUMBER 1420222017.

SCHEDULE B EXCEPTIONS

13. EASEMENT IN FAVOR OF COMMONWEALTH EDISON COMPANY AND ILLINOIS BELL TELEPHONE COMPANY, AND ITS/THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE AND MAINTAIN ALL EQUIPMENT NECESSARY FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE GRANT RECORDED AS DOCUMENT NO. 21287883.

(AFFECTS LOT 1 IN NORTHSHORE 770 SUBDIVISION)

14. EASEMENT IN THE DEED DATED JUNE 7, 1965 AND RECORDED JUNE 7, 1965 AS DOCUMENT 19488615 FROM THE CHICAGO NORTH SHORE AND MILWAUKEE RAILWAY COMPANY TO THE CHICAGO AND NORTH WESTERN RAILWAY COMPANY OF THE PERPETUAL RIGHT AND EASEMENT IN THE COMMONWEALTH EDISON COMPANY TO CONSTRUCT, OPERATE, MAINTAIN, RENEW, REPLACE, REBUILD AND REMOVE SUCH EXISTING ELECTRIC TRANSMISSION, SUB-TRANSMISSION AND DISTRIBUTING FACILITIES.

(AFFECTS LOT 1 IN NORTHSHORE 770 SUBDIVISION)

15. EASEMENT FOR UTILITIES AS SHOWN ON PLAT OF LAKE PARK SUBDIVISION RECORDED JULY 10, 1979 AS DOCUMENT 23960771.

(AFFECTS LOT 1 IN NORTHSHORE 770 SUBDIVISION)

16. A 50 FOOT BUILDING LINE AS SHOWN ON PLAT OF LAKE PARK SUBDIVISION AFORESAID LYING WEST OF THE EASTERLY LINE OF THE LAND.

(AFFECTS LOT 1 AND OTHER PROPERTY)

17. RIGHTS OF PUBLIC UTILITY COMPANIES TO MAINTAIN THEIR EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT AS DISCLOSED BY OVERHEAD WIRES AND WOOD SERVICE POLES LOCATED ON LOT 4 IN LAKE PARK SUBDIVISION, AS DISCLOSED ON SURVEY NO. 13-4-1243 MADE BY INTECH CONSULTANTS, INC. DATED MAY 27, 2014, LAST REVISED JULY 10, 2014.

(AFFECTS LOT 1 IN NORTHSHORE 770 SUBDIVISION)

NOTE: THIS EXCEPTION WAS BROUGHT FORWARD FROM A PRIOR POLICY. WE DON'T HAVE A COPY OF SAID SURVEY. UPON RECEIPT AND REVIEW OF A CURRENT SURVEY, THIS EXCEPTION SHALL BE AMENDED, AS NECESSARY.

18. RIGHTS IF ANY, OF PUBLIC AND QUASI-PUBLIC UTILITIES IN THE LAND AS DISCLOSED BY DIG LINES ON THE SOUTHEASTERN PORTION OF THE PREMISES AND MANHOLES AS SHOWN ON A SURVEY NUMBER 6363 PREPARED BY INTECH CONSULTANTS, INC., DATED MAY 27, 2014 AND LAST REVISED JULY 10, 2014.

NOTE: THIS EXCEPTION WAS BROUGHT FORWARD FROM A PRIOR POLICY. WE DON'T HAVE A COPY OF SAID SURVEY. UPON RECEIPT AND REVIEW OF A CURRENT SURVEY, THIS EXCEPTION SHALL BE AMENDED, AS NECESSARY.

20. TERMS AND CONDITIONS AS CONTAINED IN ENVIRONMENTAL "NO FURTHER REMEDIATION LETTER RECORDED NOVEMBER 2, 1999 AS DOCUMENT NUMBER 99928626, STATING THE LAND IS BE USED FOR INDUSTRIAL/COMMERCIAL ONLY.

21. TERMS, PROVISIONS, AND CONDITIONS RELATING TO THE EASEMENT DESCRIBED AS PARCEL 2 CONTAINED IN THE INSTRUMENT CREATING SAID EASEMENT.

RIGHTS OF THE ADJOINING OWNER OR OWNERS TO THE CONCURRENT USE OF SAID EASEMENT.

22. TERMS, PROVISIONS, RESTRICTIONS AND EASEMENTS CONTAINED IN THE OPERATION AND RECIPROCAL EASEMENT AGREEMENT RECORDED JULY 21, 2014 AS DOCUMENT 1420222017 RELATING TO USES, COMMON AREA MAINTENANCE AND EXPENSES, PARKING, STORM DRAINAGE EASEMENTS AND BUILDING RESTRICTIONS.

24. THE PLAT OF SUBDIVISION RECORDED JULY 16, 2014 AS DOCUMENT NUMBER 1419722012 INCLUDES A CERTIFICATION BY THE SURVEYOR THAT THE LAND IS LOCATED WITHIN A SPECIAL FLOOD AREA "A" AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

26. RESTRICTIVE COVENANTS AND EASEMENTS FOR STORM WATER DETENTION AREA APPROVED TO THE PLAT OF SUBDIVISION RECORDED JULY 16, 2014 AS DOCUMENT 1419722012. THESE COVENANTS SHALL RUN WITH THE LAND IN THE SUBDIVISION SHOWN ON THE PLAT, AND SHALL BE BINDING UPON AND INURE TO THE BENEFIT OF THE OWNERS OF ALL LOTS, THEIR RESPECTIVE SUCCESSORS, ASSIGNS, AND MORTGAGEES AND ALL PARTIES CLAIMING BY, THROUGH AND UNDER THEM.

26. PUBLIC UTILITY AND DRAINAGE EASEMENT PROVISIONS APPENDED TO THE PLAT OF SUBDIVISION IN FAVOR OF COMMONWEALTH EDISON COMPANY, SBC/AMERITECH ILLINOIS AREA ILLINOIS BELL TELEPHONE COMPANY, WCOP, COMCAST OF ILLINOIS, LLC, AND ITS/THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE AND MAINTAIN ALL EQUIPMENT NECESSARY FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED JULY 16, 2014 AS DOCUMENT NO. 1419722012.

27. UTILITY AND ACCESS EASEMENT FOR UNDERGROUND STORM WATER RETENTION, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED AS DOCUMENT NO.1419722012.

(AFFECTS LOT 1)

28. UTILITY AND ACCESS EASEMENT, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED AS DOCUMENT NO. 1419722012.

(AFFECTS LOT 1 AND OTHER PROPERTY)

29. UTILITY AND ACCESS EASEMENT FOR UNDERGROUND STORM WATER RETENTION, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED AS DOCUMENT NO. 1419722012.

(AFFECTS LOT 1)

30. STORM SEWER AND DRAINAGE EASEMENT, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENTS, AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED AS DOCUMENT NO. 1419722012.

(AFFECTS LOT 1 AND OTHER PROPERTY)

31. EASEMENT IN FAVOR OF COMMONWEALTH EDISON, AND ITS/THEIR RESPECTIVE SUCCESSORS AND ASSIGNS TO INSTALL, OPERATE AND MAINTAIN ALL EQUIPMENT NECESSARY FOR THE PURPOSE OF SERVING THE LAND AND OTHER PROPERTY, TOGETHER WITH THE RIGHT OF ACCESS TO SAID EQUIPMENT AND THE PROVISIONS RELATING THERETO CONTAINED IN THE PLAT RECORDED AS DOCUMENT NO. 1419722012, AFFECTING 15 FEET OF THE LAND.

(AFFECTS LOT 1)

33. NOTE APPENDED TO THE PLAT OF NORTHSHORE 770 SUBDIVISION: "HERE SHALL BE AT MOST (1) RESTRICTED) 3/4 ACCESS ALONG ILLINOIS ROUTE 64 (OLINDEE ROAD) TO LOT 1.

35. TERMS AND PROVISIONS OF THE ORDINANCE 2014-24, RECORDED JULY 17, 2014 AS DOCUMENT 1419845013 RELATING SPECIAL PERMITS FOR SIGNAGE ON THE COMMERCIAL PARCEL.

(AFFECTS LOT 1 AND OTHER PROPERTY)

34. TERMS AND PROVISIONS OF THE ORDINANCE 2014-23, RECORDED JULY 17, 2014 AS DOCUMENT 1419845012 GRANTING FINAL PLAN APPROVAL, YARD, AND SETBACK VARIATIONS.

(AFFECTS LOT 1 AND OTHER PROPERTY)

35. TERMS AND PROVISIONS OF THE CONSTRUCTION EASEMENT AGREEMENT DATED JULY 14, 2014 AND RECORDED JULY 24, 2014 AS DOCUMENT 1420519122 BY AND AMONG MORNINGSIDE CROSSROADS RETAIL, LLC (RETAIL DEVELOPER) MORNINGSIDE CROSSROADS RESIDENTIAL, LLC, DIV NORTH SHORE 770 WEST LOAN, LLC, ASSOCIATED BANK, NATIONAL ASSOCIATION (GRANTEES) AND THE PRIVATEBANK AND TRUST COMPANY RELATING TO A TEMPORARY, NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS ON, OVER, UPON AND UNDER THE RETAIL PARCEL FOR THE PURPOSE OF PERFORMING ALL OR ANY PORTION OF THE RDA WORK AND INSPECTION OF THE RDA WORK.

NOTES:

REGARDING SCHEDULE A:

PARCEL 1:

THIS SURVEY IS OF PART LOT 1 IN NORTHSHORE 770 SUBDIVISION, RECORDED JULY 16, 2014 AS DOCUMENT NUMBER 1419722012, COOK COUNTY, ILLINOIS.

PARCEL 2:

NON-EXCLUSIVE EASEMENTS FOR THE BENEFIT OF PARCEL 1 FOR INGRESS, EGRESS, PER OPERATION AND RECIPROCAL EASEMENT AGREEMENT RECORDED AS DOCUMENT NUMBER 1420222017, BLANKET IN NATURE ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

REGARDING SCHEDULE B:

ITEMS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 19, 22, 23, 24, 25, 27, 28, 29, 31, 32, 33, 34, 35 AND 36 ARE NOT SURVEY RELATED AND THEREFORE NOT SHOWN.

5. 5 FOOT COMMONWEALTH EDISON COMPANY AND ILLINOIS BELL TELEPHONE COMPANY EASEMENT, PER GRANT RECORDED AS DOCUMENT NO. 21287883, ON THE SURVEYED PROPERTY, SHOWN HEREON.

14. 50 EASEMENT, PER DEED RECORDED JUNE 7, 1965 AS DOCUMENT 19488615 GRANTED TO COMMONWEALTH EDISON COMPANY, ON THE SURVEYED PROPERTY, SHOWN HEREON.

15. EASEMENT FOR UTILITIES AS SHOWN ON PLAT OF LAKE PARK SUBDIVISION RECORDED JULY 10, 1979 AS DOCUMENT 23960771, NOT ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

16. 50 FOOT BUILDING LINE AS SHOWN ON PLAT OF LAKE PARK SUBDIVISION, NOT ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

17. OBSERVED ELECTRICAL DISTRIBUTION EQUIPMENT, OVERHEAD WIRES AND WOOD SERVICE POLES ON LOT 4 IN LAKE PARK SUBDIVISION, ON THE SURVEYED PROPERTY, SHOWN HEREON.

18. GAS LINE MARKINGS ON THE SURVEYED PROPERTY, SHOWN HEREON.

20. ENVIRONMENTAL "NO FURTHER REMEDIATION LETTER" RECORDED NOVEMBER 2, 1999 AS DOCUMENT NUMBER 99928626, STATING THE LAND IS BE USED FOR INDUSTRIAL/COMMERCIAL ONLY. NOT SURVEY RELATED, THE SURVEYED PROPERTY IS ALREADY IN USE, NOT PLOTTABLE.

21. TERMS, PROVISIONS, AND CONDITIONS RELATING TO THE EASEMENT DESCRIBED AS PARCEL 2, THE OPERATION AND RECIPROCAL EASEMENT AGREEMENT RECORDED AS DOCUMENT NUMBER 1420222017, CONTAINS NON-EXCLUSIVE EASEMENTS FOR THE BENEFIT OF PARCEL 1 AND THE ADJOINING OWNERS FOR INGRESS, EGRESS, BLANKET IN NATURE ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

22. EASEMENTS ON THE SURVEYED PROPERTY AND THE SHOPPING CENTER PARCELS, CONTAINED IN THE OPERATION AND RECIPROCAL EASEMENT AGREEMENT RECORDED JULY 21, 2014 AS DOCUMENT 1420222017, INCLUDES SHARED NON-EXCLUSIVE COMMON AREA, AGREEMENTS, UTILITY, STORM DRAINAGE AND SIGN EASEMENTS, BLANKET IN NATURE. NOT PLOTTABLE.

24. THE SURVEYED PROPERTY IS LOCATED WITHIN A SPECIAL FLOOD AREA "A" AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER 17031C0093J, HAVING A REVISED DATE OF AUGUST 19, 2008.

25. EASEMENT FOR STORM WATER DETENTION AREA, PER THE PLAT OF SUBDIVISION DOCUMENT 1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON.

26. PUBLIC UTILITY AND DRAINAGE EASEMENTS, PER PLAT. DOCUMENT NO. 1419722012, NOT ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

27. UTILITY AND ACCESS EASEMENT FOR UNDERGROUND STORM WATER RETENTION, PER PLAT RECORDED AS DOCUMENT NO.1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON.

28. UTILITY AND ACCESS EASEMENT, PER PLAT RECORDED AS DOCUMENT NO. 1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON.

29. UTILITY AND ACCESS EASEMENT FOR UNDERGROUND STORM WATER DETENTION, PER PLAT RECORDED AS DOCUMENT NO. 1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON. (REPEAT OF # 27)

30. STORM SEWER AND DRAINAGE EASEMENT, PER PLAT RECORDED AS DOCUMENT NO. 1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON.

31. COMMONWEALTH EDISON EASEMENT, PER THE PLAT RECORDED AS DOCUMENT NO. 1419722012, ON THE SURVEYED PROPERTY, SHOWN HEREON.

32. ACCESS ALONG ILLINOIS ROUTE 68 (OLINDEE ROAD) ON THE SURVEYED PROPERTY, SHOWN HEREON.

33. TERMS AND PROVISIONS OF THE ORDINANCE 2014-24, RECORDED JULY 17, 2014 AS DOCUMENT 1419845013 RELATING SPECIAL PERMITS FOR SIGNAGE, ARE BLANKET IN NATURE ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

34. TERMS AND PROVISIONS OF THE ORDINANCE 2014-23, RECORDED JULY 17, 2014 AS DOCUMENT 1419845012 GRANTING FINAL PLAN APPROVAL, YARD, AND SETBACK VARIATIONS THAT REGARD INTERPRETATION, INCLUDES THE SURVEYED PROPERTY, DOCUMENT DOES NOT INCLUDE THE FINAL PLANS, NOT PLOTTABLE.

35. TERMS AND PROVISIONS OF THE CONSTRUCTION EASEMENT AGREEMENT RECORDED JULY 24, 2014 AS DOCUMENT 1420519122, RELATING TO A TEMPORARY, NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS ON, OVER, UPON AND UNDER THE RETAIL PARCEL FOR THE PURPOSE OF PERFORMING ALL OR ANY PORTION OF THE RDA WORK AND INSPECTION OF THE RDA WORK. SEE DOCUMENT FOR DETAILS, BLANKET IN NATURE ON THE SURVEYED PROPERTY, NOT PLOTTABLE.

GENERAL NOTES

1. THIS SURVEY IS BASED ON PART OF THE LEGAL DESCRIPTION AND EASEMENTS OF RECORD AS IDENTIFIED BY TITLE COMMITMENT NUMBER FCH-6250080SU ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY HAVING AN EFFECTIVE DATE OF JULY 28, 2025.

2. THE BASIS OF BEARINGS FOR THIS SURVEY IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 (2011), ZONE 1201 (ILLINOIS EAST).

3. THIS SITE FALLS WITHIN "OTHER AREAS – ZONE X"NO SCREEN (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), AS DESIGNED BY THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 17031C 0093 J, MAP NUMBER 17031C0093J, HAVING A REVISED DATE OF AUGUST 19, 2008.

4. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR THIRD-PARTY SURVEYS, AND IS BASED ON FIELD WORK PERFORMED ON 8/14/2025.

5. THE SURVEYOR CONTACTED J.U.L.I.E. (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS) FOR AN ON-SITE LOCATE WHICH WAS ASSIGNED A (24) NUMBER OF 4252430433. THE UTILITIES AS MARKED BY J.U.L.I.E. ON-SITE AT THE TIME OF THE SURVEY ARE SHOWN HEREON. ADDITIONALLY, THE SURVEYOR CONTACTED J.U.L.I.E. FOR A DESIGN STAGE REQUEST FOR THIS SITE WHICH WAS ASSIGNED A (10) NUMBER OF 8252430466. INQUIRIES WERE SENT OUT TO THE VARIOUS UTILITY COMPANIES REQUESTING MAPS AND/OR ATLASES OF THEIR RESPECTIVE FACILITIES. THE INFORMATION RECEIVED TO DATE IS SHOWN HEREON. ALSO, PRIOR TO FIELD WORK ON THIS SITE, THE UNDERGROUND DETECTIVE PROVIDED UTILITY LOCATING SERVICES ON SITE AND THE INFORMATION OBTAINED BY THEM FROM THESE MARKS ARE SHOWN HEREON.

6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM OBSERVED FIELD EVIDENCE AND EXISTING DRAWINGS, MAPS AND RECORDS SUPPLIED TO SURVEYOR AND MARKINGS PROVIDED BY A THIRD-PARTY DUE TO THE UNCERTAINTY AND LIMITATIONS INHERENT TO LOCATING UNDERGROUND UTILITY FACILITIES FOR NON-CONSTRUCTION PURPOSES INCLUDING THOSE THAT ARE PLASTIC, NON-CONDUCTIVE, OR OTHERWISE UNABLE TO BE LOCATED, THERE MAY BE BURIED UTILITIES WITHIN THE SURVEY AREA THAT ARE NOT DETECTED. THE SURVEY SHOWS OBSERVED INDICATIONS OF UTILITIES BASED ON THIRD-PARTY UTILITY MARKS. THE SURVEYOR MAKES NO GUARANTEES THAT UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. THE SURVEYOR HAS PHYSICALLY LOCATED OBSERVED STRUCTURES AND MARKINGS; HOWEVER, HE HAS NOT PHYSICALLY LOCATED THE UNDERGROUND LINES.

7. TABLE A ITEM 6(B): A ZONING REPORT OR LETTER WAS NOT PROVIDED TO THE SURVEYOR.

8. TABLE A ITEM 13: ADJOINING OWNER INFORMATION SHOWN HEREON IS FROM AVAILABLE TAX RECORDS.

9. TABLE A ITEM 17: NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES BASED ON INFORMATION RECEIVED FROM THE CONTROLLING JURISDICTION AT THE TIME OF THE SURVEY. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

10. THE SURVEYED PROPERTY IS A PART OF THAT DESCRIBED IN THE TITLE COMMITMENT.

LEGEND

- FOUND 7/8" O.D.I.R. UNLESS OTHERWISE NOTED (HELD LOCATION)
- CONCRETE MONUMENT
- CROSS IN CONCRETE
- MANHOLE
- STORM STRUCTURE
- SANITARY MANHOLE
- CLEANOUT
- FLARED END SECTION
- TRANSFORMER PAD
- ELECTRIC MARKER
- UTILITY POLE
- SIGN
- LIGHT POLE
- VALVE VAULT
- FIRE HYDRANT
- WATER METER
- WATER VALVE BOX
- GAS METER
- GAS VALVE
- GAS MARKER
- DOWN SPOUT
- BORING HOLE
- MONITORING WELL
- GATE POST
- BOLLARD POLE
- SIGN
- FLAG POLE
- MAILBOX
- SANITARY SEWER —SAN—
- STORM SEWER —STM—
- WATER MAIN —W—
- PETROLEUM LINE —P—
- GAS MAIN —G—
- ELECTRIC LINE —E—
- OVERHEAD WIRES —OHW—
- COMMUNICATION LINE —T—
- FIBER OPTIC LINE —FO—
- CONIFEROUS TREE W/APPROX. DIAMETER
- DECIDUOUS TREE W/APPROX. DIAMETER
- ELEVATION
- BITUMINOUS PAVEMENT
- CONCRETE SURFACE
- DEPRESSED CURB
- STONE SURFACE
- DETECTABLE TACTILE WARNING SURFACE
- BRICK PAVERS
- WOOD FENCE
- CHAIN LINK FENCE
- METAL FENCE METAL

ABBREVIATIONS

O.D.I.P. = OUTSIDE DIAMETER IRON PIPE
TF = TOP OF FOUNDATION
FF = FINISHED FLOOR
(R) = RECORD BEARING OR DISTANCE
(M) = MEASURED BEARING OR DISTANCE
(C) = CALCULATED BEARING OR DISTANCE
(D) = DEED BEARING OR DISTANCE
N = NORTH
S = SOUTH
E = EAST
W = WEST
A = ARC LENGTH
R = RADIUS
CH = CHORD
CB = CHORD BEARING
B.S.L. = BUILDING SETBACK LINE
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT
P.U.E. = PUBLIC UTILITY EASEMENT
P.O.C. = POINT OF COMMENCEMENT
P.O.B. = POINT OF BEGINNING
BC = BACK OF CURB
BOC = BACK OF DEPRESSED
FL = FLOW LINE
C = CONCRETE
P = PAVEMENT
G = GRAVEL
EW = EDGE OF WALK
TW = TOP OF WALL
TF = TOP OF PIPE
E = INVERT ELEVATION
DS = DOWN SPOUT
S.F. = SQUARE FEET

LINE LEGEND

- LIMITS OF LAND PER LEGAL DESCRIPTION
- ADJACENT LAND PARCEL LINE
- EASEMENT LINE
- CENTERLINE
- BUILDING SETBACK LINE
- SECTION LINE
- EXISTING CONTOUR
- FLOOD ZONE DIVISION LINE

BENCHMARKS

REFERENCE BENCHMARK:
NATIONAL GEODETIC SURVEY MONUMENT
DESIGNATION RV 33
PID: KG0155
DATUM: NAVD 88
ELEVATION = 686.48

SITE BENCHMARK #1:
BOLT WITH ARROW ON FIRE HYDRANT LOCATED SOUTH SIDE OF PARKING LOT APPROXIMATELY 80 FEET EAST OF SOUTH ENTRANCE
ELEVATION = 641.58

SITE BENCHMARK #2:
BOLT WITH ARROW ON FIRE HYDRANT LOCATED IN FIRST ISLAND NORTH OF ENTRANCE ON WEST SIDE OF PARKING LOT
ELEVATION = 642.55

SURVEYOR'S CERTIFICATION

TO: FIDELITY NATIONAL TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 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, 5, 6(B), 7(A), 7(B), 8, 9, 11(A), 11(B), 13, 17, 18 AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 8/14/2025.

COMPASS SURVEYING LTD
PROFESSIONAL DESIGN FIRM
LAND SURVEYOR CORPORATE NO. 184-002778
LICENSE EXPIRES 4/30/2027

DATE OF PLAT OR MAP: _____

BY: _____
SCOTT C. KREBS
IL PROFESSIONAL LAND SURVEYOR NO. 3509
LICENSE EXPIRES 11/30/28

NO.	REVISIONS	DRAWN BY: AREA	CHECKED BY: SK	BOOK: 713 PG: 23-24	
		PC: CS		DATE:	BY:
DATE: 8/19/25					

CLIENT
SEVAN MULTI-SITE SOLUTIONS
3025 HIGHLAND PARKWAY, SUITE 850
DOWNERS GROVE, IL

PROJECT
MARIANO'S M533
784 SKOKIE BLVD
NORTHBROOK, IL

COMPASS SURVEYING LTD
ALTA SURVEYS • TOPOGRAPHY • CONSTRUCTION STAKING
2631 GINGER WOODS PARKWAY - STE. 100
AURORA, IL 60502
PHONE: (630) 820-9100 FAX: (630) 820-9101 EMAIL: ADMIN@COMPASS-SURVEYING.COM

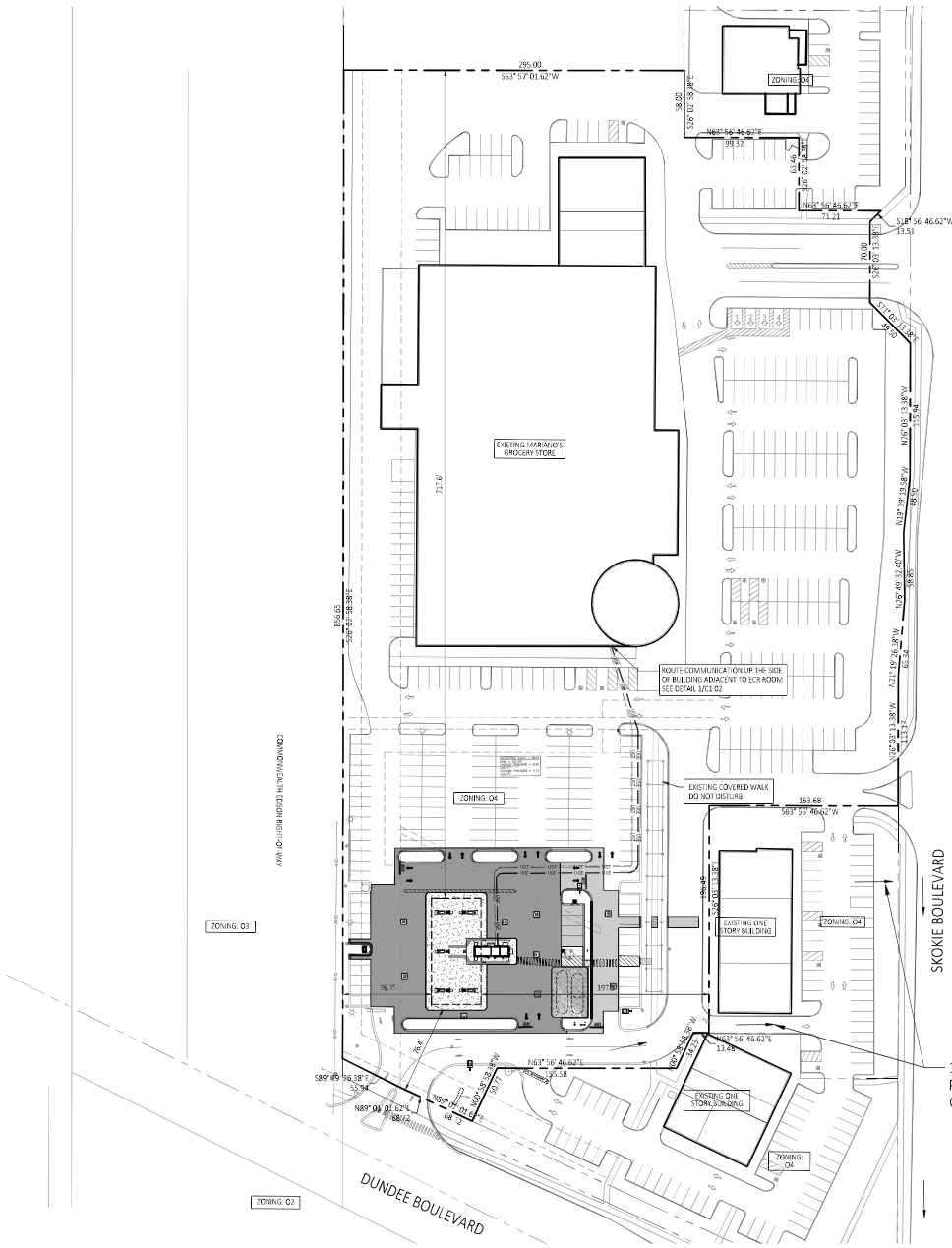
SCALE: 1" = 20'

1 OF 1

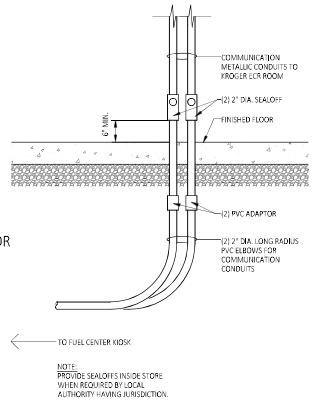
PROJ NO: 25.0224

9/30/2025 4:53 PM – J:\PROJECTS\2025 PROJECTS\25.0224\25.0224 BNDY TOPO.DWG

J:\Projects\2025 Projects\25.0224\25.0224 BNDY TOPO.dwg, 9/30/2025 4:53:41 PM



COMPOSITE SITE PLAN
SCALE: 1" = 50'-0"



NOTE:
PROVIDE SEALOFFS INSIDE STORE WHEN REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.

1 / C1.02 **CONDUITS FOR FUEL CENTER**
SCALE: NOT TO SCALE

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Downers Grove, IL 60515
info@sevan.com www.sevan.com

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SEAL
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LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062-068956
STATE OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.03.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION
COMPOSITE SITE PLAN
MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.03.2025
DRAWN BY:	HS
CHECKED BY:	MV
PROJ. MGR:	BS

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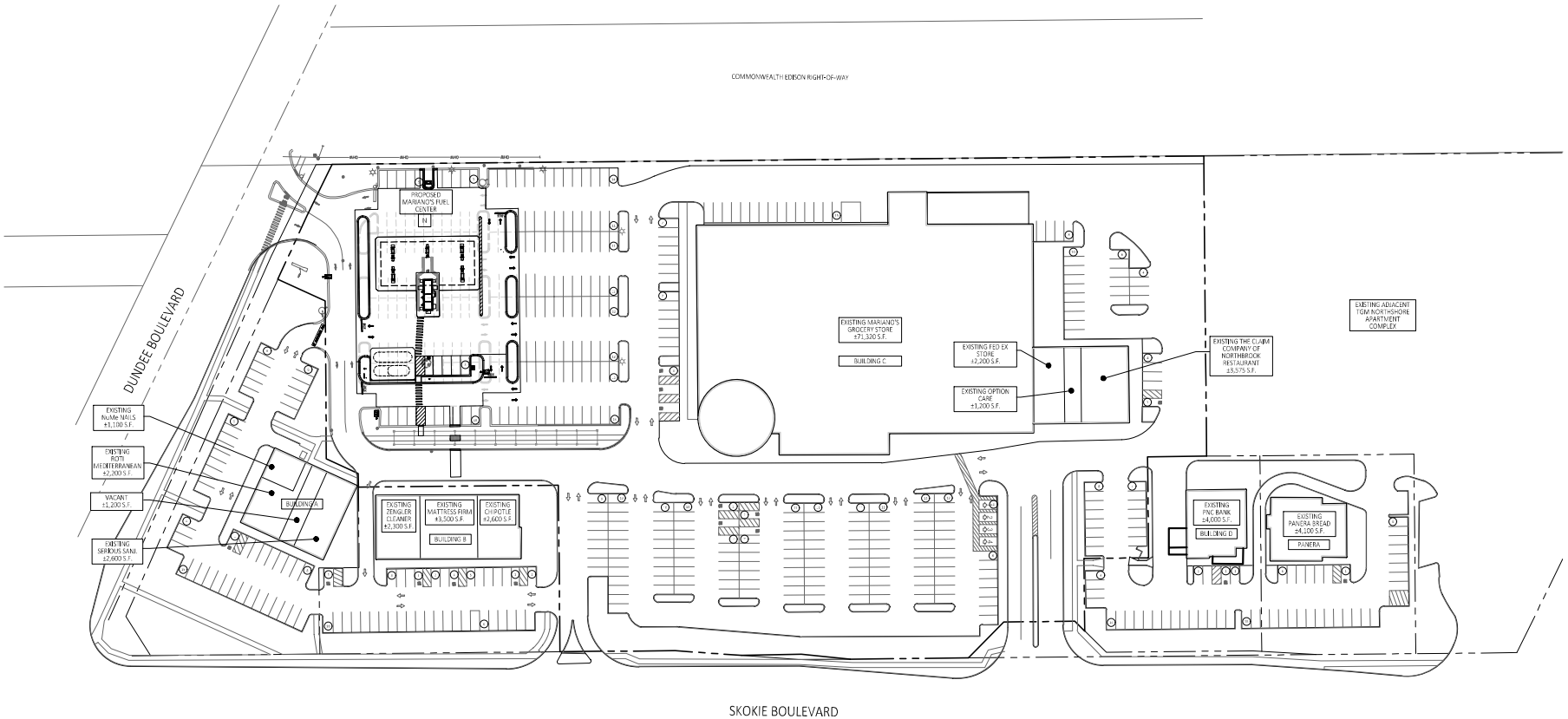
SHEET NUMBER
C1.02

PLOT: Z:\Projects\Marianos\Projects\M533 - Northbrook, IL\Active Docs\C1.02.dwg
PLOT BY: Brandon Sellers

NS770-COMMERCIAL PARKING CALCULATION					
ADDRESS	TENANT	TYPE	BUILDING AREA: (SQUARE FEET)	NBK CODE	TOTAL
BUILDING A	SERIOUS SANUASIAN CUISINE & BUBBLE TEA	RESTAURANT	±2,600	1 SPACE / 150 SF	17.33
	VACANT	RETAIL	±1,200	1 SPACE / 250 SF	4.8
	ROTI MEDITERRANEAN	RESTAURANT	±2,200	1 SPACE / 150 SF	14.66
	NUME NAILS	SALON-PERSONAL SERVICE	±1,100	1 SPACE / 150 SF	4.4
BUILDING B	CHIPOTLE	RESTAURANT	±2,600	1 SPACE/150 SF	17.33
	MATTRESS FIRM	RETAIL	±3,500	1 SPACE/250 SF	14
	ZENGLER CLEANERS	PERSONAL SERVICE	±2,300	1 SPACE/250 SF	9.2
BUILDING C	EXISTING THE CLAIM COMPANY OF NORTHBROOK RESTAURANT	RESTAURANT	±3,575	1 SPACE/150 SF	23.82
	OPTION CARE	MEDICAL CLINIC	±1,200	1 SPACE/250 SF	4.8
	FED EX STORE	RETAIL	±2,200	1 SPACE/250 SF	8.8
	MARIANO'S GROCERY STORE	RETAIL	±71,320	1 SPACE/250 SF	285.28
BUILDING D	PNC BANK	BANK	±4,000	1 SPACE/250 SF	16
BUILDING E	PANERA BREAD	RESTAURANT	±4,100	1 SPACE/150 SF	27.33
	TOTAL BUILDING AREA		101,895 S.F.		
BUILDING F	MARIANO'S FUEL CENTER	FUEL SALES	±298	1 SPACE/250 SF	1.19
			102,193 S.F.		449

COMMERCIAL DEVELOPMENT			
SHOPPING CENTER PARKING CHART	ACTUAL BUILDING AREA		
TOTAL COMMERCIAL BUILDING SQUARE FOOTAGE	102,193 S.F.	RETAIL A:	7,100 S.F.
		RETAIL B:	8,400 S.F.
		RETAIL C:	71,320 S.F.
		RETAIL D:	6,975 S.F.
		RETAIL E:	4,000 S.F.
		PANERA	4,100 S.F.
		FUEL CENTER	298 S.F.
		TOTAL GLA:	102,193 S.F.
REQUIRED PARKING SPACES	449		
ACTUAL TOTAL PARKING: INCLUDING IN COUNT (15 ADA SPACES)	562 SPACES		
SPACES LOST TO FUEL CENTER	91 SPACES		
NEW TOTAL PARKING: INCLUDING (16 ADA SPACES)	471 SPACES		
ADA SPACES REQUIRED PER ILLINOIS ACCESSIBILITY CODE	9 SPACES		
ADA SPACES PROVIDED	16 SPACES		



COMPOSITE SITE PARKING PLAN

SCALE: 1" = 50'-0"

0 50' 100'

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REVISIONS

REV.	DATE	DESCRIPTION
1	01.13.2026	MT1 PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

COMPOSITE SITE PARKING PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	14519
ISSUED DATE:	11.03.2025
DRAWN BY:	KB
CHECKED BY:	MV
PROJ. MGR:	JG

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SHEET NUMBER

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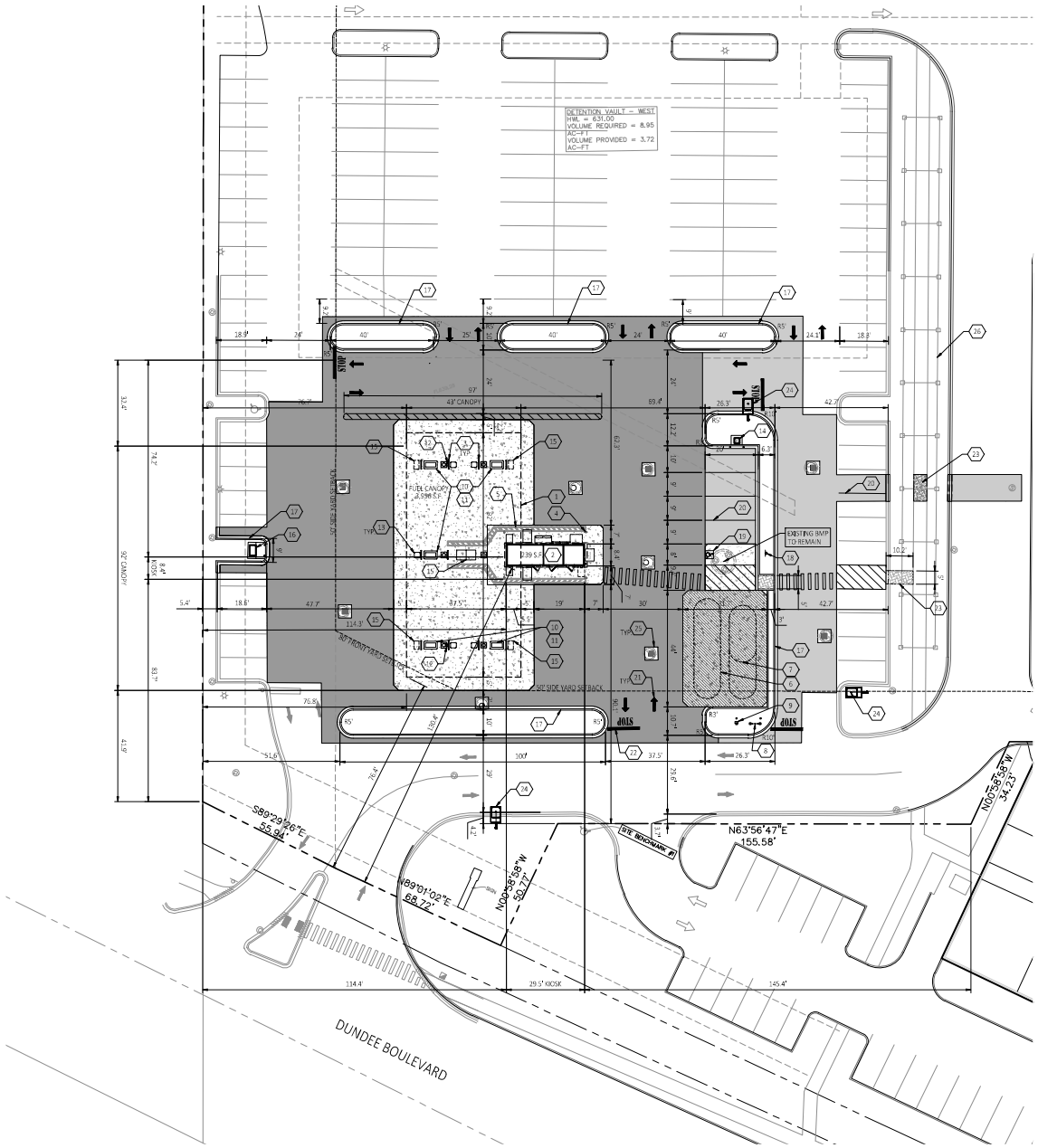

SITE DIMENSION PLAN

SCALE: 1" = 20'-0"

0 20' 40'

GENERAL SITE NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL VERIFY SITE CONDITIONS AND DIMENSIONS BEFORE BEGINNING WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL REFER TO SURVEY FOR ALL INFORMATION REGARDING EXISTING CONDITIONS.
4. ALL WORK THAT OCCURS WITHIN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS AND STANDARDS.
5. SITE GEOMETRY IS PARALLEL AND PERPENDICULAR TO THE EAST PROPERTY LINE.
6. ALL RADII ARE 3' UNLESS NOTED OTHERWISE.

(X) PROPOSED SITE IMPROVEMENTS

1 DISPENSER CANOPY, COLUMNS, AND FOOTINGS.
2 TRANSACTION KIOSK.
3 U-SHAPED BOLLARD AT CANOPY COLUMNS.
4 KIOSK BOLLARD.
5 PEDESTRIAN STRIPING.
6 20,000 GALLON DOUBLE-WALL UNDERGROUND STORAGE TANK (UNLEADED).
7 18,000 GALLON DOUBLE-WALL SPLIT UNDERGROUND STORAGE TANK 8,000 GALLONS PREMIUM/10,000 GALLONS DIESEL.
8 TANK VENT RISER.
9 TANK OVERFLOW ALARM.
10 3.00' X 5.00' DISPENSER ISLAND.
11 AUTOMOBILE MULTI-PRODUCT DISPENSER WITH CARD READER.
12 FIRE EXTINGUISHER IN STEEL CABINET.
13 WASTE RECEPTACLE / WINDSHIELD SERVICE CENTER.
14 AIR TOWER.
15 OUTDOOR SALES.
16 PROPANE BOTTLE CAGE.
17 CONCRETE CURB AND GUTTER.
18 ACCESSIBLE RESERVED PARKING SIGN AS REQUIRED BY FEDERAL, STATE OR LOCAL CODE.
19 VAN ACCESSIBLE PARKING SPACE WITH PAINTED ACCESSIBILITY SPACE SYMBOL AS REQUIRED BY FEDERAL, STATE OR LOCAL CODE.
20 4" PAINTED PARKING STRIPE
21 PAINTED DIRECTIONAL TRAFFIC ARROWS. COLOR TO MATCH PARKING STRIPING.
22 STOP BAR AND TEXT. SEE DETAIL 4/C5.01.
23 CONCRETE SIDEWALK. VERIFY SIDEWALK THICKNESS WITH ADJACENT
24 LIGHT POLE AND FOUNDATION. SEE PHOTOMETRIC SITE PLAN. SEE DETAIL 7/C5.02.
25 CONCRETE COLLAR. SEE DETAIL 7/C5.01.
26 EXISTING COVERED WALK TO REMAIN.

PAVING LEGEND:

- HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL 3/ C5.01
- LIGHT DUTY ASPHALT PAVEMENT SEE DETAIL 2/ C5.01
- CONCRETE PAVEMENT TANK MAT
- CONCRETE SIDEWALK SEE DETAIL 6/ C5.01
- CONCRETE PAVEMENT DISPENSER MAT
- CONCRETE CURB AND GUTTER SEE CITY OF NORTHBROOK DETAIL, SHEET 5.03

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REVISIONS

REV.	DATE	DESCRIPTION
0	11.03.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.15.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

SITE DIMENSION PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.03.2025
DRAWN BY:	KB
CHECKED BY:	MV
PROJ. MGR:	JB

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SHEET NUMBER

C1.20

PLOT: Z:\Sevan\Client Files\Mariano's - Raceway Sets to Engage\2025 Jobs\3 Northbrook, IL\CAD\Sheets\C1.20.dwg
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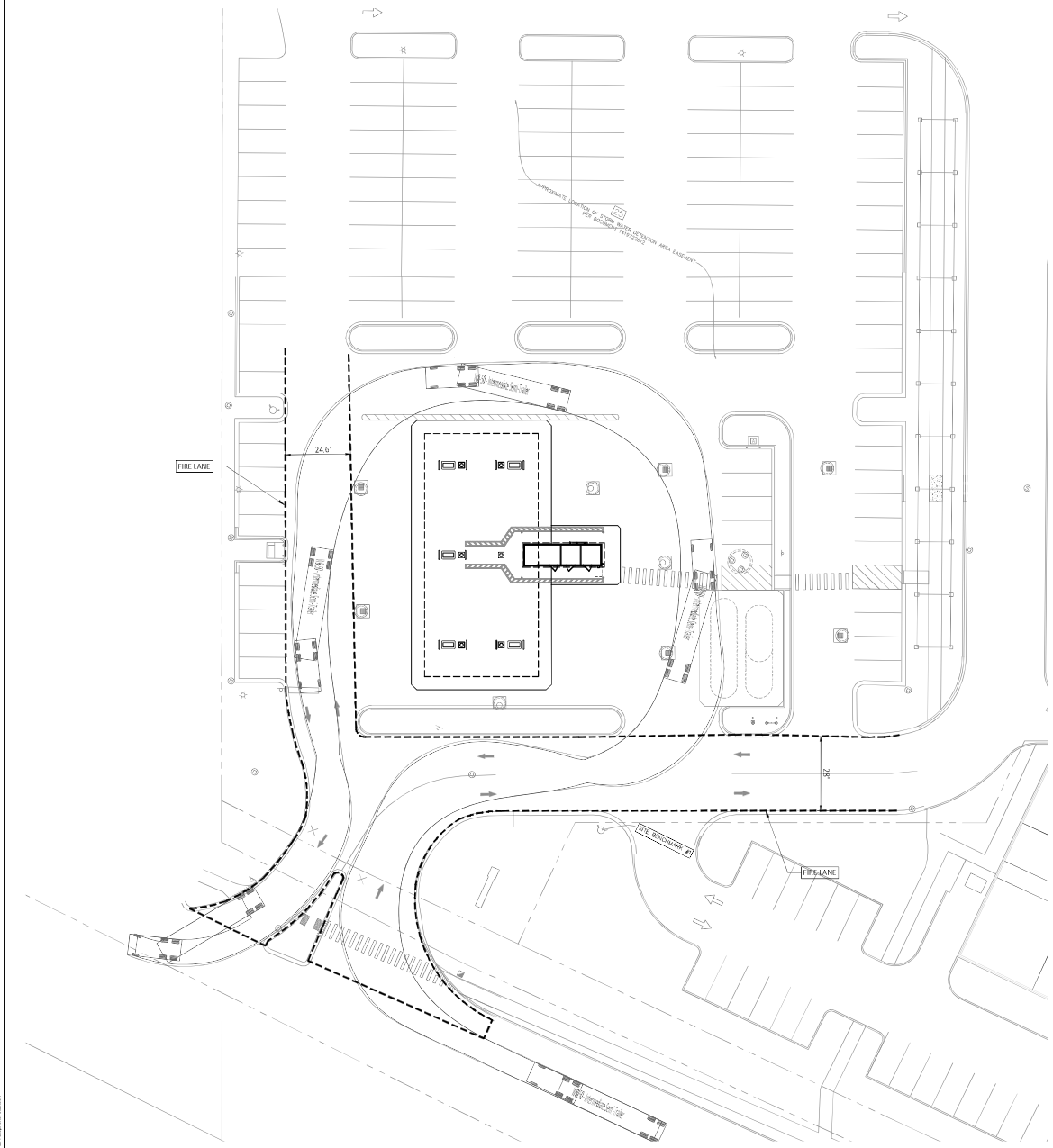
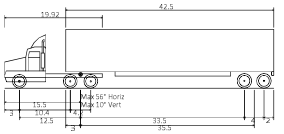
PLOTTED BY: Matthew Vallejo



TRUCK TURN PLAN

SCALE: 1" = 20'-0"

0 20' 40'



WB-50 - Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	45.000ft

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LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062.068956
OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.03.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

TRUCK TURN PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.03.2025
DRAWN BY:	HS
CHECKED BY:	MV
PROJ. MGR:	BS

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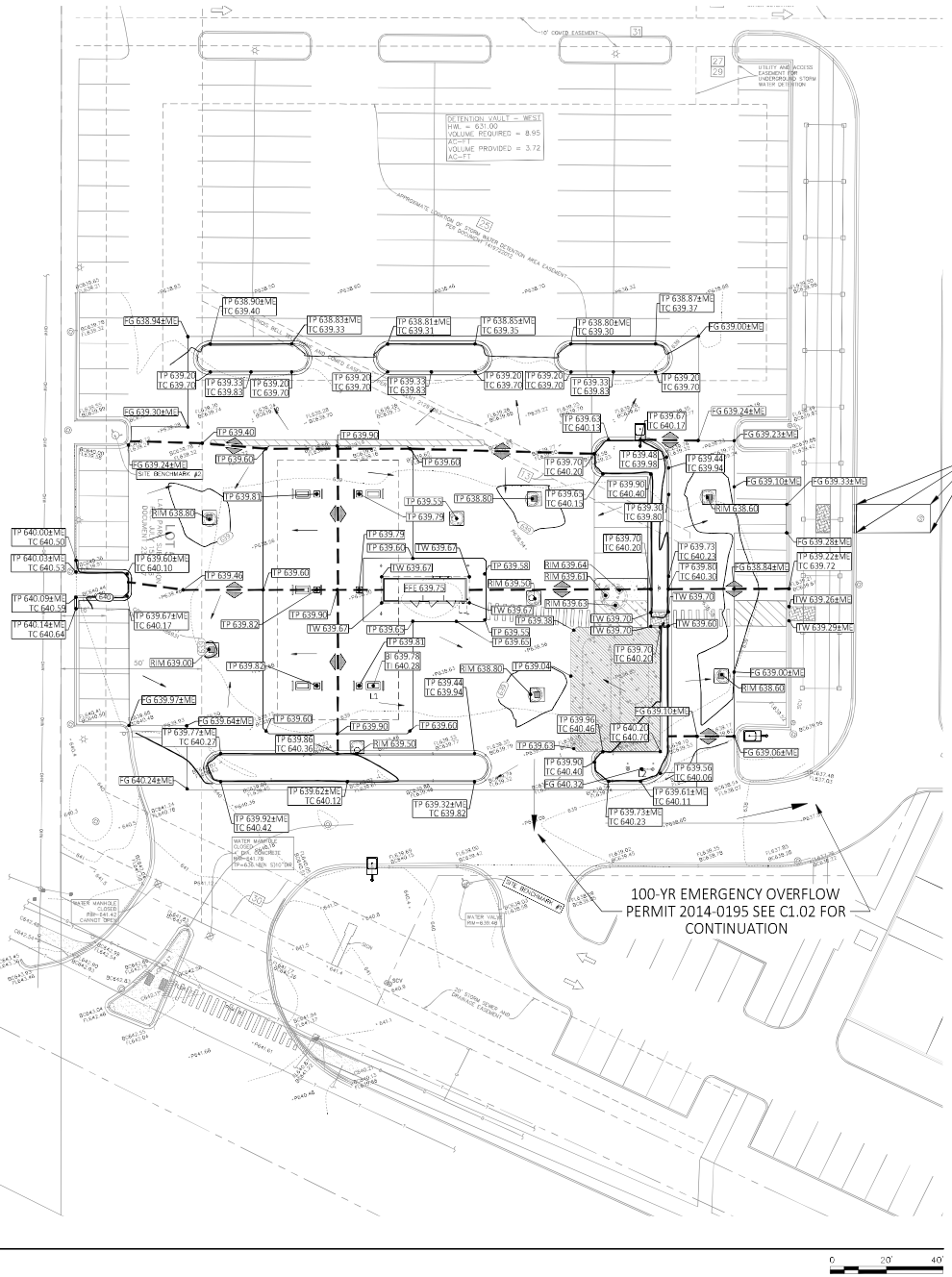
PLOT: Z:\Sevan\Clients\Mariano's_Razorsa tes\Orange\021-0053 Northbrook, IL\ACad\Sheets\C1.21.dwg
PLOT DATE: 2/18/2026 8:46 AM By: Matthew Vanderpool



GRADING PLAN

SCALE: 1" = 20'-0"

GRADING NOTES:

1. VERIFY REQUIRED SPOT ELEVATIONS/GRADING IN THE VICINITY OF THE BUILDING WITH THE ARCHITECTURAL PLANS AND STORE-DCS SCOPE OF WORK.

3. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE WITH THE DRAWINGS AND PROJECT MANUAL, AND WITH LOCAL JURISDICTIONAL AUTHORITY STANDARDS AND SPECIFICATIONS.

4. ALL PROPOSED SPOT ELEVATIONS IN PAVED AREAS ARE TO TOP OF PAVEMENT UNLESS NOTED OTHERWISE.

5. THE PROJECT SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES, ENSURING NO AREAS OF STANDING WATER.

6. THE GENERAL CONTRACTOR SHALL, AT HIS OR HER EXPENSE, RESTORE ANY AND ALL STRUCTURES, PIPE, UTILITY, PAVEMENT, CURB, SIDEWALK, LANDSCAPED AREA, ETC. DISTURBED WITHIN THE SITE AND/OR ADJOINING PROPERTIES DURING DEMOLITION OR CONSTRUCTION. SUCH FACILITIES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE AFFECTED OWNER(S).

7. UNDERDRAINS MAY BE ADDED, IF DETERMINED NECESSARY BY THE GENERAL CONTRACTOR AND AUTHORIZED BY THE OWNER'S REPRESENTATIVE, AFTER SUBGRADE IS ROUGH GRADED.

8. UNLESS OTHERWISE EXPRESSLY INDICATED HEREON, FINISHED GRADES ARE TO MATCH ADJACENT EXISTING GRADES.

9. THE GENERAL CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. PROTECT EXISTING TREES TO REMAIN WITH TEMPORARY FENCING PLACED AT THE DRIP LINE. NO GROUND DISTURBANCE OR STORAGE OF MATERIAL SHALL OCCUR WITHIN THE DRIP LINE LIMITS, UNLESS HEREON EXPRESSLY INDICATED OTHERWISE.

10. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS AND MATERIALS OF CONSTRUCTION TO COMPLETE THE CONSTRUCTION PER THE DRAWINGS AND PROJECT MANUAL. ADDITIONALLY, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL, AS WELL AS THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE PROJECT.

GRADING LEGEND:

TG	GUTTER GRADE
TC	TOP OF CURB
BW	FINISHED GRADE AT WALL
FG	FINISHED GRADE
FL	DITCH FLOW LINE
PI	PUMP ISLAND BOTTOM
TI	PUMP ISLAND TOP
TP	TOP OF PAVEMENT
RIM	UNDERGROUND STRUCTURE RIM
TW	TOP OF WALK
FFE	FINISHED FLOOR ELEVATION
ME	MATCH EXISTING
2.0%	PROPOSED SLOPE
→	DIRECTION OF OVERLAND FLOW

FUEL TANK ELEVATION COORDINATION CHART

NO.	DESCRIPTION	CLOSEST ISLAND [L1]	TANK VENT [L2]
1	ELEVATION AT TOP OF ISLAND	640.28	640.32
2	PRODUCT PIPE RUN DISTANCE [L]	142	46
2.1	MIN. SLOPE OF PIPING = (L)x1/8" PER FOOT x (1/12)	1.48 FT.	0.48 FT.
3	DISPENSER ISLAND 6" / CONCRETE DRIVE SLAB 6" / PIPE COVER 8" / PIPE DIAMETER 3" / TANK CONNECTION 10" / TOTAL 33"	2.75	-
3.1	CURB ISLAND 6" / PIPE COVER 16" / PIPE DIAMETER 2" / TANK CONNECTION 6" / TOTAL 30"	-	2.50
4	GRADE DIFFERENTIAL = (#2.1 + #3)	4.23 FT.	2.98 FT.
5	TOP OF TANKS = (#1 - #4)	636.05 FT.	637.34 FT.
6	TOP OF TANKS = LOWEST CALCULATED ELEVATION	636.05 FT.	
CHECK MIN./MAX. BURIAL DEPTH			
7	LOWEST ELEVATION OF SLAB ABOVE TANK	639.07	
8	DEPTH OF BURY = (#7 - #6)	3.02 FT.	
NOTE: IF #8 < 4.0 FT., SET TOP OF TANKS = (#7 - 4.0 FT.) IF #8 > 7 FT., CONTACT OWNER FOR CERTIFICATION OF BURIAL DEPTH WITH TANK MANUFACTURER		635.07 FT.	

CANOPY PAD ELEVATION COORDINATION CHART:

TOP OF GRADE AT LOWEST CANOPY COLUMN = 639.75

ELEVATION OF ALL TOP OF FOOTINGS (PER CANOPY DRAWING) = 638.04

1. ELEVATIONS OF TOP-OF-CANOPY-COLUMN-FOOTINGS AT DISPENSER ISLANDS SHALL BE IDENTICAL.
2. TOP OF ALL CANOPY FOOTINGS SHALL BE 1'-8 1/2" LOWER THAN TOP OF GRADE AT THE LOWEST CANOPY COLUMN.
3. THE GENERAL CONTRACTOR SHALL BASE BIDS ON FOOTING ELEVATIONS AS INDICATED. ANY MODIFICATION TO FOOTING ELEVATIONS MUST BE APPROVED BY OWNER'S REPRESENTATIVE IN WRITING.
4. VERIFY ELEVATIONS FOR BUILDING(S), CANOPY, SIGNS AND OTHER STRUCTURE PER DRAWINGS. THE GENERAL CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.

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MARIANO'S

SEAL

I HEREBY CERTIFY THAT THESE DRAWINGS WAS BEEN PREPARED UNDER MY DIRECT SUPERVISION AND, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, COMPLY WITH THE BUILDING CODES AND ORDINANCES OF THE LOCAL MUNICIPALITY.

LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062-068956
STATE OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.05.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS
4	02.18.2026	MWRD COMMENTS

CONSULTANTS

PROJECT INFORMATION

GRADING PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.05.2025
DRAWN BY:	HS
CHECKED BY:	MV
PROJ. MGR:	BS

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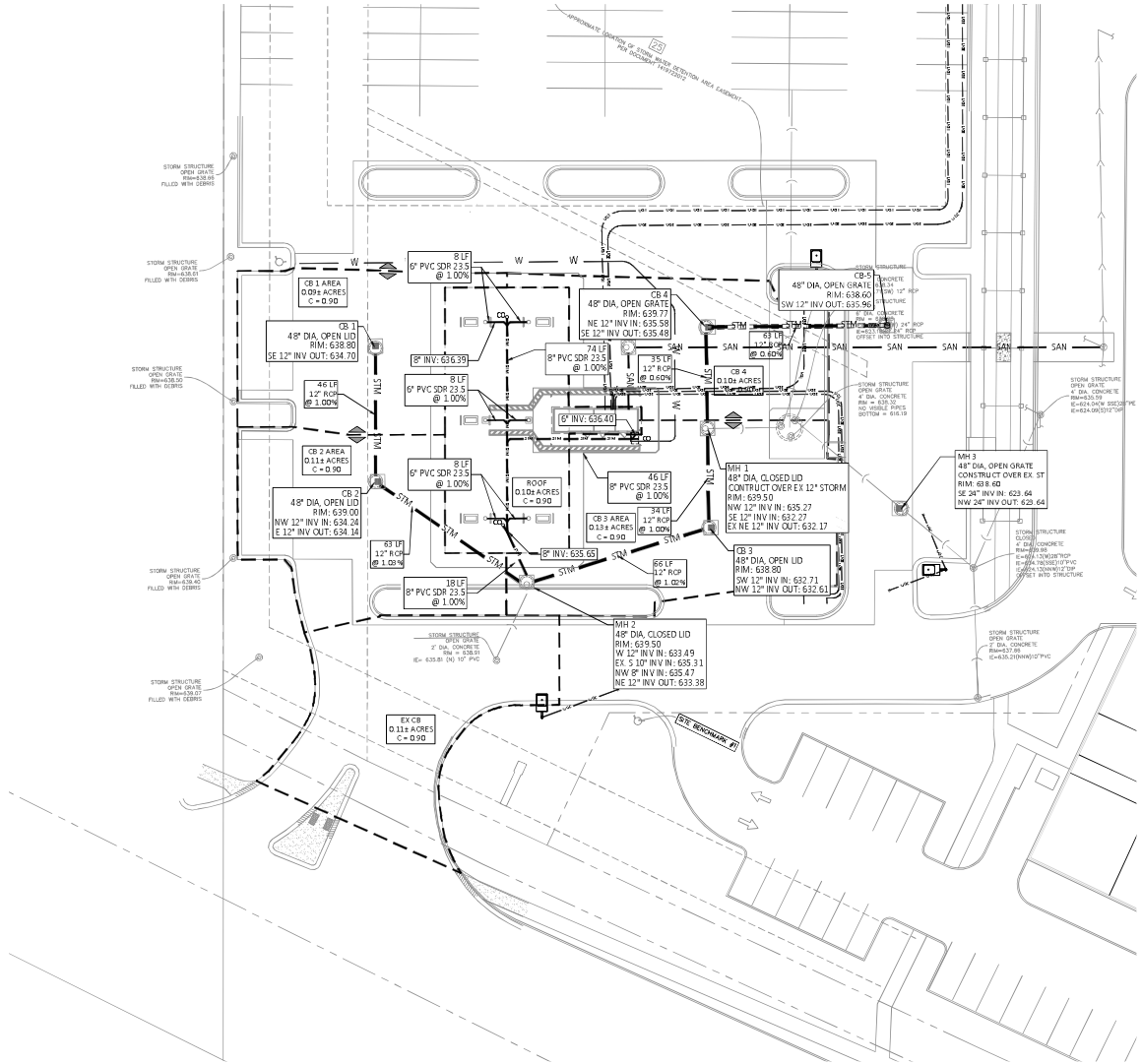
SHEET NUMBER

C1.30

PLOT: P:\Projects\Marianos\Marianos Illinois\Engr\D01-M533 Northbrook, IL\CAD\Sheet\C1.30.dwg
PLOT BY: Hannah Sievers

Pipe Location		Tributary Area				Intensity			Runoff	Pipe Design								Profile							
From	To	Area (acre)	C	AC (acre)	SAC (acre)	Inlet Tc (min)	Tc (min)	I (10yr) (in/hr)	Flow (cfs)	Pipe Length (feet)	Pipe Dia. (inch)	Pipe Slope %	Hyd. Slope %	Q_{full} (cfs)	V_{full} (fps)	V_{design} (fps)	Depth of Flow %	Time in Pipe (min)	Rim Elevation	Water Surface Elev Up Stream	Water Surface Elev Down Stream	Water Surface Elev MH Loss	Pipe Invert Elev Up Stream	Pipe Invert Elev Down Stream	Pipe Invert Elev Drop
CB 4	MH 1	0.10	0.9	0.09	0.09	10	10.00	6.48	0.59	35'	12"	1.00%	1.00%	3.56	4.53	3.62	32%	0.16	638.80 TP	636.09	635.74	0.00	635.77	635.42	0.00'
CB 1	CB 2	0.09	0.9	0.08	0.08	10	10.00	6.48	0.54	46'	12"	1.00%	1.00%	3.56	4.53	3.49	30%	0.22	638.80 TP	635.00	634.59	0.00	634.70	634.24	0.10'
CB 2	MH 2	0.11	0.9	0.10	0.18		10.22	6.44	1.15	66'	12"	1.00%	1.00%	3.56	4.53	4.45	45%	0.24	639.00 TP	634.59	634.04	0.00	634.14	633.49	0.10'
MH 2	CB 3	0.21	0.9	0.19	0.37		10.47	6.39	2.37	67'	12"	1.00%	1.00%	3.56	4.53	5.17	65%	0.22	639.00 TP	634.04	633.41	0.00	633.39	632.71	0.10'
CB 3	MH 1	0.13	0.9	0.11	0.48		10.68	6.35	3.07	34'	12"	1.00%	1.00%	3.56	4.53	5.39	79%	0.11	638.80 TP	633.41	633.06	0.00	632.61	632.27	0.10'
MH 1	EXMH	0	0.9	0.00	0.58	10	10.79	6.34	3.65	24'	12"	1.89%	1.89%	4.89	6.23	7.26	71%	0.06	639.50 TP	632.97	632.71	0.00	632.17	631.71	0.00'

STORM PIPE CAPACITY CALCULATIONS - 10 YEAR STORM



STORMWATER MANAGEMENT PLAN

SCALE: 1" = 20'-0"

0 20' 40'

STORM STRUCTURE NOTES:

1. ALL STORM STRUCTURES TO BE INSTALLED IN ACCORDANCE WITH LOCAL STANDARDS AND DETAILS UNLESS NOTED OTHERWISE.
2. PROVIDE INLET FILTERS FOR ALL INLETS. FILTER SHALL BE REGULARLY MAINTAINED AND REMAIN IN PLACE UNTIL FINAL GRADES HAVE BEEN ESTABLISHED.
3. ALL STRUCTURE FRAME AND GRATES TO BE STANDARD UNLESS NOTED OTHERWISE.
4. ALL CATCH BASINS AND INLETS SHALL HAVE UNDERDRAINS INSTALLED, WRAPPED IN GEOTEXTILE AND PLACED IN THE SEWER TRENCH, NOT MORE THAN 3 FEET BELOW THE TOP OF THE CASTING.
5. SEE SHEET C1.40 FOR UTILITY CROSSINGS.
6. REFER TO THE BOUNDARY/TOPOGRAPHIC SURVEY PREPARED BY COMPASS SURVEYING LTD FOR INFORMATION REGARDING EXISTING EASEMENTS.
6. THIS PROJECT AREA IS PART OF THE DRAINAGE PLAN AND REPORT FOR NORTHSHORE 770, MWRD IOC PERMIT #14-195. THE ORIGINAL WATER QUALITY AND QUANTITY DESIGN ACCOUNTED FOR THE DEVELOPMENT OF THE PROJECT AREA. NO ADDITIONAL DETENTION OR TREATMENT IS REQUIRED.

PROPOSED UTILITY LEGEND:

STORM SEWER	STM
ROOF DRAIN	RD
MANHOLE	
CATCH BASIN	
CLEANOUT	CO

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[redacted]

LICENSED PROFESSIONAL ENGINEER TIMOTHY B KRATZ 062 068868

02/18/2029

REVISIONS

REV.	DATE	LAND DISTURB
0	11.08.2029	SITE PLAN/SPECIAL USE
1	01.13.2030	SITE PLAN RESUBMITTAL
2	01.13.2030	MWRD
3	02.18.2030	PLANNING COMMENTS
4	02.18.2030	MWRD COMMENTS

CONSULTANTS

PROJECT INFORMATION

STORMWATER MANAGEMENT PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.08.2029
DRAWN BY:	HD
CHECKED BY:	MV
PROJ. MGR:	BC

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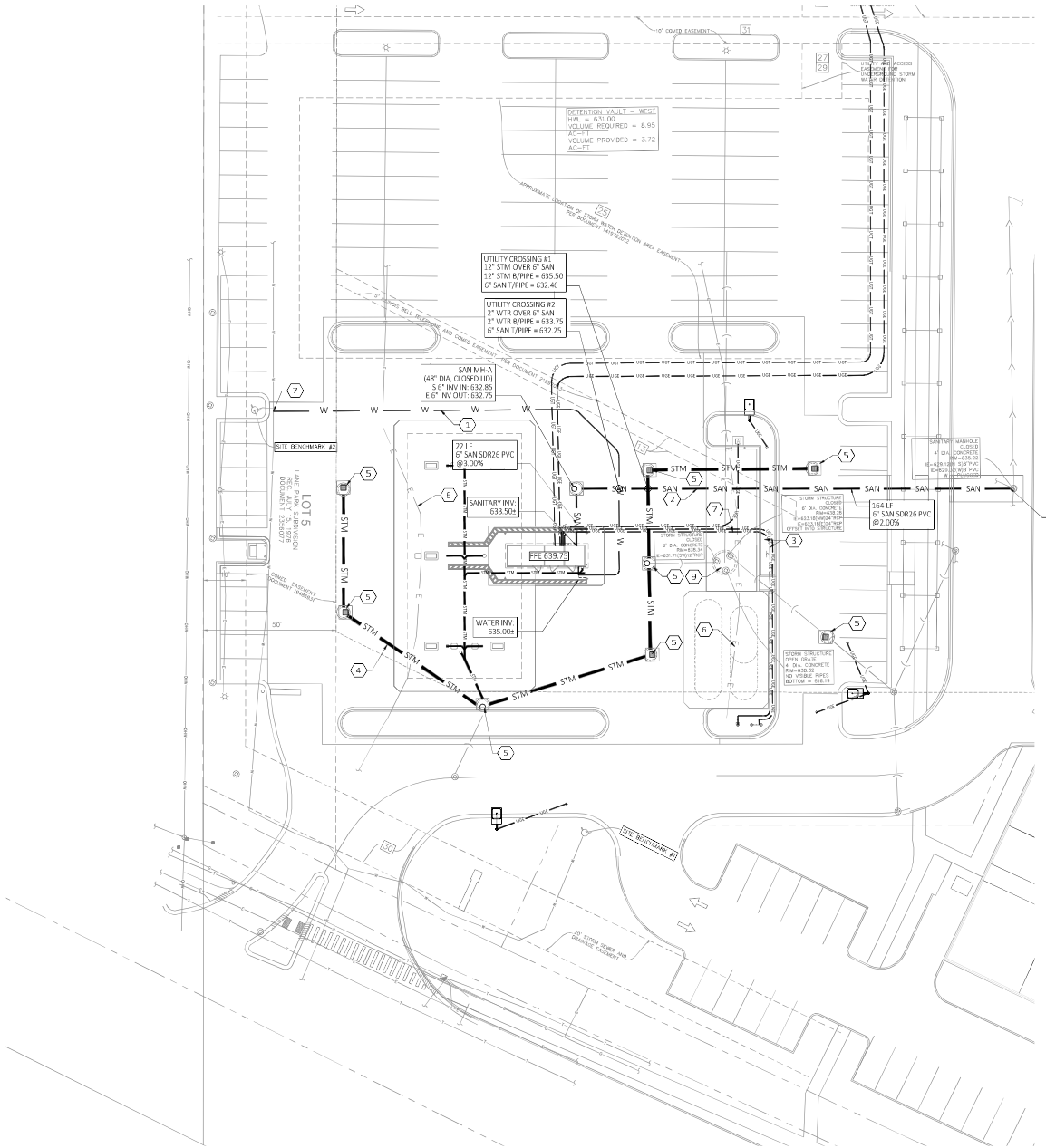
SHEET NUMBER

C1.31



UTILITY PLAN

SCALE: 1" = 20'-0"

UTILITY SERVICE NOTE:

THE GENERAL CONTRACTOR (GC) IS RESPONSIBLE FOR ALL SERVICE APPLICATIONS AND FIELD COORDINATION OF UTILITY SERVICES AND FINAL CONNECTION LOCATIONS. THE GC SHALL IMMEDIATELY NOTIFY THE OWNER'S CONSTRUCTION REPRESENTATIVE OF ANY DISCREPANCIES WITH THE PLANS.

(X) PROPOSED SITE IMPROVEMENTS

1. 2" DOMESTIC WATER SERVICE. PIPING TO BE .COPPER TYPE K OR OWNER APPROVED EQUIVALENT. MINIMUM BURIAL DEPTH TO BE 5.0' BELOW FINISHED GRADE. PROVIDE 18" CLEARANCE AT ALL UTILITY CROSSINGS. CONTRACTOR TO COORDINATE LOCATION OF SANITARY SEWER LATERAL THROUGH FOUNDATION WITH STRUCTURAL DRAWINGS. VERIFY REQUIREMENTS OF LOCAL CODES, UTILITY COMPANIES AND GOVERNING OFFICIALS. INCLUDE IN BASE BID ALL VALVES, PIPING, STRUCTURES, ETC. THAT WILL BE REQUIRED.
2. PROVIDE AND INSTALL 6" PVC SDR-26 SANITARY SERVICE AT MIN. 1% SLOPE WITH CLEAN-OUTS 5.0' OUTSIDE OF FOUNDATION AND AT EVERY HORIZONTAL AND VERTICAL BEND PER CLEAN-OUT DETAIL. COORDINATE LOCATION OF SANITARY SEWER LATERAL THROUGH FOUNDATION WITH STRUCTURAL DRAWINGS. MAINTAIN A MINIMUM OF 10' HORIZONTAL AND 18" VERTICAL SEPARATION FROM WATER MAKE CONNECTION TO EXISTING SANITARY MAIN PER SERVICE PROVIDER AND OR MUNICIPAL STANDARDS.
3. PROVIDE AND INSTALL TWO (2) 3/4" SCHEDULE 40 PVC CONDUIT FROM FUEL CENTER KIOSK TO TANK VENT.
4. STORM SEWER PIPE. SEE SHEET C1.31.
5. STORM STRUCTURE. SEE SHEET C1.31.
6. RE-ROUTE OR ABANDON EXISTING ELECTRICAL LINE
7. CONNECT TO EXISTING WATER MAIN ACCORDING TO CITY OF NORTHBROOK STANDARDS AND SPECIFICATIONS
8. PROVIDE AND INSTALL ONE (1) 3/4" SCHEDULE 40 PVC CONDUIT FROM FUEL CENTER KIOSK TO AIR COMPRESSOR FOR 120V POWER.
9. EXISTING BMP STRUCTURE. SEE PERMIT 2014-0165 PG 385 FOR DETAILS.

PROPOSED UTILITY LEGEND:

STORM SEWER	STM — STM
ROOF DRAIN	STM — STM — STM — STM
SANITARY SEWER	SAN — SAN
WATER MAIN/SERVICE	W — W
ELECTRIC SERVICE	UGE — UGE
TELEPHONE SERVICE	UGT — UGT
MANHOLE	
CATCH BASIN	
CLEANOUT	
SANITARY MANHOLE	
SANITARY CLEANOUT	
LIGHT POLE	
FUEL VENT	
AIR TOWER	

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LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062-068956
STATE OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.03.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

UTILITY PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.03.2025
DRAWN BY:	HB
CHECKED BY:	MV
PROJ. MGR:	BS

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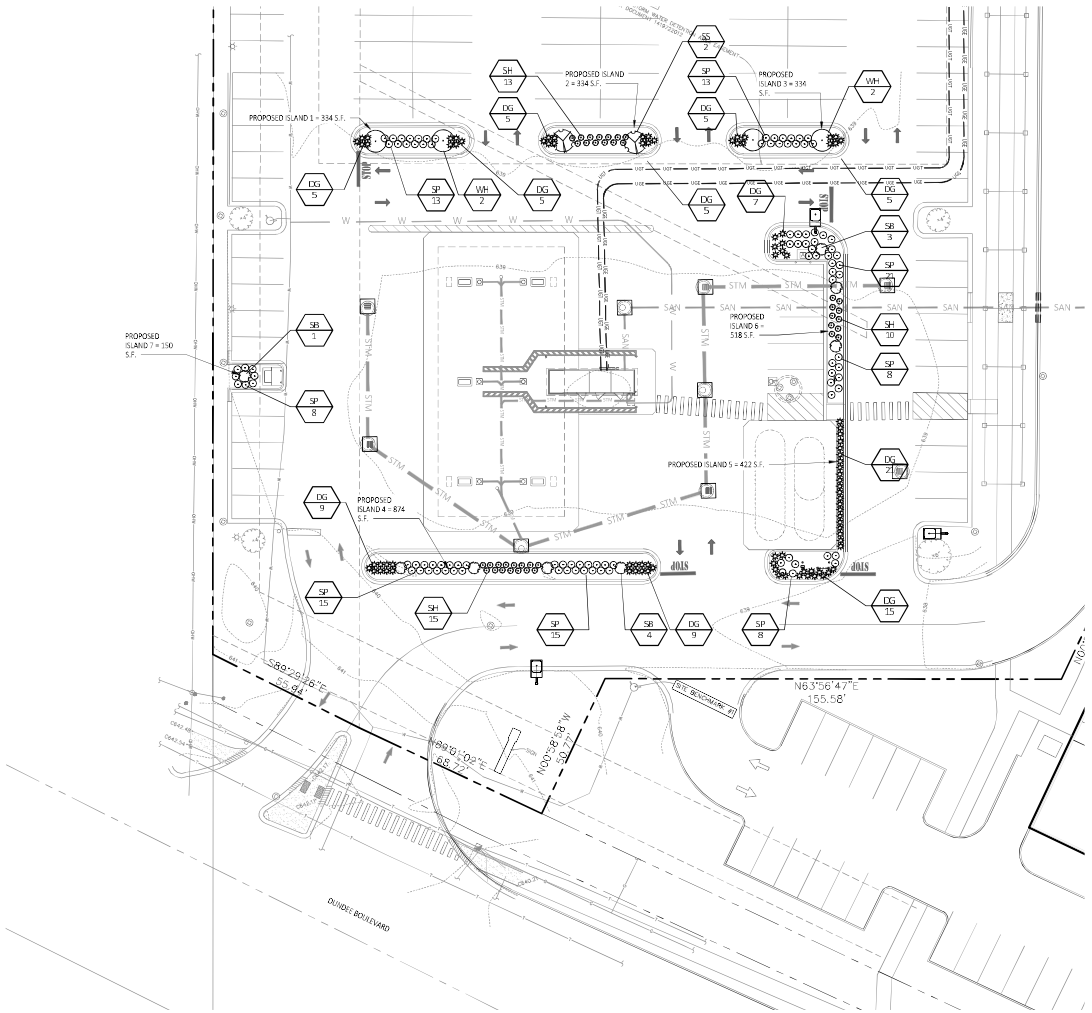
SHEET NUMBER

C1.40

PLOT: Z:\Sevan\Clients\Mariano's\Submissions\Site Plan\M533 - Northbrook, IL\Active Docs\C1.40.dwg
PLOT DATE: 02/18/2026 BY: Benjamin Schmitz

PLANT AND MATERIAL SCHEDULE							
	KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
DECIDUOUS TREE	SB	8	-	SERVICEBERRY			
MEDIUM TREE	WH	4	HAMAMELIS VERNALIS	WITCHHAZEL			
	SS	2	ACER MIYABE	STATE STREET MIYABE MAPLE			MORTON, RUGGED RIDGE
GRASSES	DG	91	-	'DWARF ORNAMENTAL GRASS'	1 GAL		
SHRUBS	SP	101	-	DECIDUOUS SHRUB	3 GAL		
	SH	38	-	DECIDUOUS SHRUB	3 GAL		

NOTES:
1. ALL DISTURBED LANDSCAPE AREAS NOT TO BE RESTORED TO MATCH EXISTING.



LANDSCAPE PLAN

SCALE: 1" = 20'-0"

0 20' 40'

LANDSCAPE NOTES:

1. ALL TREES AND SHRUBS SHALL BE STAKED IN THE FIELD FOR APPROVAL BY THE ENGINEER PRIOR TO PLANTING.
2. PLANT MATERIAL SHALL COMPLY WITH ALL SIZING AND GRADING STANDARDS OF LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK".
3. ANY SUBSTITUTIONS OF PLANT MATERIAL OR ALTERATION IN PLANT SIZES, SPECIFICATION OR LOCATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED, AND WRAPPED. SEE LANDSCAPE DETAILS.
5. PLANT BEDS TO BE MULCHED AND DRESSED WITH 4" MIN. OF SHREDDED HARDWOOD WITH PRE-EMERGENT HERBICIDE. SEE DETAIL THIS SHEET.
6. DIG SHRUB PIT 1' FOOT LARGER THAN SHRUB ROOT BALLS AND THREE PITS TWO FEET LARGER THEN ROOT BALL. BACK FILL WITH TWO PARTS TOP SOIL AND ONE PART COMPOST.
7. REMOVE ALL TWINE, WIRE, AND BURLAP FROM TREE AND SHRUB ROOT BALLS, AND FROM TRUNKS.
8. ALL DISTURBED AREAS NOT DESIGNATED AS PAVEMENT, OR PLANTING BEDS, SHALL BE SODDED. ALL TURF AREAS SHALL CONSIST OF A MINIMUM 8" THICKNESS TOPSOIL FREE OF CLAY DEBRIS, STICKS OR ROCKS IN EXCESS OF 1" IN DIAMETER. ALL TOPSOIL AREAS SHALL BE FINE GRADED AND RAKED, REMOVING RIDGES AND FILLING DEPRESSIONS AS REQUIRED TO MEET FINISHED GRADES AND CREATE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
9. LAWN TREES TO BE MULCHED WITH 4' WIDE MINIMUM OF 4" DEEP SHREDDED BARK RING OR APPROVED ALTERNATE DESIGN FOR TRUNK PROTECTION.
10. PROVIDE SEED FOR ALL NEW LAWN AREAS UNLESS NOTED OTHERWISE. TURF AREA SHALL BE TREATED WITH FERTILIZER APPLIED AT A RATE OF 1 POUND PER 1,000 SQUARE FEET.
11. INSTALLATION OF PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE STANDARDS.
12. AT THE TIME OF SITE PREPARATION, ENGINEER TO REVIEW ALL EXISTING VEGETATION, AND TAG MATERIALS TO BE SAVED OR RELOCATED.
13. ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
14. PLANT TREES AND SHRUBS GENERALLY NO CLOSER THEN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS, AND PARKING STALLS:
    a. SHADE TREES: 5 FEET
    b. ORNAMENTAL AND EVERGREEN TREES: 10 FEET (CRAB, PINE, SPRUCE, ETC.)
    c. SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY: 2 FEET
15. LOCATE ALL UTILITIES PRIOR TO DIGGING, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES.
16. NO TREES, EVERGREENS, AND SHRUBS SHALL BE INSTALLED OVER ANY EXISTING OR PROPOSED UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR EXACT LOCATION AND DETAILS.
17. LAWN AND LANDSCAPE AREAS TO BE FULLY IRRIGATED WITH AUTOMATIC UNDERGROUND SYSTEMS (BLVD ISLAND, CUL-DE-SAC AND GREENBELT). TO ESTABLISH, AND MAINTAIN GOOD AND HEALTHY TURF AND PLANT MATERIAL PER THE KROGER CO. KROGER MASTER BUILDING SPECIFICATIONS, SECTION 32 84 00 - PLANTING IRRIGATION OF THE PROCUREMENT AND CONTRACTING DOCUMENTS GROUP.
18. ALL LANDSCAPE PLANT MATERIAL TO BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND ACCEPTANCE.
19. ALL SHRUB PLANTINGS WITHIN SITE TRIANGLE AREAS TO BE MAXIMUM HEIGHT OF 30", AND FIRST BRANCHING FOR PROPOSED TREES TO BE MINIMUM OF 7' ABOVE PROPOSED GRADES.
20. ALL DISEASED, DAMAGED OR DEAD PLANT MATERIALS SHALL BE REPLACED IN ACCORDANCE WITH SPECIFICATIONS, AND LOCAL REGULATIONS.
21. PLANT FERTILIZER SHALL BE AGRIFORM 21 GRAIN TABLETS, SLOW RELEASE, 20-10-5 ANALYSIS AND/OR APPROVED EQUAL. RATES OF APPLICATION SHALL BE AS RECOMMENDED BY MANUFACTURER.

SOIL VOLUMES		
	AREA OF ISLAND (SQUARE FEET)	SOIL VOLUME (CUBIC YARDS)
PROPOSED ISLAND 1	334	24.7
PROPOSED ISLAND 2	334	24.7
PROPOSED ISLAND 3	334	24.7
PROPOSED ISLAND 4	874	64.7
PROPOSED ISLAND 5	422	31.3
PROPOSED ISLAND 6	518	38.4
PROPOSED ISLAND 7	150	11.1

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LICENSED PROFESSIONAL ENGINEER
TIMOTHY R KRATZ
062-068956
STATE OF ILLINOIS

02/18/2026

REVISIONS

REV.	DATE	DESCRIPTION
0	11.03.2025	SITE PLAN/SPECIAL USE
1	01.13.2026	SITE PLAN RESUBMITTAL
2	01.13.2026	MWRD
3	02.18.2026	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

LANDSCAPE PLAN

MARIANO'S - M533 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M533
ISSUED DATE:	11.03.2025
DRAWN BY:	
CHECKED BY:	
PROJ. MGR:	JB

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SHEET NUMBER

L1.20

PLOT: P:\Sevan\Clients\Marianos Northbrook\Drawings\01-00533 Northbrook, IL MG\Cad\Sheets\L1.20.dwg
PLOTTED: 2/18/2026 8:54 AM by Matthew Hoffman

To be incorporated into all construction documents for right-of-way improvements

The following specifications are guidelines to ensure that the parkway trees are not damaged during the proposed construction.

As with all guidelines, it will be in the contractor's best interest, to schedule a meeting prior to construction to ensure that all questions regarding proposed work and tree impacts are discussed and agreement reached with the Village Forester.

PROXIMITY TO TREES

- Any new sidewalk or street excavation to be made will require prior approval by the Village Forester.
- Site markings indicating proximity of proposed work shall be marked by each tree with paint prior to scheduling an inspection by the Village Forester.
- The permitted distance from the trunk of a tree to any proposed excavation is 6 feet or more.
- If the proposed improvement is within 6 feet or less of the tree, the tree may be required to be removed. (See Tree Removal).

TREE PRESERVATION FENCING

- Wooden slat snow fence will need to be erected from drip line to drip line of each tree within the construction area.
- Enclosed Tree Protection Detail will be part of the construction documents.

TREE ROOT PRUNING

- Root pruning shall be performed on any tree that is more than 6 feet from the proposed construction zone.
- Root pruning will **not be permitted** on any tree that is less than 6 feet away from proposed construction zone.
- Root pruning equipment must be approved by the Village Forester prior to use.
- Hand root pruning will not be permitted unless approved by the Village Forester. All hand root pruning will require a Certified Arborist's supervision.

TREE REMOVAL

- Tree removal is recommended for trees closer than 6 feet to a construction zone.
- The use of structural soil and barrier fabric will be considered as an alternative to tree removal.
- All tree removals require a written permit from the Village Forester **prior** to removal.

TREE CANOPY PRUNING

- Tree branches hanging into the construction zone may be pruned by a Certified Tree Worker.
- All pruning cuts must must ANSI A300-2001 Standards.
- No American Elms or Oaks may be pruned without written permission and instructions to Certified Arborist from the Village Forester between April 1st and October 31st.

DAMAGE TO TREES

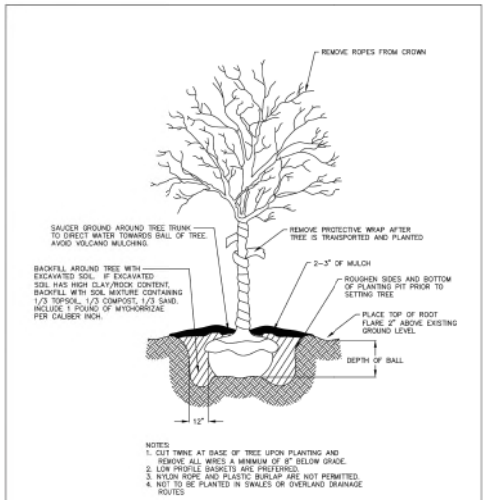
- Failure to follow these specifications will result in the contractor requiring to post a cash bond, equivalent to the value of each damaged tree, for a period not to exceed 3 years.
- Bond value will be determined by the Village Forester.
- The Village Forester reserves the right to stop the job for unsupervised work that is determined to cause irreparable damage to any right-of-way tree. Stop work order will be enforced until the cash bond is paid as determined.

CONSTRUCTION AND TREE PRESERVATION SPECIFICATIONS FOR PARKWAY TREES

DATE	REVISIONS
4-30-20	No Changes
4-1-21	Changed Page Format

STANDARD DETAIL G-12 (02)

(Sheet 1 of 1)



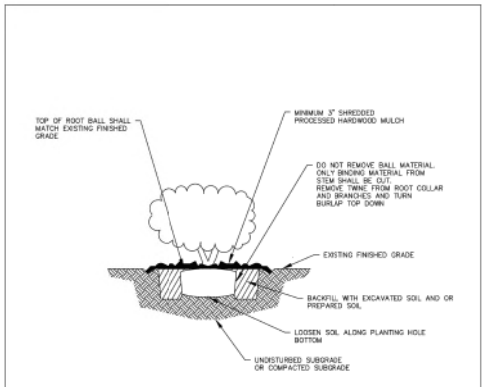
NOTES:
1. CUT TWINE AT BASE OF TREE UPON PLANTING AND REMOVE ALL WIRES A MINIMUM OF 8" BELOW GRADE.
2. LOW PROFILE BASKETS ARE PREFERRED.
3. NYLON ROPE AND PLASTIC BURLAP ARE NOT PERMITTED.
4. NOT TO BE PLANTED IN SWALES OR OVERLAND DRAINAGE ROUTES

TREE PLANTING DETAIL

DATE	REVISIONS
4-30-20	Revised Notes
4-1-21	Added Plan Note

STANDARD DETAIL G-1 (02)

(Sheet 1 of 1)



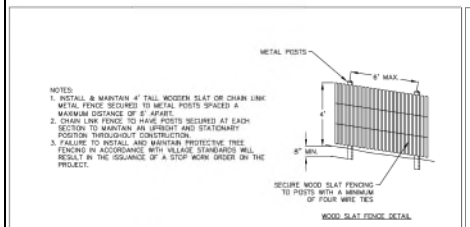
NOTES:
1. FINAL BALL ELEVATION AND PLANTER BED GRADING AS DIRECTED BY PLAN.
2. WHEN SOIL CONDITIONS WITH POOR DRAINAGE ARE DISCOVERED, NOTIFY VILLAGE REPRESENTATIVE.
3. LANDSCAPE CONTRACTOR SHALL SUGGEST SOLUTION FOR DRAINAGE IMPROVEMENTS

SHRUB PLANTING DETAIL

DATE	REVISIONS
4-30-20	Revised Notes
4-1-21	Added Plan Note

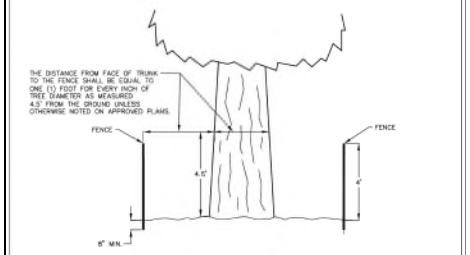
STANDARD DETAIL G-2 (02)

(Sheet 1 of 1)



NOTES:
1. INSTALL & MAINTAIN 4' TALL WOODEN SLAT OR CHAIN LINK METAL FENCE SECURED TO METAL POSTS SPACED A MAXIMUM DISTANCE OF 8' APART.
2. CHAIN LINK FENCE TO HAVE POSTS SECURED AT EACH SECTION TO MAINTAIN AN UPRIGHT AND STATIONARY POSITION THROUGHOUT CONSTRUCTION.
3. FAILURE TO INSTALL AND MAINTAIN PROTECTIVE TREE FENCING IN ACCORDANCE WITH VILLAGE STANDARDS WILL RESULT IN THE ISSUANCE OF A STOP WORK ORDER ON THE PROJECT.

WOOD SLAT FENCE DETAIL

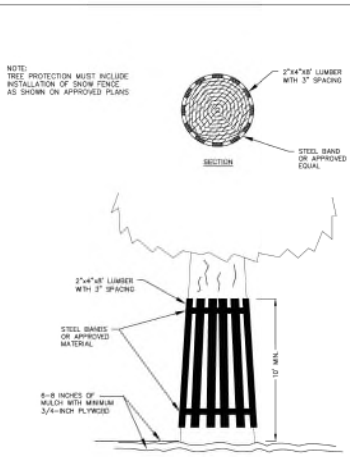


WOODEN SLAT OR CHAIN LINK TREE PROTECTION DETAIL

DATE	REVISIONS
4-30-20	Revised Notes
4-1-21	Added Plan Note

STANDARD DETAIL G-3 (02)

(Sheet 1 of 1)

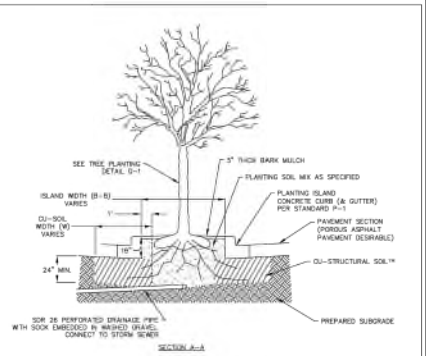


WOOD PLANK TREE PROTECTION DETAIL

DATE	REVISIONS
4-30-20	Revised Notes
4-1-21	Revised Notes

STANDARD DETAIL G-4 (02)

(Sheet 1 of 1)



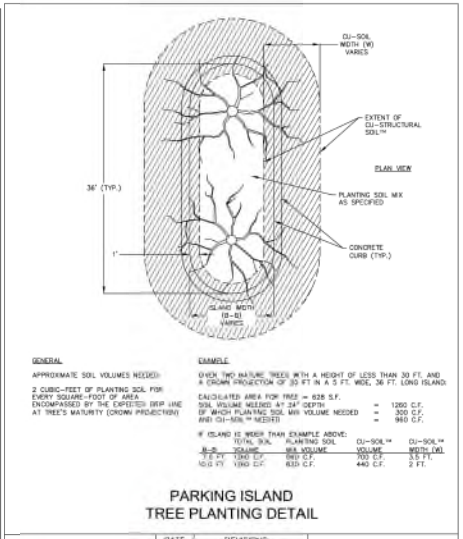
NOTES:
1. ALLOWABLE TREE SIZE AT MATURITY IS 33 FEET IN HEIGHT.
2. STRUCTURAL SOIL MAY BE CU-STRUCTURAL SOIL™ OR STALITE (FOR SANDY SOILS). TRADITIONAL CRUSHED LIMESTONE IS NOT PERMITTED FOR USE IN PARKING LOT ISLANDS THAT HAVE TREES PLANTED.
3. CU-STRUCTURAL SOIL SHALL BE OBTAINED FROM A LICENSED PRODUCER SUCH AS MIDWEST TRACING.
4. TREE SPECIES SHOULD BE CHOSEN THAT PREFER WELL DRAINED SOIL AND BE SUITABLE FOR THE EXPECTED pH OF THE CU-SOIL PROVIDED.
5. INITIAL WATERING SHOULD BE AT A RATE OF 20 GALLONS PER TREE, EVERY 5-7 DAYS.
6. SEE SHEET 2 FOR PLAN VIEW AND QUANTITIES.

PARKING ISLAND TREE PLANTING DETAIL

DATE	REVISIONS
4-30-20	New Detail
6-1-23	Revised Callouts

STANDARD DETAIL G-8 (02)

(Sheet 1 of 2)



GENERAL

APPROXIMATE SOIL VOLUMES NEEDED:

2 CUBIC-FEET OF PLANTING SOIL FOR EVERY SQUARE-FOOT OF AREA ENCOMPASSED BY THE EXPECTED DRIP LINE AT TREE'S MATURITY (CROWN PROJECTION)

EXAMPLE

GIVEN TWO MATURE TREES WITH A HEIGHT OF LESS THAN 30 FT. AND A CROWN PROJECTION OF 30 FT IN A 5 FT. WIDE, 36 FT. LONG ISLAND:

CALCULATED AREA FOR TREE = 828 S.F.

SOIL VOLUME NEEDED AT 24" DEPTH:	=	1260 C.F.
OF WHICH PLANTING SOIL MIX VOLUME NEEDED	=	300 C.F.
AND CU-SOIL™ NEEDED	=	960 C.F.

IF ISLAND IS WIDER THAN EXAMPLE ABOVE:

	TOTAL SOIL VOLUME	PLANTING SOIL MIX VOLUME	CU-SOIL™ VOLUME	CU-SOIL™ WIDTH (W)
8'-8"	1260 C.F.	300 C.F.	960 C.F.	3.5 FT.
7.5 FT.	1260 C.F.	560 C.F.	700 C.F.	3.5 FT.
10.5 FT.	1260 C.F.	820 C.F.	440 C.F.	2 FT.

PARKING ISLAND TREE PLANTING DETAIL

DATE	REVISIONS
4-30-20	New Detail

STANDARD DETAIL G-8 (01)

(Sheet 2 of 2)

CLIENT

MARIANO'S

SEAL

I HEREBY CERTIFY [redacted] DRAWINGS [redacted]

[redacted]

LICENSED PROFESSIONAL ENGINEER
TIMOTHY B KRATZ
062.068868

02/18/2020

REVISIONS

REV.	DATE	DESCRIPTION
2	05.13.2020	MWRD
1	03.18.2020	PLANNING COMMENTS

CONSULTANTS

PROJECT INFORMATION

LANDSCAPE DETAILS

MARIANO'S - M633 - RETAIL FUEL CENTER
784 SKOKIE BLVD
NORTHBROOK, IL 60062
COOK COUNTY

SHEET MANAGEMENT

PROJECT NUMBER:	M633
ISSUED DATE:	11.05.2019
DRAWN BY:	RE
CHECKED BY:	MV
PROJ. MGR:	JB

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SHEET NUMBER

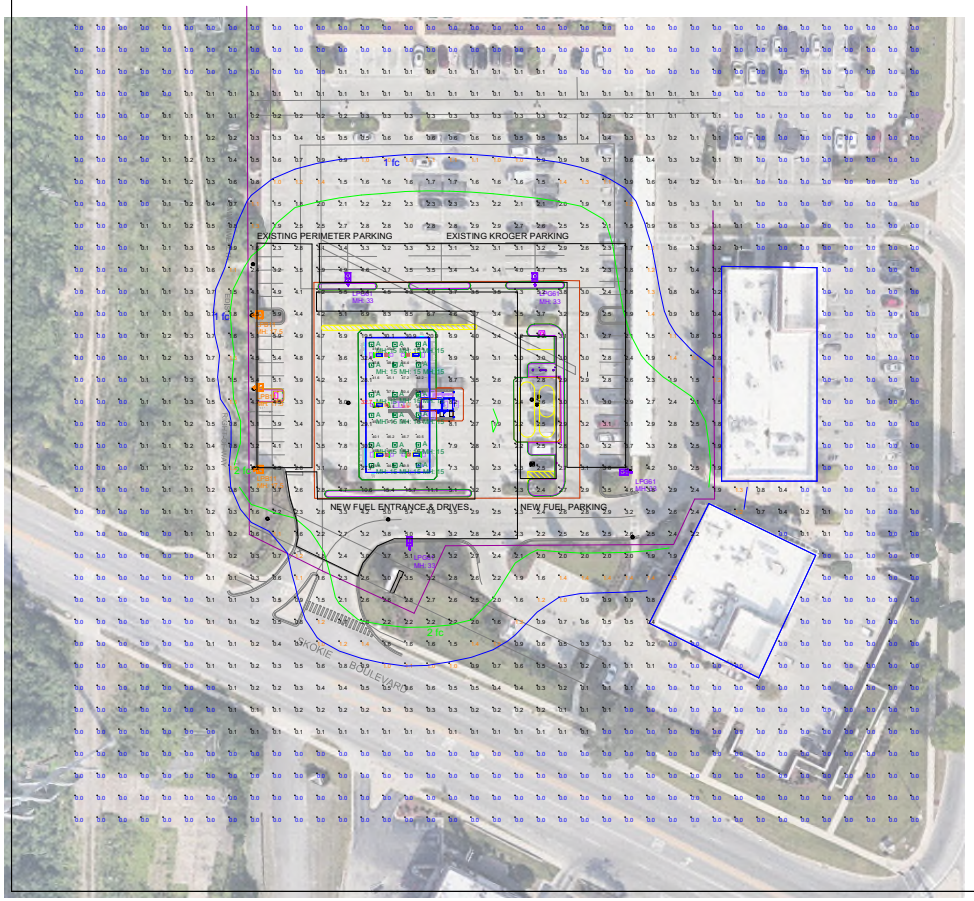
L1.21

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	Lum. Lumens	LLF	Description
	18	A	Single	104	1872	15383	1.000	SCV-LED-15L-SC-50
	3	LPB11	Single	79.6	238.8	10644	0.941	GALN-SB1D-740-VOLT-T4FT-XX
	4	LPG61	Single	440.1	1760.4	66037	0.941	GALN-SB6D-740-VOLT-SWQ-XX

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts @ Grade	Illuminance	Fc	1.19	32.7	0.0	N.A.	N.A.
FUEL CANOPY	Illuminance	Fc	46.00	55.0	36.5	1.26	1.51
EXISTING KROGER PARKING	Illuminance	Fc	3.10	5.1	1.7	1.82	3.00
EXISTING PERIMETER PARKING	Illuminance	Fc	4.11	5.9	2.3	1.79	2.57
NEW FUEL ENTRANCE & DRIVES	Illuminance	Fc	2.96	5.4	1.8	1.64	3.00
NEW FUEL PARKING	Illuminance	Fc	2.65	3.0	2.5	1.06	1.20

Total Watts = 3871.2

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	A	193.41	287.87	15	0	0
2	A	209.41	287.94	15	0	0
3	A	225.41	288.01	15	0	0
4	A	193.48	273.87	15	0	0
5	A	209.48	273.94	15	0	0
6	A	225.48	274.01	15	0	0
7	A	193.41	253.62	15	0	0
8	A	209.41	253.69	15	0	0
9	A	225.41	253.76	15	0	0
10	A	193.48	239.62	15	0	0
11	A	209.48	239.69	15	0	0
12	A	225.48	239.76	15	0	0
13	A	193.41	219.37	15	0	0
14	A	209.41	219.44	15	0	0
15	A	225.41	219.51	15	0	0
16	A	193.48	205.37	15	0	0
17	A	209.48	205.44	15	0	0
18	A	225.48	205.51	15	0	0
19	LPB11	112.25	202.75	17.5	0	0
20	LPB11	112.25	258.75	17.5	0	0
21	LPB11	111.75	308	17.5	0	0
22	LPG61	305	328.75	33	90	0
23	LPG61	177.5	329	33	90	0
24	LPG61	219.5	148.75	33	90	0
25	LPG61	370.5	201	33	180	0



Project manager to specify fixture voltage for each fixture type

COOPER Lighting Solutions
Applications Engineering
1121 Highway 74 South
Peachtree City, GA 30269
tel no: 770-486-4534
fax no: 770-486-4599
e-mail: mkt-lightingapplications@cooperlighting.com

We make no representations as to completeness, currency or accuracy because of reliance inherent in CAD and the additional digital data used to produce a lighting application. All light in DAO data appears to be extremely accurate, however, the apparent accuracy can conflict in the techniques used to generate it, and is in no way intended to imply that actual light levels obtained in the field will be identical to those shown in this application. Actual light levels should be measured in the field and compared manually with the use of a computer. This lighted level analysis is an estimate only, and is based on estimated reflectance values for interior applications or estimated pole and fixture orientation for exterior applications. Actual reflectance values and fixture orientation may vary from those assumed in this application, resulting in actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the ES standards used. In addition to the above, actual light levels may vary due to factors beyond the control of the designer, including but not limited to: poor voltage regulation or excessive manufacturing tolerances and application variances. The presence of objects will obstruct light levels and may cause some shadowing.
Lighting calculation drawings are being provided for the review of the Customer

Project Name: MARIANO'S M533 Northbrook, IL

Client: The Kroger Co. Joe Bermudez

Drawn By: EL

Date: 11/19/2025

Scale: As Shown

Project No: 2501181B.AGI

ROOF PLAN NOTES:

1. REFER TO SPECIFICATIONS FOR ROOFING MANUFACTURER AND INFORMATION.
2. CONTRACTOR SHALL PAINT ALL UNSCREENED ROOF EQUIPMENT TO MATCH ROOFING MEMBRANE.
3. ALL SHEET METAL EXPANSION JOINTS SHALL BE 'DRIVE CLEAT' LOCKS. ALL SEAMS OR JOINTS SHALL BE SEALED (COLOR TO MATCH COPING). ALL SHEET METAL COPING OR FLASHING SHALL MEET MINIMUM REQUIREMENTS PER SMACNA (SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION)
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PARAPET FLASHING FOR REVIEW PRIOR TO FABRICATION.
5. ROOFING TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
6. FLASHING AND ROOFING DETAILS – BECAUSE ROOFING MANUFACTURERS HAVE DIFFERENT DETAILS FOR INSTALLATION OF THEIR ROOF SYSTEMS, FLASHING CONDITIONS, ETC. THE DETAILS SHOWN ON THE DRAWINGS ARE TO BE CONSIDERED DESIGN INTENT. ITEMS SUCH AS PARAPET FLASHING, CANTS, BLOCKING, ROOF PENETRATIONS, AND EXPANSION JOINTS ARE TO BE INSTALLED PER MANUFACTURERS DETAILS. THE CONTRACTOR IS TO SUBMIT MANUFACTURERS STANDARD DETAILS TO ARCHITECT PRIOR TO THE BEGINNING OF WORK.
7. REFER TO STRUCTURAL DRAWINGS FOR DECK BEARING ELEVATION AT ROOF STRUCTURE.
8. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS ON OR THROUGH ROOF.
9. CLEAN ROOF OF ALL CONSTRUCTION DEBRIS DURING CONSTRUCTION AND AT PROJECT COMPLETION.

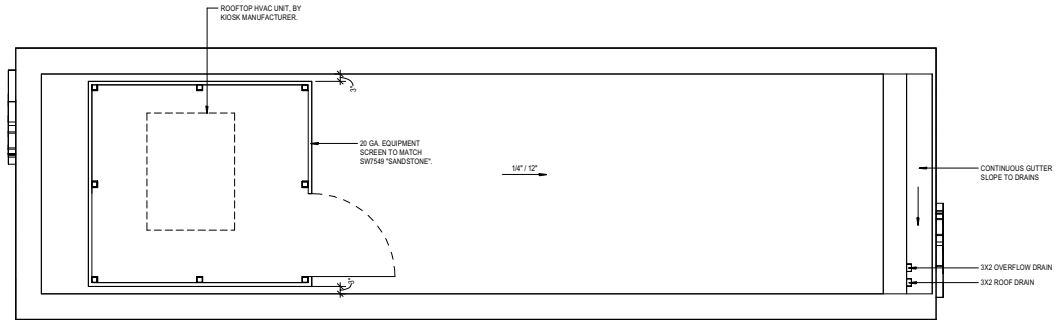
FLOOR PLAN NOTES:

1. CONTRACTOR SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES.
2. IN THE EVENT OF AN OMITTED NECESSARY DIMENSION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER.
3. VERIFY ALL DIMENSIONS, CONDITIONS, AND GRADES, AT JOB SITE PRIOR TO COMMENCING WORK.
4. VERIFY SIZE, LOCATION, AND CHARACTERISTICS OF WORK AND EQUIPMENT FURNISHED BY OWNER WITH THE MANUFACTURER OR SUPPLIER PRIOR TO COMMENCING CONSTRUCTION ON WORK PERTAINING TO THE SAME.
5. INSTALL FIRE RETARDANT TREATED 2X6 SOLID WOOD BLOCKING AT ALL LOCATIONS WITH WALL MOUNTED EQUIPMENT.
6. EXTERIOR DIMENSIONS ARE GIVEN FROM FACE OF STRUCTURE TO FACE OF STRUCTURE.
7. CONTRACTOR REQUIRED TO PROVIDE NECESSARY BLOCKING FOR ALL OWNER PROVIDED SIGNAGE.
8. FOR ALL AIR CONDITIONING EQUIPMENT, EXHAUST AND SUPPLY FANS, HVAC AND REFRIGERATION EQUIPMENT CURBS; CONTRACTOR SHALL PROVIDE AND INSTALL SUITABLE BLOCKING IN WALLS AND CEILINGS TO SUPPORT FIXTURES, EQUIPMENT, AND CANOPIES.
9. ALL EXTERIOR LANDINGS TO BE ½" MAX BELOW FINISH FLOOR, TYPICAL.
10. ALL INTERIOR DOORS SHALL BE 4" FROM ADJACENT PERPENDICULAR WALL UNO

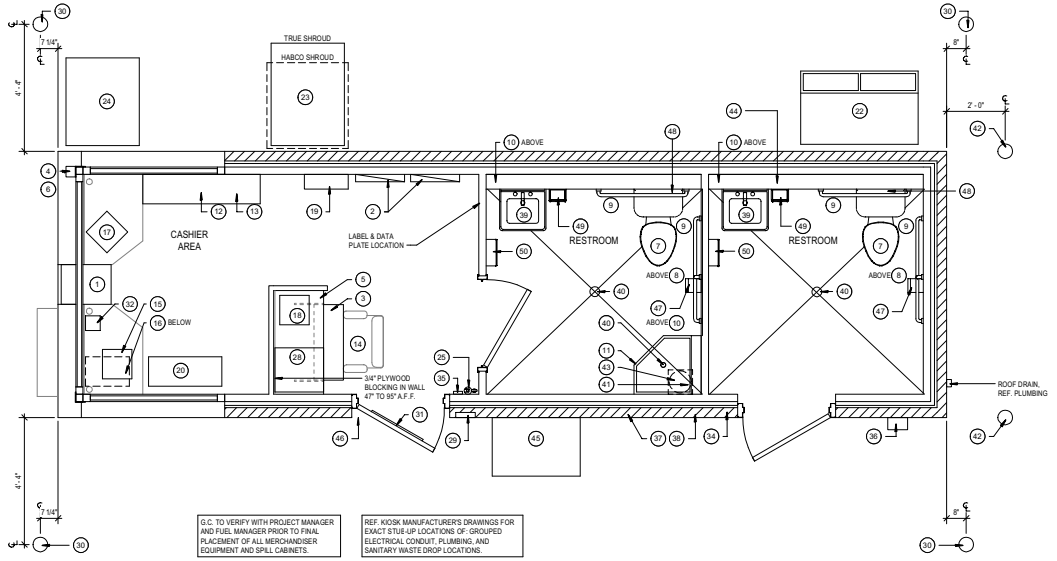
EQUIPMENT SCHEDULE:

ALL EQUIPMENT FURNISHED BY OWNER UNLESS OTHERWISE SPECIFIED.

1. SHURESAFE-ER SERIES # SPT310 - FURNISH WITH KIOSK
2. PANEL BOARD - FURNISH WITH KIOSK
3. NOT USED
4. EMERGENCY STOP - FURNISHED WITH ITEM #2
5. OFFICE COUNTER - 20" X 42 1/2" - 34" A.F.F.
6. UNITED SIGN CO. U-MS-76 - FURNISH WITH KIOSK
7. WATER CLOSET PROVIDED AND INSTALLED BY KIOSK MANUFACTURER
8. BROAN EXHAUST FAN PROVIDED AND INSTALLED BY KIOSK MANUFACTURER
9. GRAB BARS PROVIDED AND INSTALLED BY KIOSK MANUFACTURER
10. NOT USED
11. SERVICE SINK, REFER TO PLUMBING SHEETS.
12. 4'-0" STORAGE RACK - PROVIDED AND INSTALLED BY G.C.
13. CANDY RACK
14. CHAIR
15. LOTTO MACHINE
16. SAFE
17. P.O.S. REGISTER
18. BACK OFFICE P.O.S. - INSTALLED BY OWNER
19. TANK MONITOR
20. CIGARETTE CARTON MERCHANDISER
21. CIGARETTE PACK MERCHANDISER
22. 46 C.F. ICE MERCHANDISER
23. HABCO/TRUE COOLER AND SHROUD - PROVIDED BY OWNER, INSTALLED BY G.C.
24. ENERGY/HYDRATION COOLER AND SHROUD - PROVIDED BY OWNER, INSTALLED BY G.C.
25. 2-A: 20: B:C FIRE EXTINGUISHER - BY G.C. QUANTITIES AND LOCATIONS INSTALLED PER LOCAL CODE.
26. NOT USED
27. NOT USED
28. DESK EQUIPMENT RACK - 40 1/2"W X 40 7/8"H X 22"D, WALL MOUNTED
29. KNOX BOX PER LOCAL AUTHORITIES
30. 6" CONCRETE FILLED PIPE BOLLARD WITH SIGN - PROVIDED AND INSTALLED BY G.C. REF DETAILS.
31. BULLETIN BOARD - G.C. TO MOUNT ABOVE PEEPHOLE.
32. INTERCOM MASTER STATION - INSTALLED BY G.C.
33. MERCHANDISING PANELS.
34. FROST-PROOF HOSE BIBB - BY KIOSK MANUFACTURER, REF. KIOSK MANUFACTURER'S DRAWINGS.
35. INTRUSION ALARM KEYPAD
36. EMERGENCY 911 CALL BOX MOUNT CENTERLINE AT +48" ABOVE FINISH LEVEL.
37. COPPER WATER SERVICE LINE ENTRANCE. REF. PLUMBING, CIVIL, AND KIOSK MANUFACTURER'S DRAWINGS.
38. BACKFLOW DEVICE - REF. KIOSK MANUFACTURER'S DRAWINGS.
39. LAVATORY - INSTALLED BY KIOSK MANUFACTURER, REF. KIOSK MANUFACTURER'S DRAWINGS.
40. FLOOR DRAIN - REF. KIOSK MANUFACTURER'S DRAWINGS.
41. CONNECTION TO KIOSK WATER PIPING - REF. KIOSK MANUFACTURER'S DRAWINGS.
42. 6" CONCRETE FILLED PIPE BOLLARD - PROVIDED AND INSTALLED BY G.C. REF DETAILS.
43. 6 GALLON ELECTRIC TANK WATER HEATER & SHELF - INSTALLED BY KIOSK MANUFACTURER.
44. CONNECT TO SANITARY SEWER - REF. CIVIL AND KIOSK MANUFACTURER DRAWINGS.
45. SPILL CABINET - PROVIDED BY OWNER, INSTALLED BY G.C. VERIFY FINAL LOCATION WITH OWNER'S PM.
46. G.C. TO INSTALL OVERHEAD DOOR STOP - GLYNN-JOHNSON, 90 SERIES, US32D FINISH, WITH HOLD OPEN AND SEX NUT BOLT - TO RESTRICT DOOR OPENING TO APPROXIMATELY 90 DEGREES. MUST MAINTAIN A MIN. OF 32" CLEAR FROM ALL HARDWARE FOR INGRESS.
47. TOILET TISSUE DISPENSER - PROVIDED BY OWNER, INSTALLED BY G.C.
48. TOILET SEAT COVER DISPENSER - PROVIDED BY OWNER, INSTALLED BY G.C.
49. HAND SOAP DISPENSER - PROVIDED BY OWNER, INSTALLED BY G.C.
50. HAND TOWEL DISPENSER - PROVIDED BY OWNER, INSTALLED BY G.C.



2 ROOF PLAN
SCALE: 1/2" = 1'-0"



G.C. TO VERIFY WITH PROJECT MANAGER AND FUEL MANAGER PRIOR TO FINAL PLACEMENT OF ALL MERCHANDISER EQUIPMENT AND SPILL CABINETS.

REF. KIOSK MANUFACTURER'S DRAWINGS FOR EXACT STUB-UP LOCATIONS OF: GROUPED ELECTRICAL CONDUIT, PLUMBING, AND SANITARY WASTE DROP LOCATIONS.

1 FLOOR PLAN
SCALE: 1/2" = 1'-0"

KIOSK ADAPTATION A.O.R. SCOPE OF RESPONSIBILITY:

REFER TO KIOSK MANUFACTURER'S DRAWINGS FOR ALL ITEMS SHOWN EXCEPT FOR THE FOLLOWING KIOSK SITE ADAPTATIONS:

1. MASONRY VENEER, WHERE SHOWN.
2. G.C. INSTALLED ITEMS LISTED IN "EQUIPMENT SCHEDULE".
3. ITEMS SURFACE MOUNTED OR RECESSED INTO MASONRY VENEER.
4. ITEMS WHOSE INSTALLATION REQUIRES MASONRY VENEER COMPLETION.

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Galloway
5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

STAMP

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The Kroger Co.
Supermarket Petroleum Group
Denver, CO 80239
Phone: (303) 715-5901
Fax: (303) 715-5905

KROGER RO-533
ARCHITECTURE CONSTRUCTION DOCUMENT
5(GD) 2-RR INT & EXT DOOR W/ VENEER

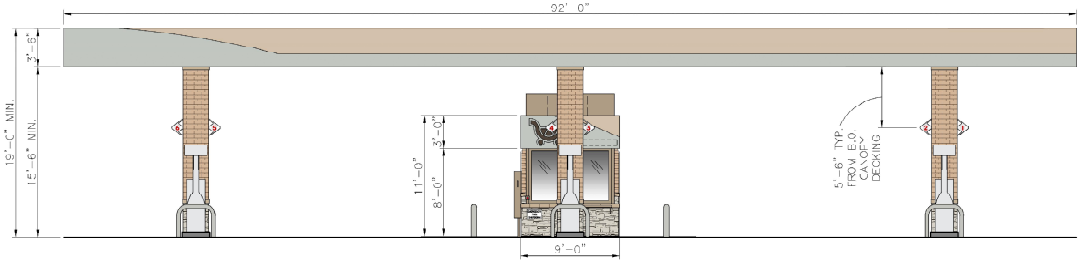
784 SKOKIE BLVD,
NORTHBROOK, IL 60062

#	Date	Issue/Description

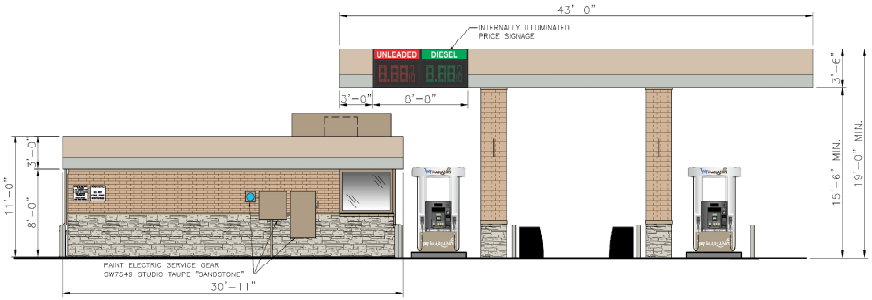
Project No:	KroRo0533.30
Drawn By:	RG
Checked By:	TA
Date:	NOVEMBER 2025

FLOOR AND ROOF PLANS

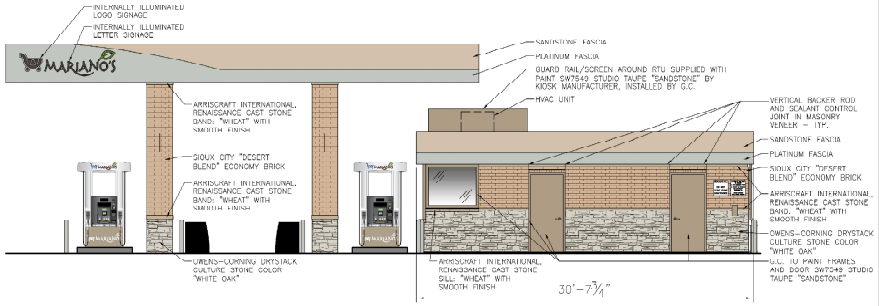
A1.0



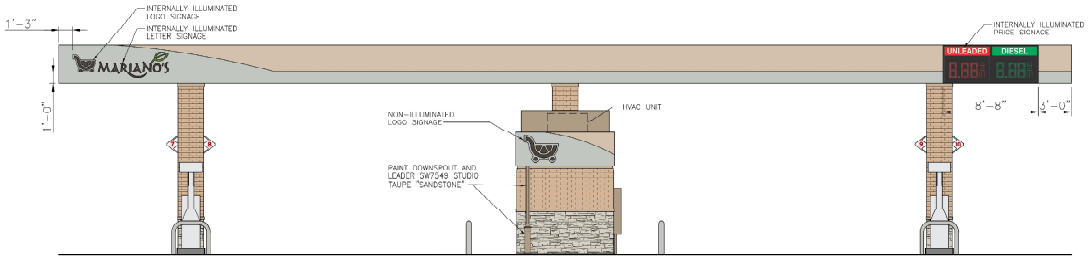
1 FRONT (WEST) ELEVATION
SCALE: 3/16"=1'-0"



2 LEFT (NORTH) ELEVATION
SCALE: 3/16"=1'-0"



3 RIGHT (SOUTH) ELEVATION
SCALE: 3/16"=1'-0"



4 REAR (EAST) ELEVATION
SCALE: 3/16"=1'-0"

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Galloway
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Supermarket Fairplain Group
Denver, CO 80239
Phone: (303) 770-8884
Fax: (303) 770-8820

Kroger

CO_OR ELEVATION
5 (3D) 2RR w/ VENEER

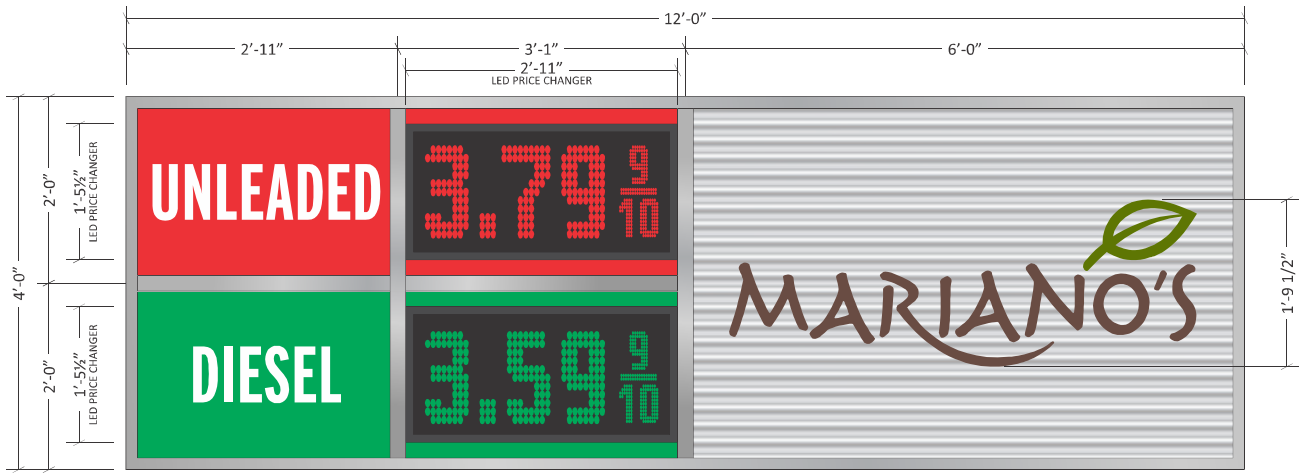
784 SKOKIE BLVD
NORTHBROOK, ILLINOIS 60062

#	Date	Issue / Description	Init

Project No:	KmRT3-003
Drawn By:	CSR
Checked By:	DLJ
Date:	NOVEMBER 2025

FUEL CENTER
EXTERIOR COLOR ELEVATIONS & SIGNAGE

A0.0



NOTE: FIELD SURVEY REQUIRED PRIOR TO PRODUCTION

A ***REMODEL EXISTING D/F MONUMENT CABINETS w/ NEW LED GAS PRICE CHANGERS***
SCALE: 3/4"=1'

- REMODEL EXISTING MONUMENT SIGN CABINET w/ NEW FACES, DIVIDER BARS & LED GAS PRICE CHANGERS
- FURNISH & INSTALL (2)NEW CORRUGATED ALUM. FACES w/ PUSH THRU ACRYLIC "MARIANO'S" LETTERS & LOGO w/ FIRST SURFACE TRANSLUCENT VINYL
- FURNISH & INSTALL (4)NEW LED GAS PRICE CHANGERS(TWO PER SIDE)
- FURNISH & INSTALL (4)NEW WHITE LEXAN PANELS w/ FIRST SURFACE APPLIED #33 RED(UNLEADED) AND #26 GREEN(DIESEL) VINYL
- FURNISH & INSTALL NEW DIVIDER BARS AS NEED PAINTED BRUSHED ALUM.

BRUSHED ALUMINUM	***WHITE LEXAN***
PMS 7518 C BROWN	***3M 3630-33 RED***
PMS 7496 C GREEN	***3M 3630-26 GREEN***



PROPOSED
SCALE: 1/2" = 1'



EXISTING

DOYLE
GENERAL SIGN CONTRACTORS
232 INTERSTATE RD. P.O. BOX 1068
ADDISON, IL 60101
630-543-9490
FAX 630-543-9493

DATE	REVISION
12.19.25	UPDATED ELEVS. & ADDED LETTER DET.

CUSTOMER APPROVAL **DATE**

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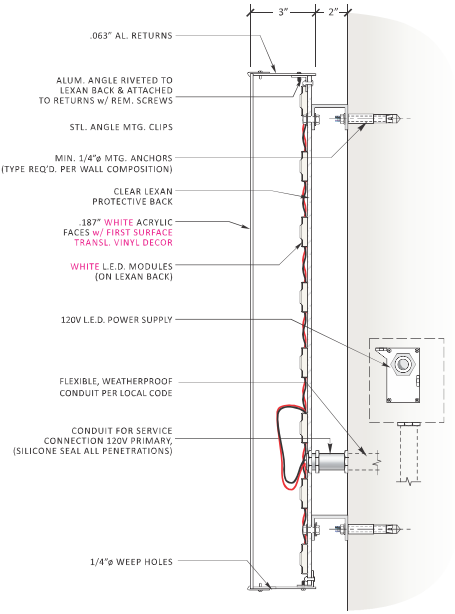
CLIENT	MARIANO'S #533						
ADDRESS	784 SKOKIE BLVD.						
CITY	NORTHBROOK	**STATE**	IL	**DESIGNER**	KM	**SALESPERSON**	JD
DRWG. NO.	18349812344	**SCALE:**	NOTED	**DATE:**	11.07.2025	**SHEET NO.**	1

O:\Design\M\MARIANOS\Northbrook IL #533 - Skokie Blvd\18349812344_v2.cdr



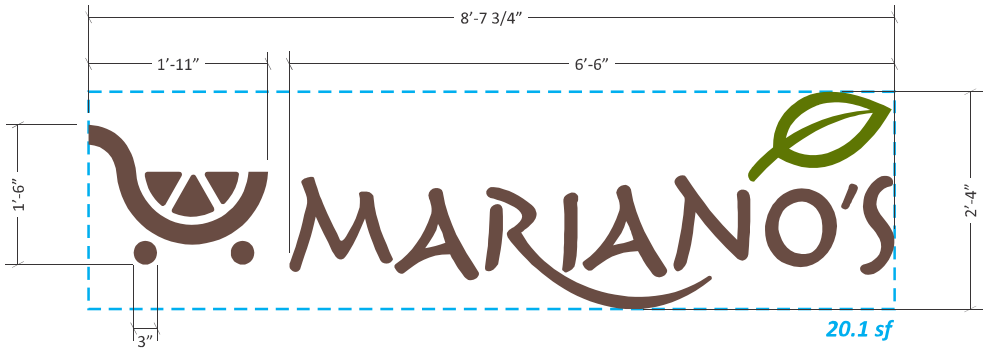
PARTIAL CANOPY ELEVATION

SCALE: ¼"=1'



B ***FACE-LIT / BACK-LIT CHANNEL LETTER***

NTS



B ***TWO(2) SETS OF FACE-LIT & HALO-LIT LETTERS & LOGO***

SCALE: 3/4"=1'

PANTONE 7518 C	PANTONE 7496 C

DOYLE

GENERAL SIGN CONTRACTORS

232 INTERSTATE RD. P.O. BOX 1068
ADDISON, IL 60101

630-543-9490
FAX 630-543-9493

DATE	REVISION
12.19.25	UPDATED ELEVS. & ADDED LETTER DET.

CUSTOMER APPROVAL **DATE**

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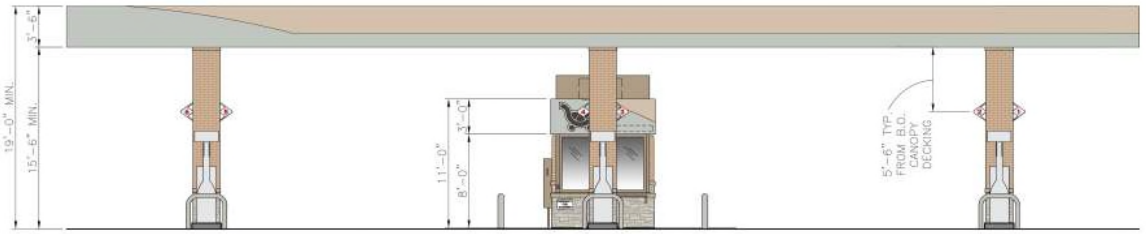
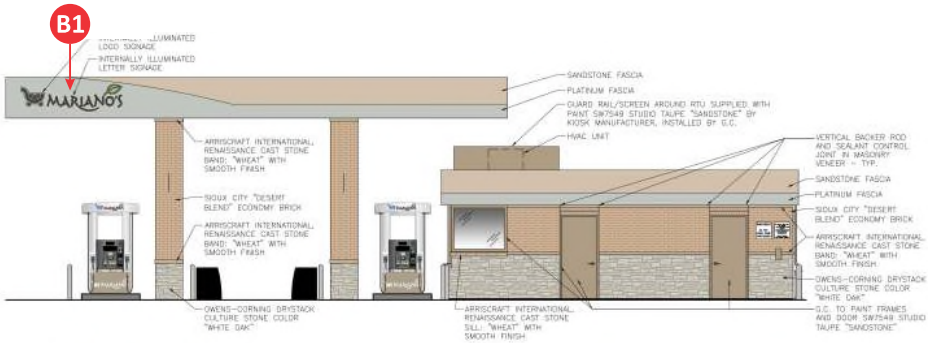
CLIENT	MARIANO'S #533						
ADDRESS	784 SKOKIE BLVD.						
CITY	NORTHBROOK	**STATE**	IL	**DESIGNER**	KM	**SALESPERSON**	JD
DRWG. NO.	18349812344	**SCALE:**	NOTED	**DATE:**	11.07.2025	**SHEET NO.**	2

O:\Design\M\MARIANOS\Northbrook IL #533 - Skokie Blvd\18349812344_v2.cdr



1 FRONT (WEST) ELEVATION
SCALE: 3/32" = 1'





2 LEFT (NORTH) ELEVATION
SCALE: 3/32" = 1'

3 RIGHT (SOUTH) ELEVATION
SCALE: 3/32" = 1'



4 REAR (EAST) ELEVATION
SCALE: 3/32" = 1'

DOYLE
GENERAL SIGN CONTRACTORS
232 INTERSTATE RD. P.O. BOX 1068
ADDISON, IL 60101
630-543-9490
FAX 630-543-9493

DATE	REVISION
12.19.25	UPDATED ELEVS. & ADDED LETTER DET.

CUSTOMER APPROVAL DATE

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CLIENT	MARIANO'S #533						
ADDRESS	784 SKOKIE BLVD.						
CITY	NORTHBROOK	STATE	IL	DESIGNER	KM	SALESPERSON	JD
DRWG. NO.	18349812344	SCALE:	NOTED	DATE:	11.07.2025	SHEET NO.	3

O:\Design\M\MARIANOS\Northbrook IL #533 - Skokie Blvd\18349812344_v2.cdr

1110 American Parkway
Building 10, Suite F-200-B
Allentown, PA, 18109
Main: 877 627 3772

Colliers
Engineering & Design

November 3, 2025

Aram Beladi, P.E.
Village of Northbrook Village Engineer
1225 Cedar Lane
Northbrook, Illinois 60062

Parking Assessment
Mariano's Northbrook – 784 Skokie Boulevard
Village of Northbrook, Cook County, Illinois
Colliers Engineering & Design Project No. 25012699A

Dear Aram,

Colliers Engineering & Design, Inc. has prepared this parking assessment letter in support of the Site Plan Application to the Village of Northbrook ("Village") on behalf of Mariano's ("Applicant") for the proposed development of an ancillary gas station within the existing Mariano's supermarket parking lot ("the Project") within the Village of Northbrook, Cook County, Illinois. The site is currently developed with a Mariano's supermarket with a total of 355 off-street parking spaces. It is proposed to construct a gas station with 10 fueling positions within the southern portion of the site. With the proposed improvements, 85 parking spaces will be eliminated, and 270 parking spaces will be maintained. The subject site is bound by residential and commercial land uses to the north, Skokie Boulevard and commercial land uses to the east, Dundee Road (Route 68) and commercial land uses to the south, and a decommissioned Union Pacific Railroad line to the west. The purpose of this assessment is to determine the parking characteristics of the two (2) parking lots, east and south of the existing Mariano's supermarket, as a means of confirming the available parking is sufficient to accommodate the proposed ancillary gas station. The Study Location Map and proposed Concept Plan are provided as **Figures 1** and **2**.

Parking Accumulation Study

A parking accumulation study was conducted on Thursday, October 9, 2025 and Saturday, October 11, 2025 from 7:00 AM to 7:00 PM. The appended graphs illustrate the observed parking demand at the existing supermarket. A maximum parking demand of 196 spaces was observed on Thursday, October 9, 2025, at 12:45 PM which equates to a maximum parking occupancy percentage of 71% and a vacancy of 159 spaces. A copy of the data collection is enclosed.

Colliers Engineering & Design

Conclusion

In summary, it is proposed to eliminate 85 parking spaces and construct an ancillary gas station with 10 fueling positions in the southern portion of the existing Mariano's supermarket parking lot. A parking accumulation study was conducted on Thursday, October 9, 2025 and Saturday, October 11, 2025 from 7:00 AM to 7:00 PM which determined a maximum parking demand of 71% (196 spaces). Based on the results of the parking accumulation study, it is our opinion the proposed total of 270 parking spaces is sufficient to accommodate the anticipated parking demand. Should you have questions or require any additional information, please do not hesitate to contact this office.

Sincerely,

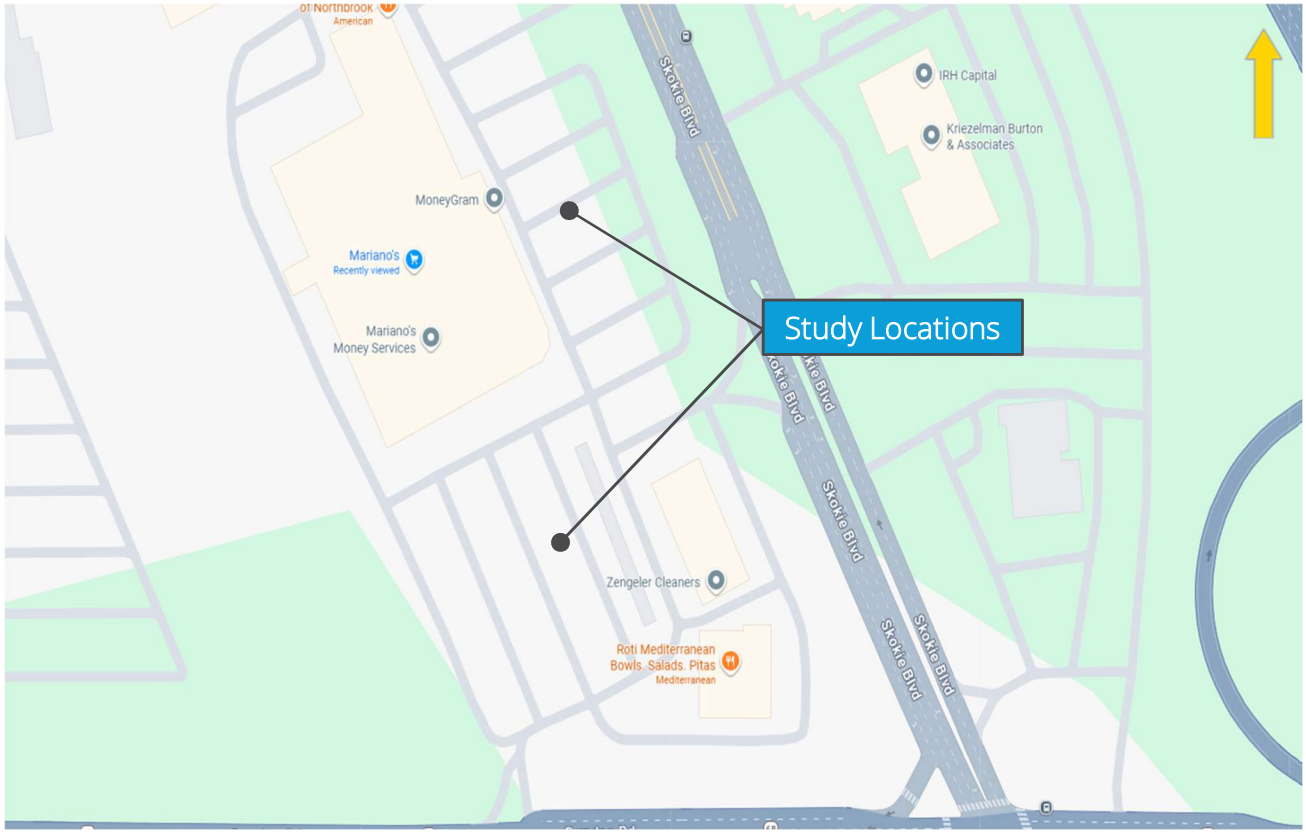
Colliers Engineering & Design, Inc.



Tyler Krause, P.E.
Senior Project Manager | Traffic Planning

cc: Swati Pandey, Village of Northbrook (via email)
Joe Bermudez, Sevan (via email)
Matthew Pisko, Sevan (via email)
Alec Zukowski, Colliers Engineering & Design (via email)

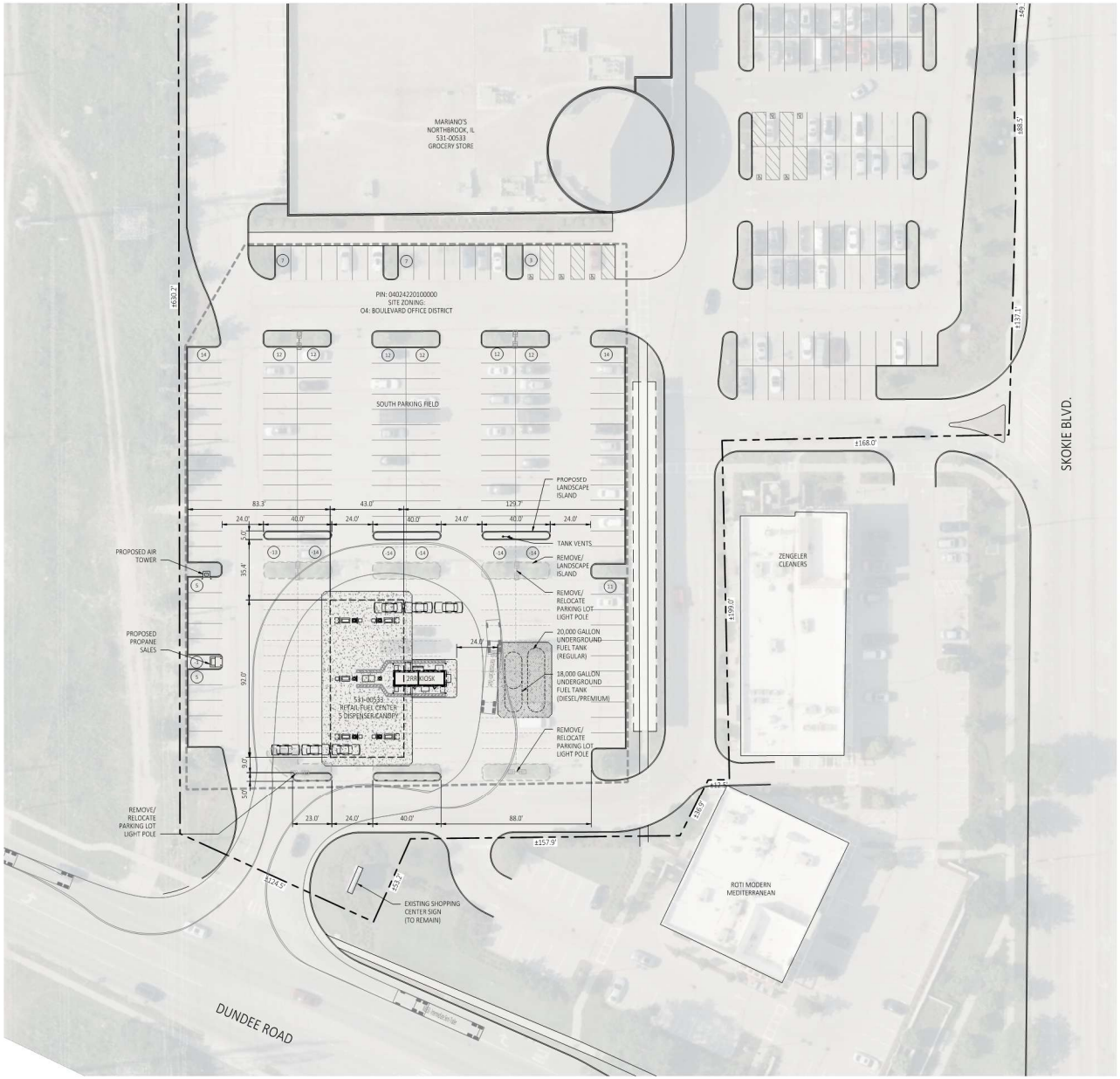
R:\PROJ\Year\2025\25012699A - Mar-Northbrook\Reports\Traffic\Docs\251103_njs_Parking Assessment.docx





Colliers Engineering & Design	Mariano's Northbrook	**Figure 1**
	Project No. 25012699A	
	Village of Northbrook, Cook County, Illinois	**Study Location Map**

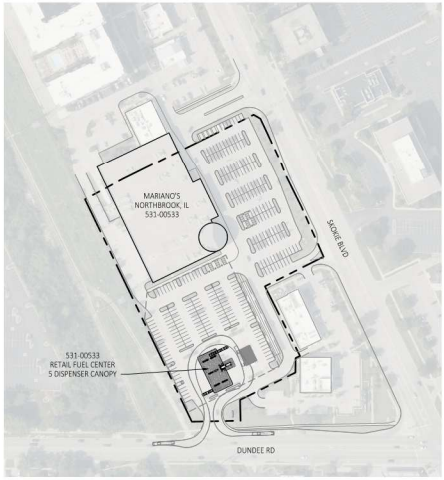
FIGURE 2



CONCEPT SITE PLAN

SCALE: 1" = 50'-0"

0 50' 100'



VICINITY MAP

SCALE: NTS

SOUTH PARKING FIELD:

EXISTING PARKING:

STANDARD SPACES:	219 SPACES
ADA SPACES:	3 SPACES
TOTAL SPACES:	222 SPACES

PROPOSED PARKING:

STANDARD SPACES:	134 SPACES
ADA SPACES:	3 SPACES
TOTAL SPACES:	137 SPACES
TOTAL SPACES LOST:	85 SPACES

NOTE:

THIS CONCEPT PLAN WAS PREPARED TO ILLUSTRATE THE DEVELOPMENT POTENTIAL FOR THE SITE. IT IS CONCEPTUAL IN NATURE AND IS THEREFORE SUBJECT TO MODIFICATION PENDING MUNICIPALITY INPUT, A PLAT OF SURVEY, FINAL PLANNING, ENGINEERING AND ARCHITECTURE.

sevan
ENGINEERING, P.C.
Corporate Office:
3025 Highland Parkway | Suite 850
Downers Grove, IL 60515
info@sevan.com www.sevansolutions.com

INTEGRITY | RESPECT | TEAMWORK
EXCELLENCE | CHARITY

REVISIONS

NO.	DATE	DESCRIPTION
0	04.02.2019	CUSTOMER REVIEW
1	05.24.2022	CUSTOMER REVIEW
2	06.08.2022	CUSTOMER REVIEW
3	03.12.2025	SPG MARKUP
4	05.05.2025	KIOSK ROTATION
5	08.15.2025	CONCEPT REVIEW

CONSULTANT

SEAL

CUSTOMER

MARIANO'S

PROJECT DESCRIPTION

531-00533
RETAIL FUEL CENTER

PROJECT LOCATION

784 SKOKIE BLVD
NORTHBROOK, IL 60062
(COOK COUNTY)

SHEET TITLE

CONCEPT SITE PLAN
OPTION 2

SHEET MANAGEMENT

PROJECT NO.:	531-00533
DATE:	
CAD FILE:	533_SITE_OPT2_Rev0.dwg
PROJECT MANAGER:	T. KRATZ

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SHEET NUMBER

CP1.20

FILE NAME: Z:\Sevan\Clients\Roundy's Supermarkets Inc\Design\531-00533 Northbrook, IL\Arch\Docs\533_SITE_OPT2_CDP-Rev4.dwg LAST SAVED BY: VanderHeide, Mike SAVED DATE: 8/15/2025 12:28 PM PLOTTED: 9/15/2025 12:39 PM

Vehicles Parked	
Average:	135
85th Percentile:	163
Maximum:	196

Thursday, October 9, 2025

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	183	87	32%
7:15 AM	186	84	31%
7:30 AM	188	82	30%
7:45 AM	183	87	32%
8:00 AM	184	86	32%
8:15 AM	170	100	37%
8:30 AM	180	90	33%
8:45 AM	169	101	37%
9:00 AM	158	112	41%
9:15 AM	150	120	44%
9:30 AM	154	116	43%
9:45 AM	156	114	42%
10:00 AM	149	121	45%
10:15 AM	141	129	48%
10:30 AM	136	134	50%
10:45 AM	127	143	53%
11:00 AM	133	137	51%
11:15 AM	117	153	57%
11:30 AM	115	155	57%
11:45 AM	110	160	59%
12:00 PM	99	171	63%
12:15 PM	86	184	68%
12:30 PM	81	189	70%
12:45 PM	74	196	73%

Thursday, October 9, 2025

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	102	168	62%
1:15 PM	108	162	60%
1:30 PM	107	163	60%
1:45 PM	113	157	58%
2:00 PM	108	162	60%
2:15 PM	119	151	56%
2:30 PM	117	153	57%
2:45 PM	104	166	61%
3:00 PM	122	148	55%
3:15 PM	108	162	60%
3:30 PM	122	148	55%
3:45 PM	140	130	48%
4:00 PM	134	136	50%
4:15 PM	133	137	51%
4:30 PM	127	143	53%
4:45 PM	134	136	50%
5:00 PM	133	137	51%
5:15 PM	128	142	53%
5:30 PM	140	130	48%
5:45 PM	143	127	47%
6:00 PM	144	126	47%
6:15 PM	148	122	45%
6:30 PM	147	123	46%
6:45 PM	172	98	36%
Total:	**270**		

Vehicles Parked	
Average:	137
85th Percentile:	172
Maximum:	182

Saturday, October 11, 2025

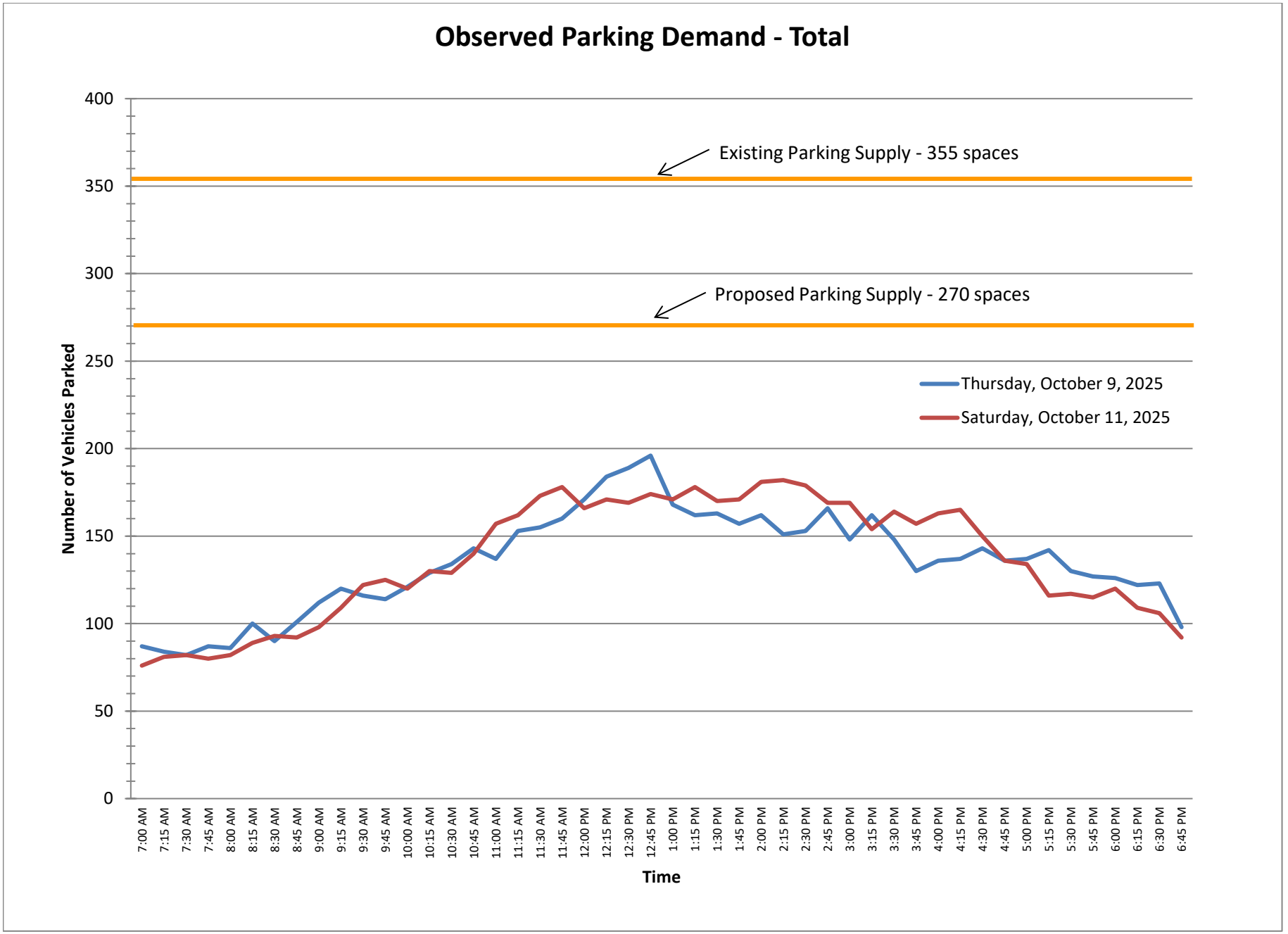
Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	194	76	28%
7:15 AM	189	81	30%
7:30 AM	188	82	30%
7:45 AM	190	80	30%
8:00 AM	188	82	30%
8:15 AM	181	89	33%
8:30 AM	177	93	34%
8:45 AM	178	92	34%
9:00 AM	172	98	36%
9:15 AM	161	109	40%
9:30 AM	148	122	45%
9:45 AM	145	125	46%
10:00 AM	150	120	44%
10:15 AM	140	130	48%
10:30 AM	141	129	48%
10:45 AM	130	140	52%
11:00 AM	113	157	58%
11:15 AM	108	162	60%
11:30 AM	97	173	64%
11:45 AM	92	178	66%
12:00 PM	104	166	61%
12:15 PM	99	171	63%
12:30 PM	101	169	63%
12:45 PM	96	174	64%

Saturday, October 11, 2025

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	99	171	63%
1:15 PM	92	178	66%
1:30 PM	100	170	63%
1:45 PM	99	171	63%
2:00 PM	89	181	67%
2:15 PM	88	182	67%
2:30 PM	91	179	66%
2:45 PM	101	169	63%
3:00 PM	101	169	63%
3:15 PM	116	154	57%
3:30 PM	106	164	61%
3:45 PM	113	157	58%
4:00 PM	107	163	60%
4:15 PM	105	165	61%
4:30 PM	120	150	56%
4:45 PM	134	136	50%
5:00 PM	136	134	50%
5:15 PM	154	116	43%
5:30 PM	153	117	43%
5:45 PM	155	115	43%
6:00 PM	150	120	44%
6:15 PM	161	109	40%
6:30 PM	164	106	39%
6:45 PM	178	92	34%
Total:	**270**		


Observed Parking Demand - Total
Existing Parking Supply - 355 spaces
Proposed Parking Supply - 270 spaces
Thursday, October 9, 2025
Saturday, October 11, 2025
Number of Vehicles Parked
Time
400
350
300
250
200
150
100
50
0
7:00 AM
7:15 AM
7:30 AM
7:45 AM
8:00 AM
8:15 AM
8:30 AM
8:45 AM
9:00 AM
9:15 AM
9:30 AM
9:45 AM
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4:30 PM
4:45 PM
5:00 PM
5:15 PM
5:30 PM
5:45 PM
6:00 PM
6:15 PM
6:30 PM
6:45 PM

Vehicles Parked	
Average:	55
85th Percentile:	65
Maximum:	74

Thursday, October 9, 2025 (Parking Lot 1)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	94	43	31%
7:15 AM	97	40	29%
7:30 AM	97	40	29%
7:45 AM	95	42	31%
8:00 AM	94	43	31%
8:15 AM	92	45	33%
8:30 AM	92	45	33%
8:45 AM	89	48	35%
9:00 AM	83	54	39%
9:15 AM	85	52	38%
9:30 AM	86	51	37%
9:45 AM	84	53	39%
10:00 AM	80	57	42%
10:15 AM	81	56	41%
10:30 AM	77	60	44%
10:45 AM	76	61	45%
11:00 AM	79	58	42%
11:15 AM	73	64	47%
11:30 AM	72	65	47%
11:45 AM	74	63	46%
12:00 PM	72	65	47%
12:15 PM	69	68	50%
12:30 PM	68	69	50%
12:45 PM	63	74	54%

Thursday, October 9, 2025 (Parking Lot 1)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	70	67	49%
1:15 PM	68	69	50%
1:30 PM	72	65	47%
1:45 PM	71	66	48%
2:00 PM	73	64	47%
2:15 PM	79	58	42%
2:30 PM	84	53	39%
2:45 PM	80	57	42%
3:00 PM	81	56	41%
3:15 PM	82	55	40%
3:30 PM	83	54	39%
3:45 PM	77	60	44%
4:00 PM	81	56	41%
4:15 PM	88	49	36%
4:30 PM	88	49	36%
4:45 PM	84	53	39%
5:00 PM	84	53	39%
5:15 PM	86	51	37%
5:30 PM	88	49	36%
5:45 PM	90	47	34%
6:00 PM	95	42	31%
6:15 PM	98	39	28%
6:30 PM	94	43	31%
6:45 PM	98	39	28%
Total:	**137**		

Vehicles Parked	
Average:	55
85th Percentile:	68
Maximum:	73

Saturday, October 11, 2025 (Parking Lot 1)

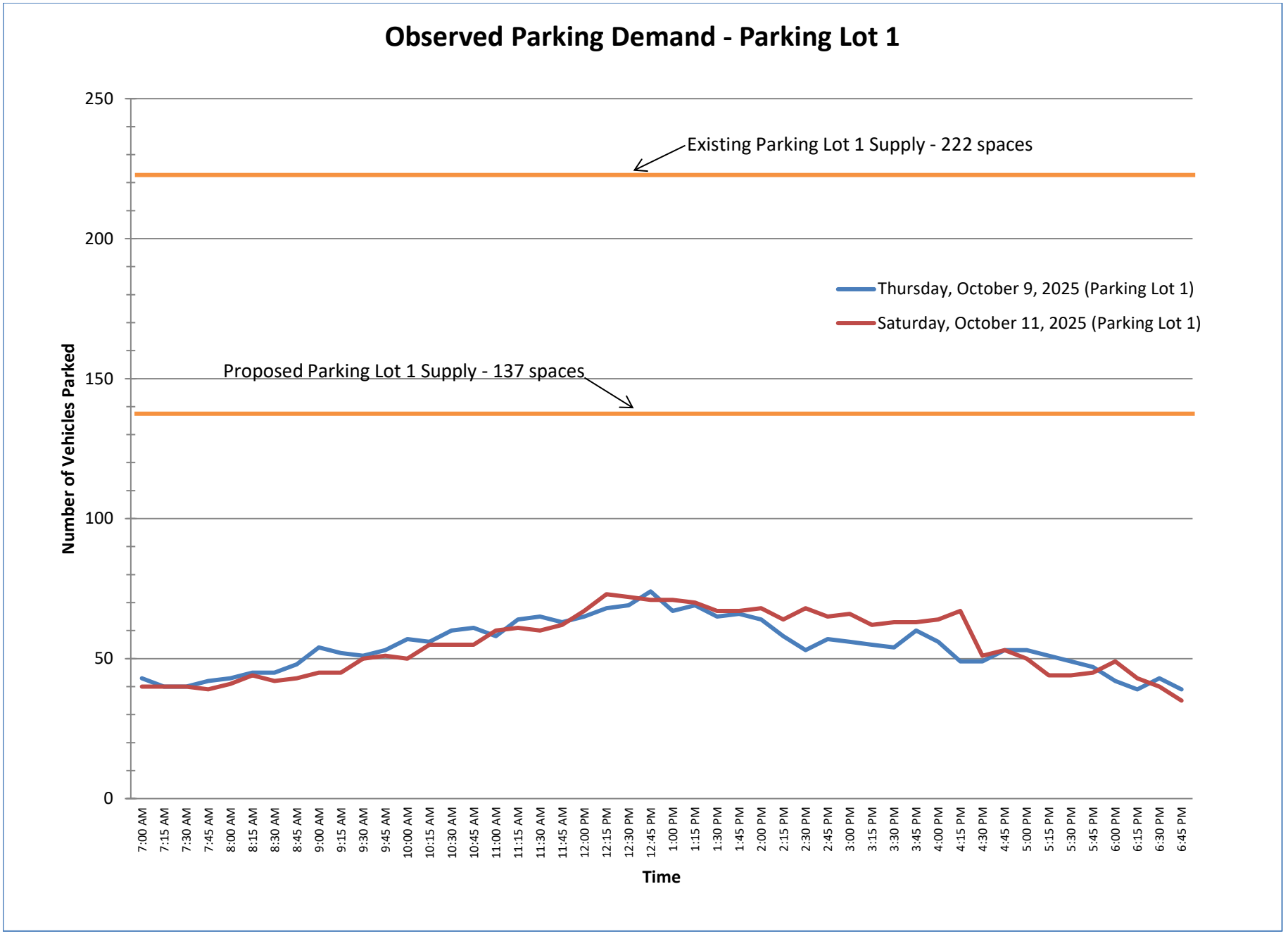
Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	97	40	29%
7:15 AM	97	40	29%
7:30 AM	97	40	29%
7:45 AM	98	39	28%
8:00 AM	96	41	30%
8:15 AM	93	44	32%
8:30 AM	95	42	31%
8:45 AM	94	43	31%
9:00 AM	92	45	33%
9:15 AM	92	45	33%
9:30 AM	87	50	36%
9:45 AM	86	51	37%
10:00 AM	87	50	36%
10:15 AM	82	55	40%
10:30 AM	82	55	40%
10:45 AM	82	55	40%
11:00 AM	77	60	44%
11:15 AM	76	61	45%
11:30 AM	77	60	44%
11:45 AM	75	62	45%
12:00 PM	70	67	49%
12:15 PM	64	73	53%
12:30 PM	65	72	53%
12:45 PM	66	71	52%

Saturday, October 11, 2025 (Parking Lot 1)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	66	71	52%
1:15 PM	67	70	51%
1:30 PM	70	67	49%
1:45 PM	70	67	49%
2:00 PM	69	68	50%
2:15 PM	73	64	47%
2:30 PM	69	68	50%
2:45 PM	72	65	47%
3:00 PM	71	66	48%
3:15 PM	75	62	45%
3:30 PM	74	63	46%
3:45 PM	74	63	46%
4:00 PM	73	64	47%
4:15 PM	70	67	49%
4:30 PM	86	51	37%
4:45 PM	84	53	39%
5:00 PM	87	50	36%
5:15 PM	93	44	32%
5:30 PM	93	44	32%
5:45 PM	92	45	33%
6:00 PM	88	49	36%
6:15 PM	94	43	31%
6:30 PM	97	40	29%
6:45 PM	102	35	26%
Total:	**137**		


Observed Parking Demand - Parking Lot 1
Existing Parking Lot 1 Supply - 222 spaces
Proposed Parking Lot 1 Supply - 137 spaces
Thursday, October 9, 2025 (Parking Lot 1)
Saturday, October 11, 2025 (Parking Lot 1)
Number of Vehicles Parked
250
200
150
100
50
0
Time
7:00 AM
7:15 AM
7:30 AM
7:45 AM
8:00 AM
8:15 AM
8:30 AM
8:45 AM
9:00 AM
9:15 AM
9:30 AM
9:45 AM
10:00 AM
10:15 AM
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3:30 PM
3:45 PM
4:00 PM
4:15 PM
4:30 PM
4:45 PM
5:00 PM
5:15 PM
5:30 PM
5:45 PM
6:00 PM
6:15 PM
6:30 PM
6:45 PM

Vehicles Parked	
Average:	81
85th Percentile:	101
Maximum:	122

Thursday, October 9, 2025 (Parking Lot 2)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	89	44	33%
7:15 AM	89	44	33%
7:30 AM	91	42	32%
7:45 AM	88	45	34%
8:00 AM	90	43	32%
8:15 AM	78	55	41%
8:30 AM	88	45	34%
8:45 AM	80	53	40%
9:00 AM	75	58	44%
9:15 AM	65	68	51%
9:30 AM	68	65	49%
9:45 AM	72	61	46%
10:00 AM	69	64	48%
10:15 AM	60	73	55%
10:30 AM	59	74	56%
10:45 AM	51	82	62%
11:00 AM	54	79	59%
11:15 AM	44	89	67%
11:30 AM	43	90	68%
11:45 AM	36	97	73%
12:00 PM	27	106	80%
12:15 PM	17	116	87%
12:30 PM	13	120	90%
12:45 PM	11	122	92%

Thursday, October 9, 2025 (Parking Lot 2)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	32	101	76%
1:15 PM	40	93	70%
1:30 PM	35	98	74%
1:45 PM	42	91	68%
2:00 PM	35	98	74%
2:15 PM	40	93	70%
2:30 PM	33	100	75%
2:45 PM	24	109	82%
3:00 PM	41	92	69%
3:15 PM	26	107	80%
3:30 PM	39	94	71%
3:45 PM	63	70	53%
4:00 PM	53	80	60%
4:15 PM	45	88	66%
4:30 PM	39	94	71%
4:45 PM	50	83	62%
5:00 PM	49	84	63%
5:15 PM	42	91	68%
5:30 PM	52	81	61%
5:45 PM	53	80	60%
6:00 PM	49	84	63%
6:15 PM	50	83	62%
6:30 PM	53	80	60%
6:45 PM	74	59	44%
Total:	**133**		

Vehicles Parked	
Average:	82
85th Percentile:	104
Maximum:	118

Saturday, October 11, 2025 (Parking Lot 2)

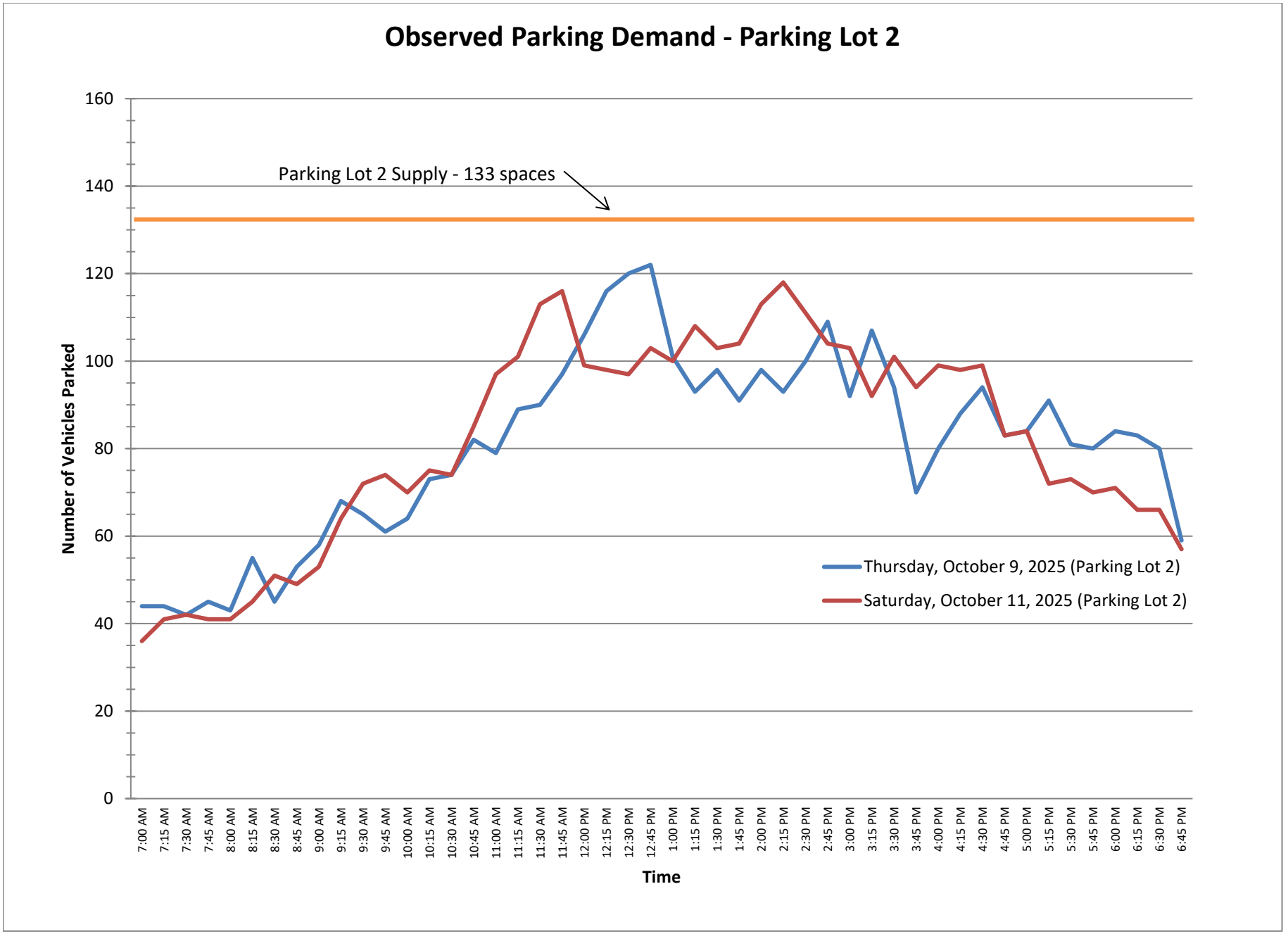
Observed Parking Demand

Time	Vacant	Occupied	% Occupied
7:00 AM	97	36	27%
7:15 AM	92	41	31%
7:30 AM	91	42	32%
7:45 AM	92	41	31%
8:00 AM	92	41	31%
8:15 AM	88	45	34%
8:30 AM	82	51	38%
8:45 AM	84	49	37%
9:00 AM	80	53	40%
9:15 AM	69	64	48%
9:30 AM	61	72	54%
9:45 AM	59	74	56%
10:00 AM	63	70	53%
10:15 AM	58	75	56%
10:30 AM	59	74	56%
10:45 AM	48	85	64%
11:00 AM	36	97	73%
11:15 AM	32	101	76%
11:30 AM	20	113	85%
11:45 AM	17	116	87%
12:00 PM	34	99	74%
12:15 PM	35	98	74%
12:30 PM	36	97	73%
12:45 PM	30	103	77%

Saturday, October 11, 2025 (Parking Lot 2)

Observed Parking Demand

Time	Vacant	Occupied	% Occupied
1:00 PM	33	100	75%
1:15 PM	25	108	81%
1:30 PM	30	103	77%
1:45 PM	29	104	78%
2:00 PM	20	113	85%
2:15 PM	15	118	89%
2:30 PM	22	111	83%
2:45 PM	29	104	78%
3:00 PM	30	103	77%
3:15 PM	41	92	69%
3:30 PM	32	101	76%
3:45 PM	39	94	71%
4:00 PM	34	99	74%
4:15 PM	35	98	74%
4:30 PM	34	99	74%
4:45 PM	50	83	62%
5:00 PM	49	84	63%
5:15 PM	61	72	54%
5:30 PM	60	73	55%
5:45 PM	63	70	53%
6:00 PM	62	71	53%
6:15 PM	67	66	50%
6:30 PM	67	66	50%
6:45 PM	76	57	43%
Total:	**133**		


Observed Parking Demand - Parking Lot 2
Parking Lot 2 Supply - 133 spaces
Number of Vehicles Parked
Time
Thursday, October 9, 2025 (Parking Lot 2)
Saturday, October 11, 2025 (Parking Lot 2)
0
20
40
60
80
100
120
140
160
7:00 AM
7:15 AM
7:30 AM
7:45 AM
8:00 AM
8:15 AM
8:30 AM
8:45 AM
9:00 AM
9:15 AM
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6:30 PM
6:45 PM

Colliers Engineering & Design

Traffic Impact Study

January 22, 2026

Mariano's Retail Fuel Center

Village of Northbrook, Cook County, Illinois

Prepared for:

Village of Northbrook Plan Commission
1225 Cedar Lane
Northbrook, Illinois 60062

Prepared by:

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Introduction

The following report has been prepared for Mariano's ("Applicant") in association with the development of an ancillary gas station within the existing Mariano's supermarket parking lot ("the Project") within the Village of Northbrook, Cook County, Illinois. The site is currently utilized for parking as part of Mariano's Grocery Store. The site is currently developed with a Mariano's supermarket with a total of 355 off-street parking spaces. It is proposed to construct a gas station with 10 fueling positions within the southern portion of the site. With the proposed improvements, 85 parking spaces will be eliminated, and 270 parking spaces will be maintained. The subject site is bound by residential and commercial land use to the north, Skokie Boulevard and commercial land use to the east, Dundee Road (Route 68) and commercial land use to the south, and a decommissioned Union Pacific Railroad line to the west. The proposed site is located within the O-4 Boulevard Office District in accordance with the 2025 Northbrook Zoning Map. The project site is identified as Parcel ID: 04024220100000. A site location map is included as **Figure 1** in **Appendix B**.

The proposed development will be supported by one (1) existing right-in/left-in/right-out driveway along Dundee Road (Route 68) approximately 470' west of Skokie Boulevard and one (1) existing right-in/right-out driveway along Skokie Boulevard approximately 480' north of Dundee Road (Route 68). Direct access to the development will be supported by two (2) full access driveways along the internal roadway which extends from Dundee Road to north of Mariano's Grocery Store. These driveways currently exist as median breaks to access the parking facilities of Mariano's Grocery Store and will be repurposed as driveways upon the development of the proposed site. The proposed Conceptual Site Plan is provided as **Figure 2** in **Appendix B**.

The scope of this Traffic Impact Study is based on scoping coordination with the Village of Northbrook, as well as the requirements outlined within the Village of Northbrook Ordinance. A copy of the scoping coordination is included in **Appendix A**.

This study presents an evaluation of the current and future traffic conditions in the vicinity of the Project. Specific elements included in this study are:

- An inventory of the roadway facilities in the vicinity of the Project, including the existing physical and traffic operating characteristics;
- Determination of the Existing Conditions;
- Site Generated Trips as described in the ITE *Trip Generation Manual, 12th Edition*;
- Trip Distribution and Assignment;
- Forecast of the 2027 No-Build Traffic Volumes;
- Peak Hour Capacity Analysis for the 2027 No-Build Conditions;
- Forecast of the 2027 Build Traffic Volumes;
- Peak Hour Capacity Analysis for the 2027 Build Conditions;
- Summary and Conclusions.

Roadway Conditions

A field investigation was conducted adjacent to the project site to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations, and existing vehicular/pedestrian traffic patterns.

Roadways

Skokie Boulevard is a north-south oriented major collector roadway under the jurisdiction of the Village of Northbrook The roadway provides two (2) travel lanes in each direction separated by a 17' center two-way left-turn lane. The posted speed limit is 40 mph.

Dundee Road (Route 68) is an east-west oriented principal arterial roadway under the jurisdiction of the Illinois Department of Transportation. The roadway provides two (2) travel lanes in each direction separated by a 12' center two-way left-turn lane with a posted speed limit of 35 mph.

Signalized Intersections

Skokie Boulevard & Dundee Road (Route 68) is a signalized four-leg intersection. The northbound and southbound approaches of Skokie Boulevard provide one (1) dedicated left-turn lane, two (2) dedicated through lanes and one (1) channelized right-turn lane. The eastbound and westbound approaches of Dundee Road (Route 68) provide one (1) dedicated left-turn lane, two (2) dedicated through lanes and one (1) dedicated right-turn lane.

Unsignalized Intersections

Dundee Road (Route 68) & Site Driveway is an unsignalized three-leg intersection with the southbound approach of the site driveway under stop-control. The southbound approach of the Site Driveway provides one (1) channelized right-turn lane. The eastbound approach of Dundee Road (Route 68) provides one (1) dedicated left-turn lane, one dedicated through lane and one shared through/right-turn lane. The westbound approach of Dundee Road (Route 68) provides one (1) shared left-turn/through lane, one (1) dedicated through lane and one (1) dedicated right-turn lane.

Skokie Boulevard & Site Driveway is an unsignalized four-leg intersection with the eastbound approach of the Site Driveway under stop-control. The northbound approach of Skokie Boulevard provides one (1) dedicated through-lane and one (1) shared through/right-turn lane. The southbound approach of Skokie Boulevard provides one (1) shared left-turn/through lane, one (1) dedicated through lane and one (1) channelized right-turn lane. The eastbound approach of the Site Driveway provides one (1) channelized right-turn lane.

Internal Roadway & Site Driveway is an unsignalized three-leg intersection under all-way stop control. The northbound approach of the Internal Roadway provides one (1) shared through/right-turn lane. The southbound approach of the Internal Roadway provides one (1) shared left-turn/through lane. The westbound approach of the Site Driveway provides one (1) shared left-turn/right-turn lane.

Internal Roadway & Internal Commercial Driveway / Eastern Site Driveway is an unsignalized four-leg intersection with the northbound approach of the Internal Commercial Driveway and southbound approach of the Eastern Site Driveway under stop-control. The northbound approach of the Internal Commercial Driveway and southbound approach of the Internal Commercial Driveway provide one (1) full movement lane. The eastbound and westbound approaches of the Internal Roadway provide one (1) full movement lane.

Internal Roadway / Western Internal Driveway & Site Driveway is an unsignalized three leg intersection with the eastbound approach of the Western Internal Driveway under stop-control. The northbound approach of the Site driveway provides one (1) shared left-turn/right-turn lane. The eastbound approach of the Western Internal Driveway provides one (1) shared through/right-turn lane. The westbound approach of the Internal Roadway provides one (1) shared left-turn/through lane.

Existing Traffic Conditions

Traffic volume data was collected within the study area to gain an understanding of the existing roadway conditions and operations through turning movement counts ("TMC") conducted on Thursday, October 9, 2025, from 7:00 AM to 9:00 PM and 4:00 PM to 6:00 PM and on Saturday, October 11, 2025, from 11:00 AM to 1:00 PM at the following intersections:

- Skokie Boulevard & Dundee Road (Route 68);
- Dundee Road (Route 68) & Site Driveway;
- Skokie Boulevard & Site Driveway;
- Internal Roadway & Site Driveway;
- Internal Roadway & Internal Commercial Driveway / Eastern Site Driveway; and
- Internal Roadway / Western Internal Driveway & Site Driveway.

The data collection efforts are detailed in **Table 1**. The processed TMC data is provided in **Appendix C**.

Table 1 – Data Collection Efforts and Established Network Peak Hours

Peak Period	Date Collected	Traffic Count Time Frame	Established Network Peak Hour
Weekday Morning	Thursday, October 9, 2025	7:00 AM – 9:00 PM	8:00 AM – 9:00 AM
Weekday Evening		4:00 PM – 6:00 PM	4:30 PM – 5:30 PM
Weekend Midday	Saturday, October 11, 2025	11:00 AM – 1:00 PM	11:30 AM – 12:30 PM

The TMC data was balanced in an upward fashion between intersections to provide a conservative analysis. A Volume Flow Diagram illustrating the Existing Conditions is provides as **Figure 3** in **Appendix B**.

Trip Generation and Distribution

Trip Generation

The site generated trips associated with the proposed development were estimated in accordance with standard methodology found within the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 12th Edition*. This ITE publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country. Land Use Code 944 – Gasoline/Service Station was utilized to estimate the trip generation of the proposed development. The comprehensive trip generation worksheets are provided in **Appendix D**.

Pass-By Trips

A pass-by trip is defined by ITE as a trip that is made as an intermediate stop while traveling to the primary trip destination without route diversion. The identification of pass-by trips is important to traffic analysis, as pass-by trips are counted as part of the existing traffic volumes. As a result, the trip is not "new" to the roadway network; it already existed prior to the development being constructed. However, pass-by trips do not reduce the trip generation at the site access.

Data published within the ITE Trip Generation User's Guide and Handbook for Land Use Code 944 – Gasoline/Service Station was utilized for the proposed development. The pass-by percentages of 63%, 57% and 49% was applied during the weekday morning, weekday evening and weekend midday peak hours respectively. **Table 2** provides a summary of the site generated trips by trip type.

Table 2 – Trip Generation Summary

ITE Land Use	Size	Daily Total	AM Peak Hour			PM Peak Hour			SAT Peak		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
ITE LUC 944 – Gasoline/Service Station	10 VFP	1720	57	56	113	71	71	142	62	60	122
Pass-by (63% AM / 57% PM / 49% SAT)			*36*	*36*	*72*	*41*	*41*	*82*	*30*	*30*	*62*
Total "New" Trips			**21**	**20**	**41**	**30**	**30**	**60**	**32**	**30**	**62**

Trip Distribution

Trip distribution methodology is developed based on a variety of factors. These factors include the existing travel patterns within the adjacent roadway network, adjacent land uses, proposed land uses, development locations, driveway locations, and the proximity of major arterials within the project vicinity.

"New" Trip Distribution

The following trip distribution patterns were established for "New" trips based upon a review of the existing roadway volumes, adjacent land uses, and proposed driveway configurations:

- To/From Skokie Boulevard, North of Site – 25%;
- To/From Skokie Boulevard, South of Site – 10%;
- To/From Dundee Road (Route 68), East of Site – 40%; and
- To/From Dundee Road (Route 68), West of Site – 25%.

Volume Flow Diagrams illustrating the "New" Trip Distribution and the "New" Site Generated Trips are provided as **Figures 4** and **5** in **Appendix B**.

Pass-By Trip Distribution

The following trip distribution pattern was established for pass-by trips based upon a review of the existing roadway volumes, adjacent land uses, and anticipated commuter travel patterns:

- Skokie Boulevard, Northbound – 9%, 9% and 11% (AM/PM/SAT respectively);
- Skokie Boulevard, Southbound – 17%, 27% and 22% (AM/PM/SAT respectively);
- Dundee Road (Route 68), Eastbound – 45%, 30% and 34% (AM/PM/SAT respectively); and
- Dundee Road (Route 68), Westbound – 29%, 43% and 44% (AM/PM/SAT respectively).

Volume Flow Diagrams illustrating the Pass-By Trip Distribution and the Pass-By Site Generated Trips are provided as **Figures 6** and **7** in **Appendix B**. A Volume Flow Diagram illustrating the Total Site Generated Trips is provided as **Figure 8** in **Appendix B**.

Future Traffic Conditions

To determine the traffic impact of the proposed development, an estimation of the operational traffic characteristics at the Build date, without the construction of the Project (or "No-Build" condition), is made. The existing volumes have been projected to the build-out year of 2027.

Background Growth

A general background rate of 1% was estimated based on traffic volume data published within the IDOT Annual Average Daily Traffic (AADT) Map. The growth rate was applied to the transient traffic volumes within the study area to account for general increases in traffic due to regional population and employment growth by the build year.

2027 No-Build Conditions

The 2027 No-Build traffic volumes were forecasted by applying the background growth rate to the existing traffic volumes. A Volume Flow Diagram illustrating the 2027 No-Build Conditions is provided as **Figure 9** in **Appendix B**.

2027 Build Conditions

The 2027 Build traffic volumes were forecasted by adding the site generated traffic provided in Figure 8 to the 2027 No-Build traffic volumes within the roadway network. A Volume Flow Diagram illustrating the 2027 Build Conditions is provided as **Figure 10** in **Appendix B**.

HCM Capacity Analysis

The peak hour traffic operations within the project vicinity were evaluated at the study intersection. The analyses were performed using *Synchro Version 12*, a traffic analysis and simulation program. The results of these analyses provide Levels of Service ("LOS"), volume/capacity descriptions, and average seconds of delay for the intersection movements.

The efficiency with which an intersection operates is a function of volume and capacity. The capacity of an intersection is the volume of vehicles it can accommodate during a given time period. LOS is a qualitative measure describing operational conditions within a traffic stream in terms of traffic characteristics, such as freedom to maneuver, traffic interruption, comfort, and convenience. Six (6) LOS are defined for each type of facility with analysis procedures available. Levels of Service range from "A" through "F," with Level "A" representing excellent conditions with no delays, and failure and deficient operations denoted by Level "F." The HCM LOS criteria for signalized and unsignalized intersections are summarized in the **Table 3**.

Table 3 – HCM LOS/Delay Criteria

Level of Service	Average Control Delay (sec/veh)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

The Levels of Service for the 2025 Existing, 2027 No-Build and 2027 Build conditions are detailed in **Tables 4 & 5.** The 95th Percentile Queue Length Summary for the 2025 Existing, 2027 No-Build and 2027 Build conditions are detailed in **Tables 6 & 7**. The capacity analysis calculation worksheets are provided in **Appendix E**.

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Table 4 – Level of Service Summary (1 of 2)

Intersection	Movement		2025 Existing						2027 No-Build						2027 Build					
			AM Peak		PM Peak		SAT Peak		AM Peak		PM Peak		SAT Peak		AM Peak		PM Peak		SAT Peak	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Skokie Boulevard (NB/SB) & Dundee Road (Route 68) (EB/WB)	EB	L	E	57.7	D	51.1	E	63.2	E	58.2	D	51.5	E	63.8	E	58.2	D	51.5	E	63.8
		T	B	17.7	C	22.8	B	18.7	B	17.9	C	22.9	B	19.0	B	17.7	C	22.8	B	18.9
		R	B	11.5	B	13.9	B	10.1	B	11.6	B	14.0	B	10.2	B	11.6	B	14.0	B	10.2
	WB	L	F	559.8	F	332.0	E	66.3	F	575.9	F	345.7	E	66.8	F	575.9	F	345.7	E	66.8
		T	C	24.8	C	29.7	C	23.7	C	25.3	C	30.3	C	24.2	C	25.4	C	30.4	C	24.3
		R	B	16.0	B	15.2	B	13.8	B	16.3	B	15.4	B	14.2	B	16.3	B	15.4	B	14.1
	NB	L	F	144.4	F	207.9	E	70.0	F	151.5	F	218.7	E	70.8	F	166.7	F	231.4	E	76.3
		T	D	41.3	D	38.7	D	44.7	D	41.5	D	39.0	D	44.8	D	41.4	D	38.9	D	44.8
		R	C	31.7	C	27.6	C	31.0	C	31.8	C	27.6	C	30.7	C	31.8	C	27.6	C	30.8
	SB	L	F	184.1	F	152.0	F	126.9	F	192.3	F	160.1	F	133.0	F	258.9	F	194.3	F	162.7
		T	D	40.8	E	56.8	D	43.4	D	40.9	E	60.1	D	43.5	D	41.0	E	60.9	D	43.7
		R	C	23.1	C	28.2	C	26.1	C	22.9	C	28.3	C	26.0	C	22.9	C	28.3	C	26.0
	Overall		**E**	**77.0**	**E**	**69.2**	**D**	**41.7**	**E**	**78.8**	**E**	**71.8**	**D**	**42.4**	**F**	**83.4**	**E**	**75.6**	**D**	**45.4**
Site Driveway (SB) & Dundee Road (Route 68) (EB/WB)	EB	L	B	12.5	C	16.2	B	11.3	B	12.7	C	16.7	B	11.4	B	13.4	C	17.9	B	11.8
		T	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	WB	TR	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	SB	R	B	14.4	C	23.8	B	14.1	B	14.7	C	24.9	B	14.3	C	15.1	D	27.6	B	14.8
	Overall		**A**	**0.6**	**A**	**1.5**	**A**	**1.2**	**A**	**0.6**	**A**	**1.6**	**A**	**1.2**	**A**	**0.8**	**A**	**2.1**	**A**	**1.4**

(1) Movement Operates at free-flow conditions

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Table 5 – Level of Service Summary (2 of 2)

Intersection	Movement		2025 Existing						2027 No-Build						2027 Build					
			AM Peak		PM Peak		SAT Peak		AM Peak		PM Peak		SAT Peak		AM Peak		PM Peak		SAT Peak	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Skokie Boulevard (NB/SB) & Site Driveway (EB)	EB	R	B	10.3	C	15.3	B	11.4	B	10.4	C	15.6	B	11.5	B	10.6	C	16.7	B	11.9
	NB	T	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	SB	TR	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	Overall		**A**	**0.2**	**A**	**0.6**	**A**	**0.6**	**A**	**0.2**	**A**	**0.6**	**A**	**0.7**	**A**	**0.3**	**A**	**0.9**	**A**	**0.9**
Internal Roadway (NB/SB) & Site Driveway (WB)	WB	LR	A	7.0	A	7.4	A	7.4	A	7.0	A	7.4	A	7.4	A	7.5	A	7.8	A	7.7
	NB	TR	A	7.4	A	7.6	A	7.6	A	7.4	A	7.6	A	7.7	A	7.6	A	7.8	A	7.9
	SB	LT	A	7.5	A	8.0	A	8.2	A	7.5	A	8.0	A	8.2	A	7.6	A	8.1	A	8.3
	Overall		**A**	**7.4**	**A**	**7.8**	**A**	**7.9**	**A**	**7.4**	**A**	**7.8**	**A**	**7.9**	**A**	**7.6**	**A**	**7.9**	**A**	**8.0**
Internal Commercial Driveway (NB) / Eastern Internal Driveway (SB) & Internal Roadway (EB/WB)	EB	LTR	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4	A	7.4
	WB	LTR	A	7.4	A	7.5	A	0.0	A	7.4	A	7.5	A	0.0	A	7.4	A	7.5	A	0.0
	NB	LTR	A	9.7	A	9.8	A	9.9	A	9.7	A	9.8	A	9.9	A	9.7	A	9.9	B	10.0
	SB	LTR	A	8.5	A	8.7	A	9.2	A	8.5	A	8.7	A	9.3	A	9.9	B	10.2	B	10.1
	Overall		**A**	**0.9**	**A**	**1.3**	**A**	**0.9**	**A**	**0.9**	**A**	**1.3**	**A**	**0.9**	**A**	**2.9**	**A**	**2.6**	**A**	**2.1**
Site Driveway (NB) & Western Internal Driveway (EB) / Internal Roadway (WB)	EB	TR	A	8.4	A	0.0	A	0.0	A	8.4	A	0.0	A	0.0	A	8.5	A	8.6	A	8.4
	WB	LT	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	NB	LR	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	Overall		**A**	**2.2**	**A**	**0.0**	**A**	**0.0**	**A**	**2.2**	**A**	**0.0**	**A**	**0.0**	**A**	**3.6**	**A**	**3.6**	**A**	**2.4**

(1) Movement Operates at free-flow conditions

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Table 6 – 95th Percentile Queue Length Summary (1 of 2)

Intersection	Movement		Storage Length	2025 Existing			2027 No-Build			2027 Build		
				AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak
Skokie Boulevard (NB/SB) & Dundee Road (ROUTE 68) (EB/WB)	EB	L	400′	353′	253′	345′	360′	258′	353′	360′	258′	353′
		T	>500′	298′	253′	210′	305′	260′	215′	300′	255′	213′
		R	275′	145′	150′	40′	148′	153′	43′	148′	153′	43′
	WB	L	300′	918′	653′	238′	960′	675′	240′	940′	675′	240′
		T	>500′	285′	325′	243′	293′	333′	250′	295′	338′	253′
		R	150′	83′	60′	78′	85′	65′	80′	85′	65′	80′
	NB	L	300′	278′	613′	235′	288′	640′	240′	310′	670′	258′
		T	>500′	178′	205′	185′	180′	210′	190′	180′	208′	188′
		R	280′	63′	55′	85′	68′	58′	88′	68′	58′	88′
	SB	L	400′	345′	470′	383′	358′	490′	398′	458′	575′	465′
		T	>500′	165′	355′	173′	168′	370′	178′	170′	375′	178′
		R	440′	68′	248′	88′	68′	253′	93′	68′	253′	93′
Site Driveway (SB) & Dundee Road (ROUTE 68) (EB/WB)	EB	L	50′	25′	25′	25′	25′	25′	25′	25′	32′	25′
		T	>500′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	WB	TR	475′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	SB	R	480′	25′	50′	25′	25′	55′	25′	25′	73′	28′

(1) Movement Operates at free-flow conditions

Table 7 – 95th Percentile Queue Length Summary (2 of 2)

Intersection	Movement		Storage Length	2025 Existing			2027 No-Build			2027 Build		
				AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak
Skokie Boulevard (NB/SB) & Site Driveway (EB)	EB	R	160′	25′	25′	25′	25′	25′	25′	25′	30′	25′
	NB	T	>500′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	SB	TR	330′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Internal Roadway (NB/SB) & Site Driveway (WB)	WB	LR	90′	25′	25′	25′	25′	25′	25′	25′	25′	25′
	NB	TR	280′	25′	25′	25′	25′	25′	25′	25′	25′	25′
	SB	LT	390′	25′	25′	25′	25′	25′	25′	25′	25′	25′
Internal Commercial Driveway (NB) / Eastern Internal Driveway (SB) & Internal Roadway (EB/WB)	EB	LTR	120′	0′	0′	0′	0′	0′	0′	0′	0′	0′
	WB	LTR	280′	0′	0′	0′	0′	0′	0′	0′	0′	0′
	NB	LTR	390′	0′	25′	25′	0′	25′	25′	0′	25′	25′
	SB	LTR	260′	0′	0′	0′	0′	0′	0′	25′	25′	25′
Site Driveway (NB) & Western Internal Driveway (EB) / Internal Roadway (WB)	EB	TR	240′	25′	0′	0′	25′	0′	0′	25′	25′	25′
	WB	LT	100′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
	NB	TR	50′	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

(1) Movement Operates at free-flow conditions

Skokie Boulevard & Dundee Road (Route 68)

2025 Existing Analysis

Under the Existing conditions, all intersection movements will operate at Level of Service "E" or better during all peak hours studied with the exception of the westbound left, northbound left and southbound left-turning movements, which will experience delays during all peak hours studied. The intersection will operate at an overall Level of Service "E" or better all peak hours studied.

2027 No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Levels of Service "E" or better during all peak hours studied with the exception of the westbound left, northbound left and

southbound left-turning movements, which will experience delays during all peak hours studied. The intersection will operate at an overall Level of Service "E" or better during all peak hours studied.

2027 Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "E" or better during all peak hours studied with the exception of the weekday morning peak hour which will experience delays.

Dundee Road (Route 68) & Site Driveway

2025 Existing Analysis

Under the Existing conditions, all intersection movements will operate at Level of Service "C" or better during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Level of Service "C" or better during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during the weekday evening peak hour.

Internal Roadway & Site Driveway

2025 Existing Analysis

Under the Existing conditions, all intersection movements will operate at Level of Service "C" or better during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Level of Service "C" or better during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during the weekday evening peak hour.

Internal Roadway & Internal Commercial Driveway / Eastern Site Driveway

2025 Existing Analysis

Under the Existing conditions, all intersection movements will operate at Level of Service "A" during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Level of Service "A" during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during the weekday evening peak hour.

Internal Roadway / Western Internal Driveway & Site Driveway

2025 Existing Analysis

Under the Existing conditions, all intersection movements will operate at Level of Service "A" during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Level of Service "A" during all peak hours studied. The intersection will operate at an overall Level of Service "A" during all peak hours studied.

2027 Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during the weekday evening peak hour.

Summary and Conclusions

The Traffic Impact Study evaluated the proposed convenience store/gas station within the Village of Northbrook, Cook County, Illinois. The findings of the Traffic Impact Study are summarized as follows:

1. The site is currently utilized for parking as part of Mariano's Grocery Store. The site is currently developed with a Mariano's supermarket with a total of 355 off-street parking spaces. It is proposed to construct a gas station with 10 fueling positions within the southern portion of the site.

2. The proposed development will be supported by one (1) existing right-in/left-in/right-out driveway along Dundee Road (Route 68) approximately 470' west of Skokie Boulevard and one (1) existing right-in/right-out driveway along Skokie Boulevard approximately 480' north of Dundee Road (Route 68). Direct access to the development will be supported by two (2) full access driveways along the internal roadway which extended from Dundee Road to north of Mariano's Grocery Story. These driveway currently exist as median breaks to access the parking facilities of Mariano's Grocery Store and will be repurposed as driveways upon the development of the site.

3. Under the 2027 Build conditions, all movements at the intersection of Skokie Boulevard & Dundee Road (Route 68) will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "E" or better during all peak hours studied with the exception of the weekday morning peak hour which will experience delays.

4. Under the 2027 Build conditions, all movements at the intersection of Dundee Road (Route 68) & Site Driveway will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during all peak hours studied.

5. Under the 2027 Build conditions, all movements at the intersection of the Internal Roadway & Site Driveway will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during all peak hours studied.

6. Under the 2027 Build conditions, all movements at the intersection of the Internal Roadway & Internal Commercial Driveway / Eastern Site Driveway will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during all peak hours studied.

7. Under the 2027 Build conditions, all movements at the intersection of the Internal Roadway & Western Internal Driveway & Site Driveway will continue to operate at or near No-Build Levels of Service during all peak hours studied. The intersection will continue to operate at an overall Level of Service "A" during all peak hours studied.

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Traffic Impact Study

Appendix A | TIA Scoping Correspondence

Noah Singer

From: Tyler Krause
Sent: Monday, November 3, 2025 3:56 PM
To: Noah Singer
Subject: FW: Mariano's Northbrook

From: Beladi, Aram <Aram.Beladi@northbrook.il.us>
Sent: Thursday, October 2, 2025 3:50 PM
To: Tyler Krause <tyler.krause@collierseng.com>
Cc: Alec Zukowski <alec.zukowski@collierseng.com>
Subject: RE: Mariano's Northbrook

This Message originated outside your organization.

Understood Tyler,

Unfortunately I do not have a good contact for the state in terms of getting the signal plans. I would also defer to you to apply an appropriate growth factor as we don't have a typical number we provide.

Best regards.

Aram Beladi, P.E.
Village Engineer | Village of Northbrook
655 Huehl Rd. | Northbrook, IL 60062
d: 847-664-4133



From: Tyler Krause <tyler.krause@collierseng.com>
Sent: Wednesday, October 1, 2025 2:24 PM
To: Beladi, Aram <Aram.Beladi@northbrook.il.us>
Cc: Alec Zukowski <alec.zukowski@collierseng.com>
Subject: RE: Mariano's Northbrook

I'm using Mimecast to share large files with you. Please see the attached instructions.

Beware External Email - Think Before You Act

I'm using Mimecast to share large files with you. Please see the attached instructions.

Hi Aram, thanks again for the call back. Just to confirm our conversation, we will study the intersections circled in red in the attached PDF during the weekday morning (7AM-9AM), weekday afternoon (4PM-6PM), and Saturday midday (11AM-1PM). We will also capture the existing parking supply during a typical weekday and typical Saturday from 7AM to 7PM.

All signal permit plans are held with the State. Do you have a specific contact with the state that we can reach out to?

Our data will be collected in 2025 with the development likely occurring in 2026. We typically apply a growth factor to accommodate the increase in traffic. Is there a specific growth factor for this area we should consider?

Looking forward to working with you and Village on this effort.

Thanks
Tyler Krause

Tyler Krause, P.E.
Senior Project Manager | Traffic Planning
Allentown, Pennsylvania

Colliers Engineering & Design
tyler.krause@collierseng.com
Direct: (484) 240-8116 | Cell: (610) 737-5023 | Main: 877 627 3772
colliersengineering.com | affiliated authorized entities



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From: Tyler Krause
Sent: Wednesday, October 1, 2025 2:48 PM
To: 'Aram.Beladi@northbrook.il.us' <Aram.Beladi@northbrook.il.us>
Cc: Alec Zukowski <alec.zukowski@collierseng.com>
Subject: Mariano's Northbrook

Hi Aram, I am the traffic engineer for the development team for the gas station portion of Mariano's Northbrook. Do you have few minutes to connect this week on the traffic scope. I just wanted to make sure we were on the same page before conducting any data. I am available today until about 3:30 or tomorrow 10-1 central time.

Thanks
Tyler Krause

Tyler Krause, P.E.
Senior Project Manager | Traffic Planning
tyler.krause@collierseng.com
Direct: (484) 240-8116 | Cell: (610) 737-5023 | Main: 877 627 3772
1110 American Parkway, Building 10, Suite F-200-B | Allentown, Pennsylvania 18109

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Senior Project Manager | Traffic Planning
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Prairie Grass Cafe
Spark Med Spa
Blue Chip Marketing Worldwide
RHM Staffing Solutions
IRON Financial
Empires Roofing Company
25012699P - Mariano's Northbrook, IL
Mariano's
Morton's The Steakhouse
Skokie Blvd
Rot Mediterranean Bowls, Salads, Pitas
Dundee Rd
Chicago Curling Club
Starbucks
Del Rd
Longacre Rd
94
68
30A
Google Earth

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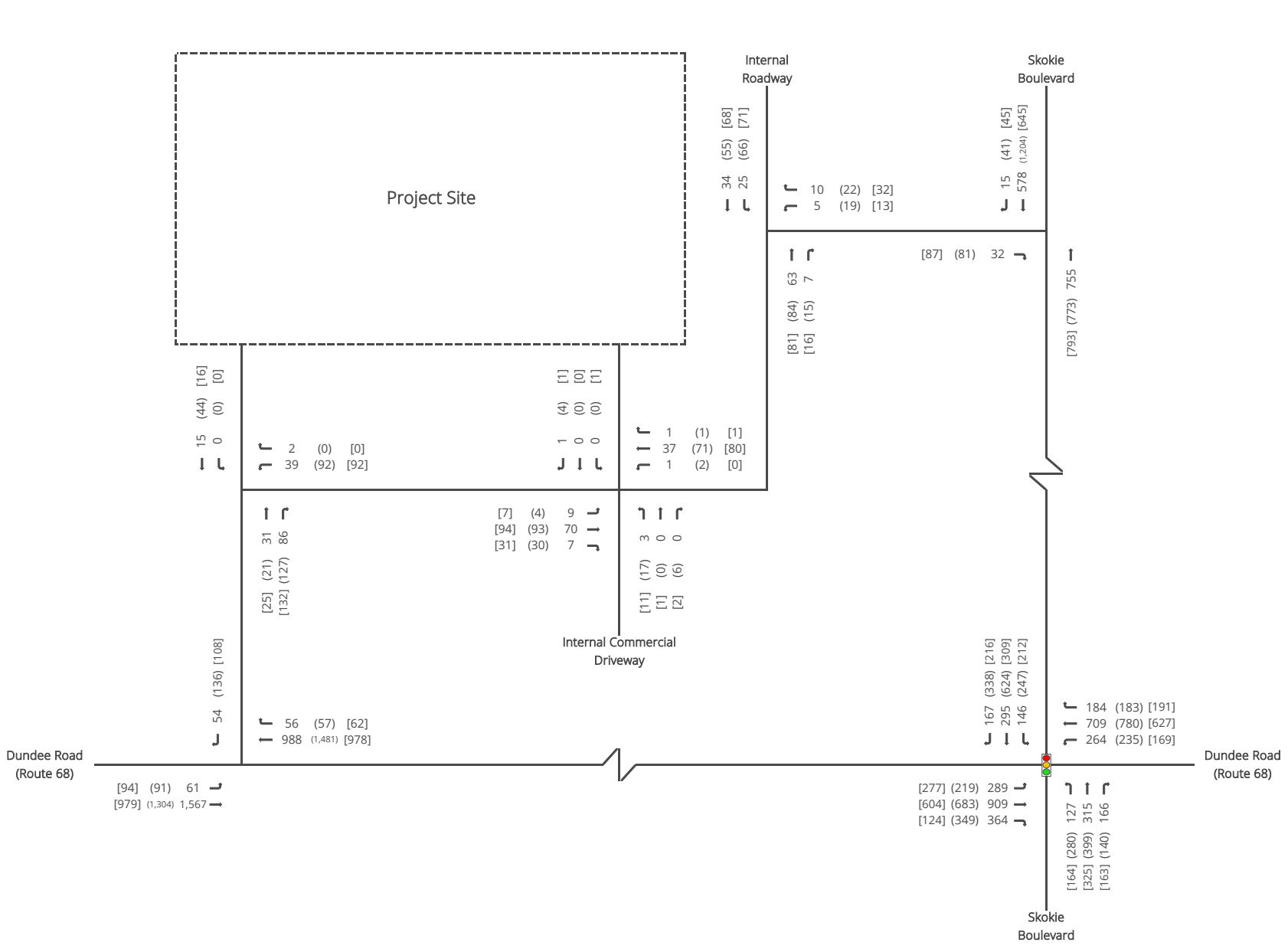
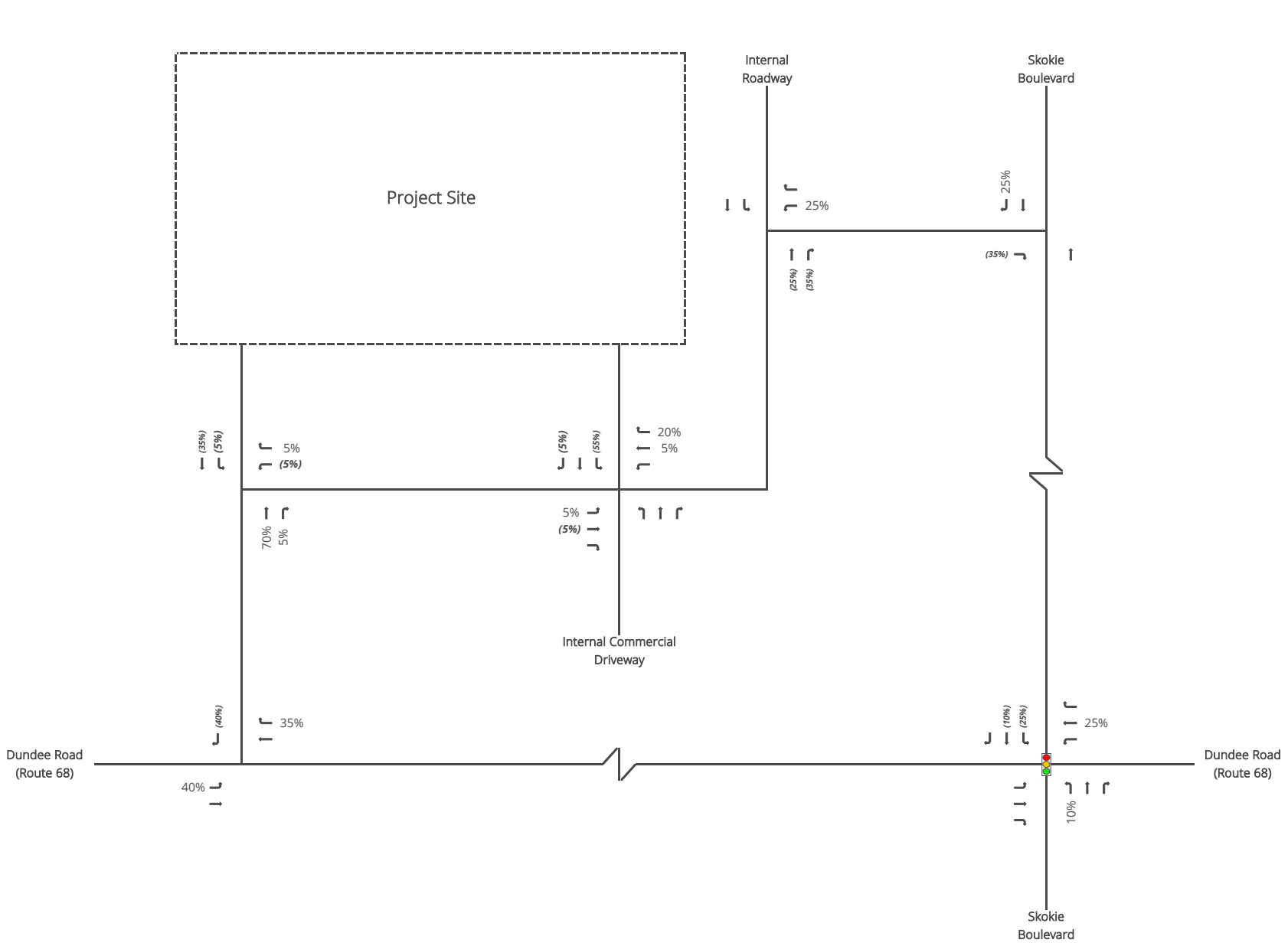
Traffic Impact Study

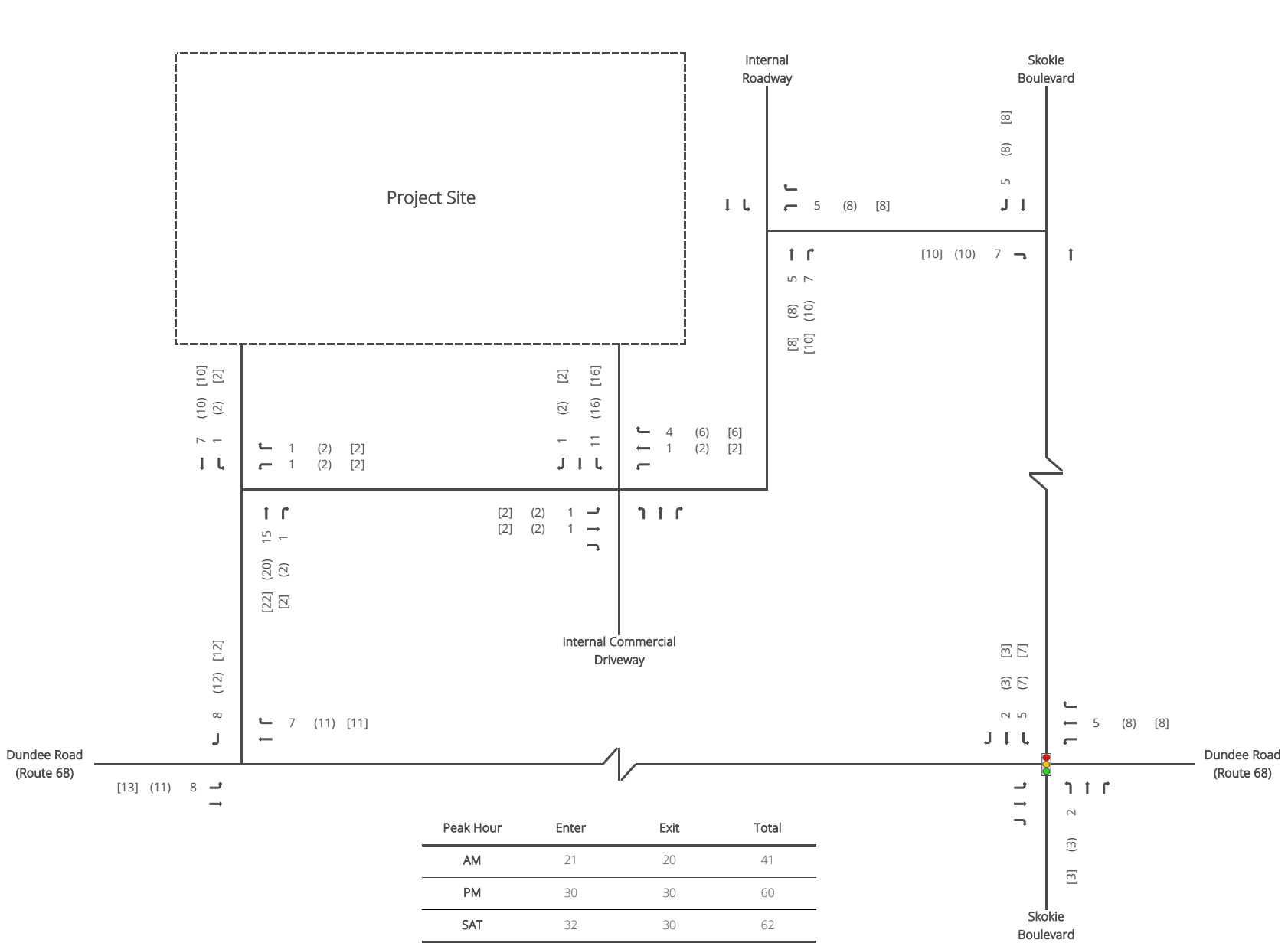
Appendix B | Traffic Figures



Colliers Engineering & Design	Mariano's Northbrook Project No. 25012699A Village of Northbrook, Cook County, Illinois	**Legend** AM Peak Hour: ### PM Peak Hour: (###) SAT Peak Hour: [###] Through Movement: Turning Movement: Signalized Intersection:	**Figure 3** **2025 Existing Conditions** **AM, PM, & SAT Peak Hours**



Colliers Engineering & Design	Mariano's Northbrook Project No. 25012699A Village of Northbrook, Cook County, Illinois	**Legend** Entering: ##% Exiting: ***(##%)*** Through Movement: Turning Movement: Signalized Intersection:	**Figure 4** **Primary Trip Distribution** **AM, PM, & SAT Peak Hours**



Peak Hour	Enter	Exit	Total
AM	21	20	41
PM	30	30	60
SAT	32	30	62

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Mariano's Northbrook

Project No. 25012699A

Village of Northbrook, Cook County, Illinois

Legend

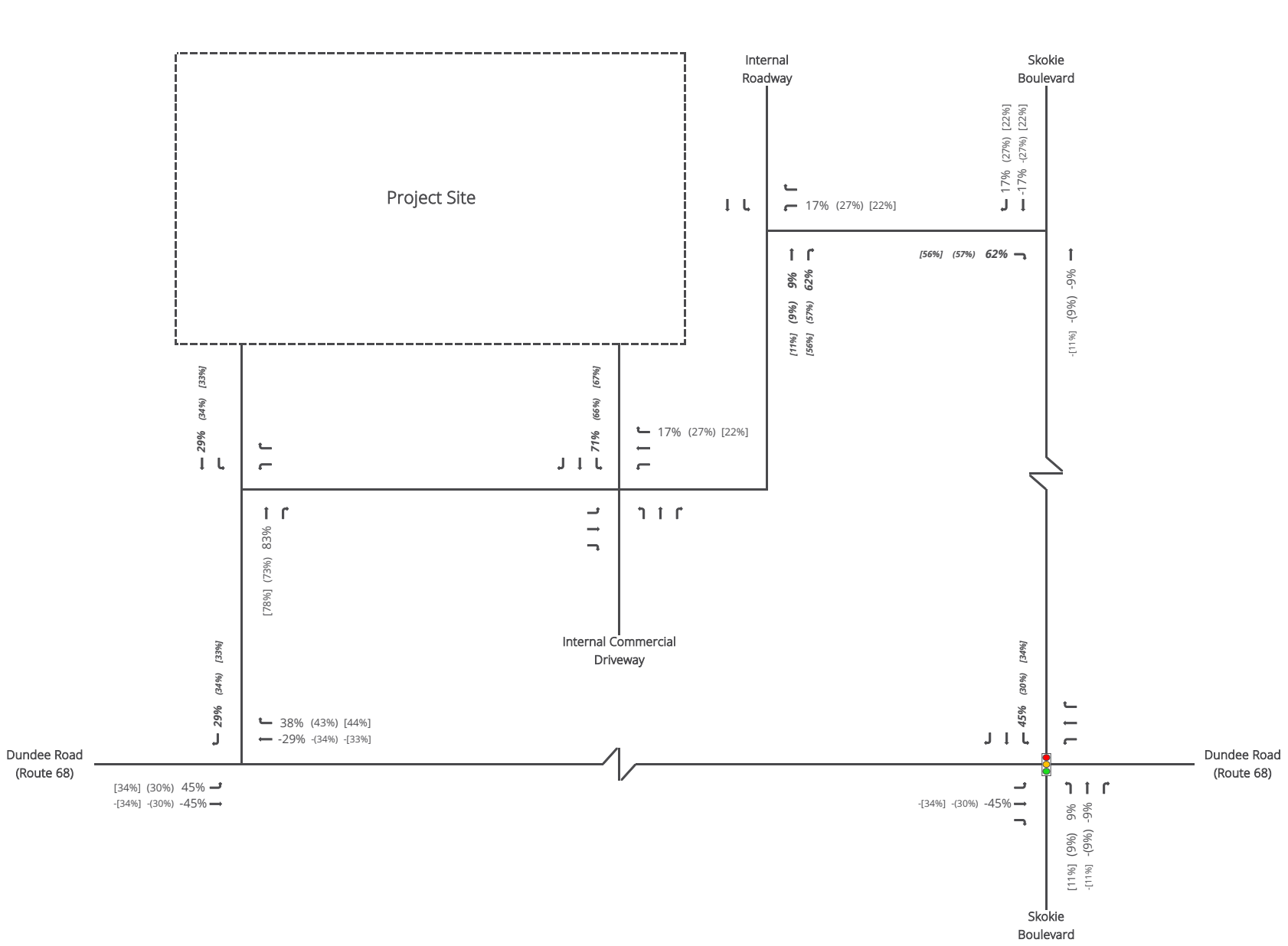
AM Peak Hour: ###
PM Peak Hour: (###)
SAT Peak Hour: [###]

Through Movement:
Turning Movement:
Signalized Intersection:

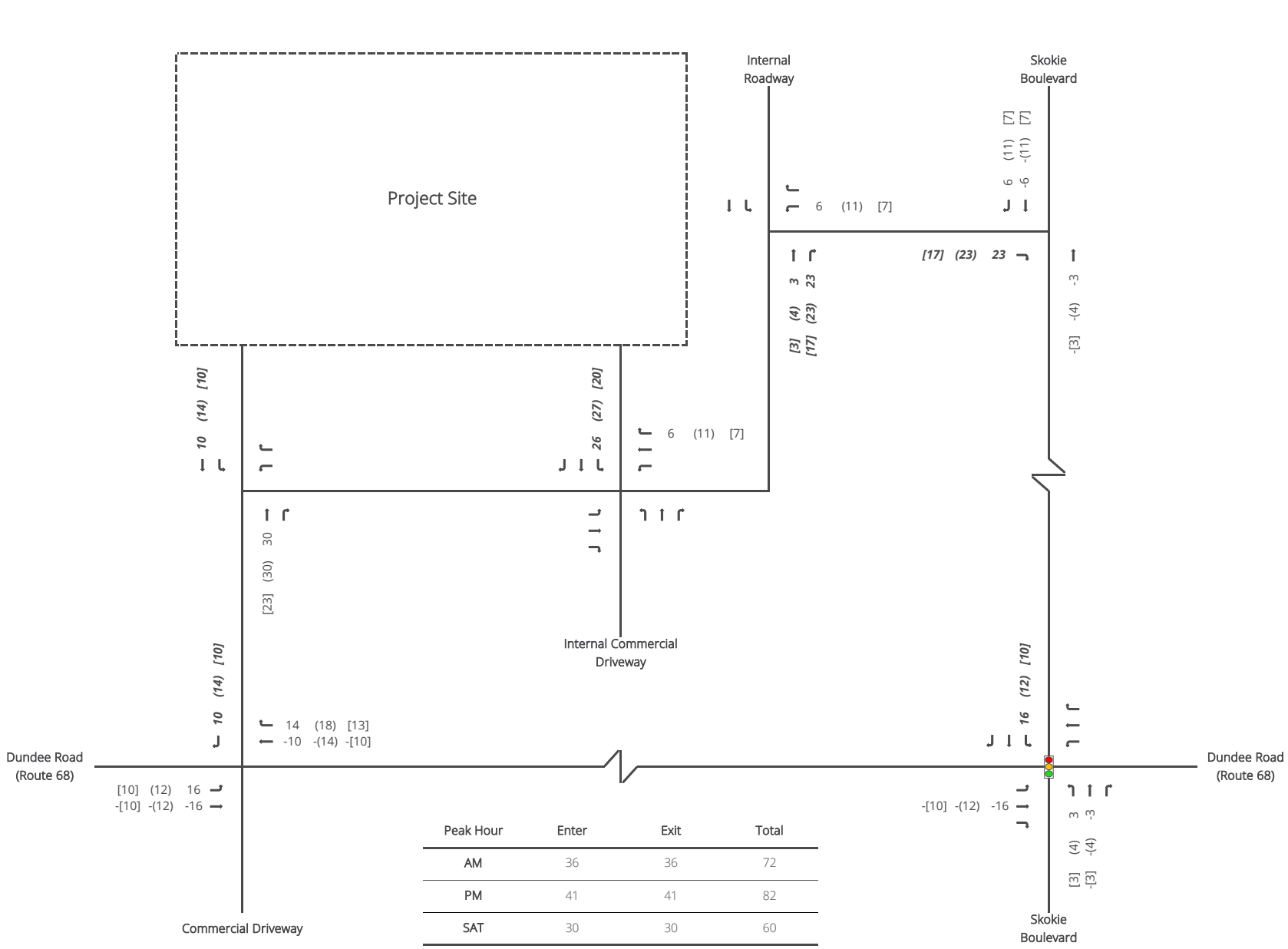
Figure 5

Primary Site Generated Trips

AM, PM, & SAT Peak Hours



Colliers Engineering & Design	Mariano's Northbrook Project No. 25012699A Village of Northbrook, Cook County, Illinois	**Legend** Entering / Exiting AM Peak Hour: ## / ***##*** PM Peak Hour: (##) / ***(##)*** SAT Peak Hour: [##] / ***[##]*** Through Movement: Turning Movement: Signalized Intersection:	**Figure 6** **Pass-By Trip Distribution** **AM, PM, & SAT Peak Hours**



Peak Hour	Enter	Exit	Total
AM	36	36	72
PM	41	41	82
SAT	30	30	60

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Mariano's Northbrook

Project No. 25012699A

Village of Northbrook, Cook County, Illinois

Legend

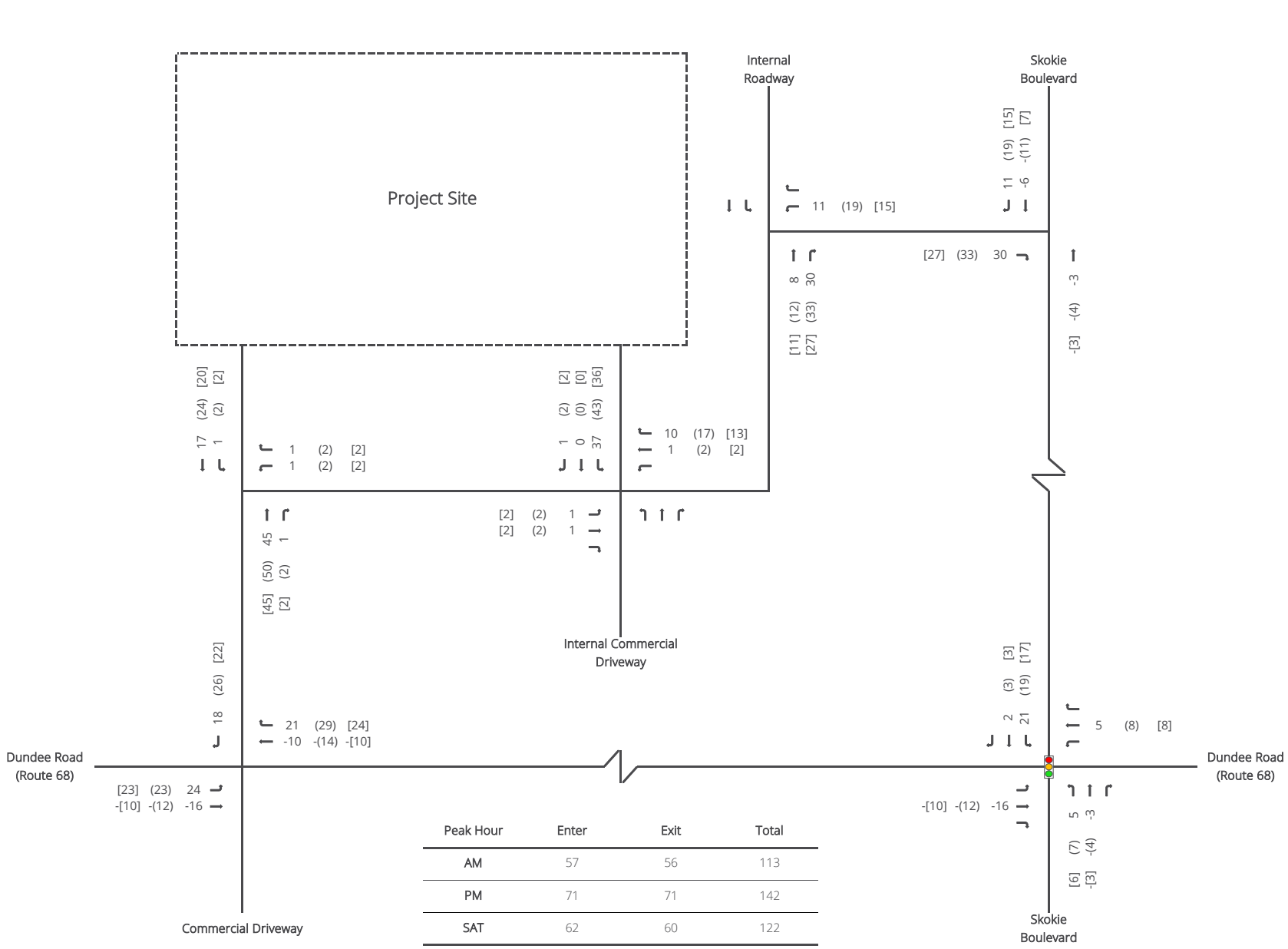
	Entering	Exiting
AM Peak Hour:	###	###
PM Peak Hour:	(###)	(###)
SAT Peak Hour:	[###]	[###]

Through Movement:
Turning Movement:
Signalized Intersection:

Figure 7

Pass-By Site Generated Trips

AM, PM, & SAT Peak Hours



Peak Hour	Enter	Exit	Total
AM	57	56	113
PM	71	71	142
SAT	62	60	122

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Mariano's Northbrook

Project No. 25012699A

Village of Northbrook, Cook County, Illinois

Legend

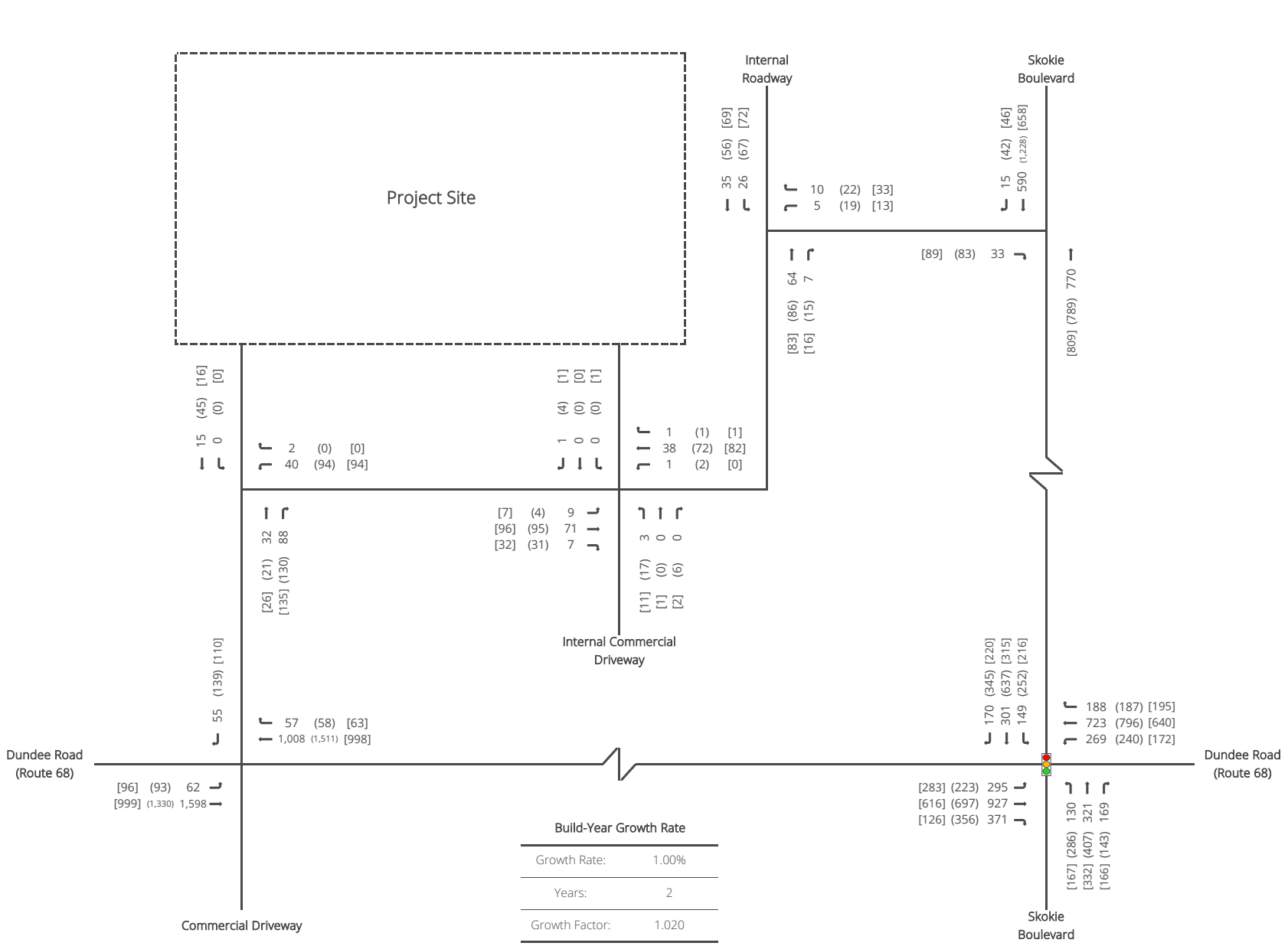
AM Peak Hour: ###
PM Peak Hour: (###)
SAT Peak Hour: [###]

Through Movement:
Turning Movement:
Signalized Intersection:

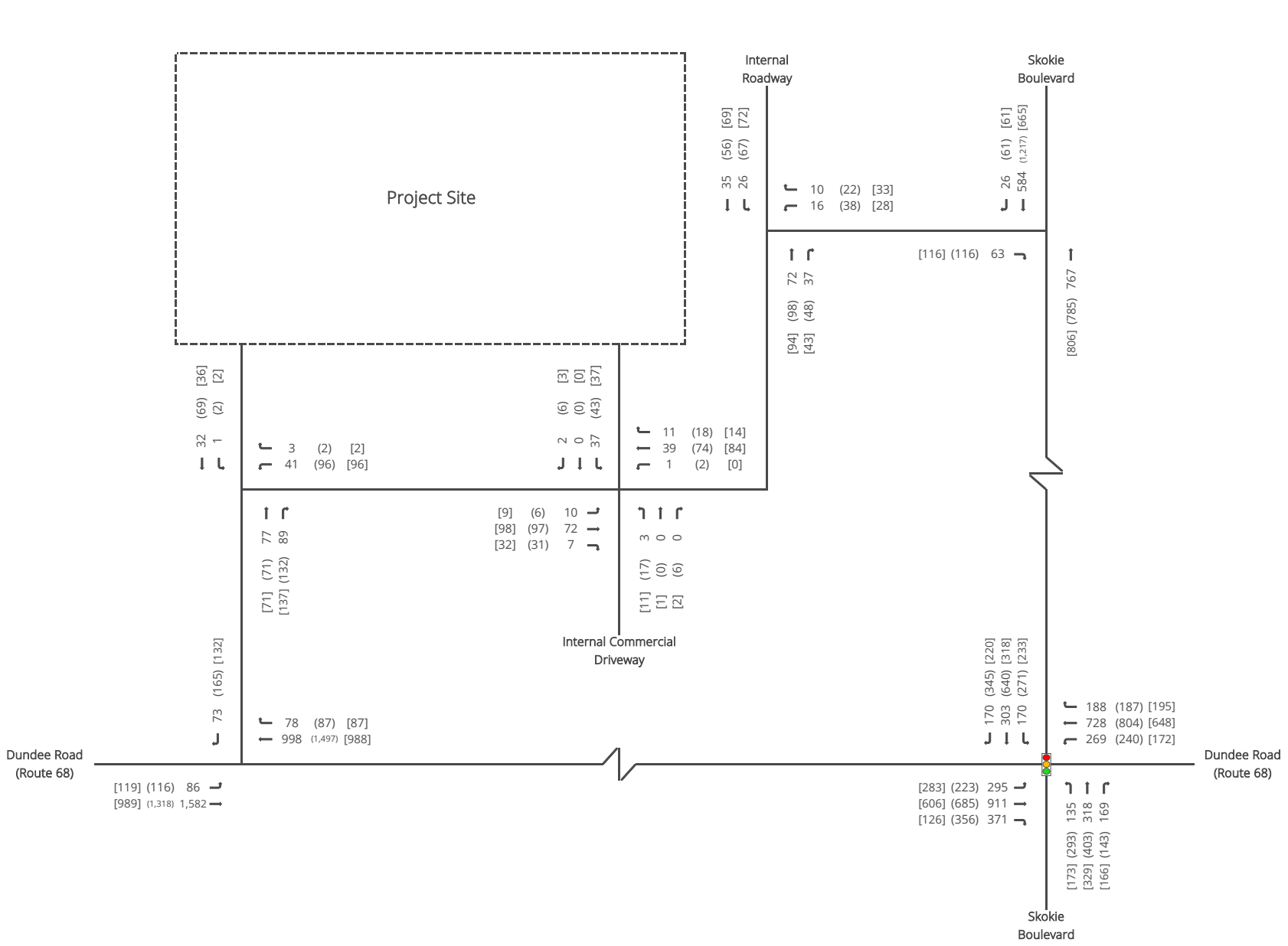
Figure 8

Total Site Generated Trips

AM, PM, & SAT Peak Hours



Colliers Engineering & Design	Mariano's Northbrook Project No. 25012699A Village of Northbrook, Cook County, Illinois	**Legend** AM Peak Hour: ### PM Peak Hour: (###) SAT Peak Hour: [###] Through Movement: Turning Movement: Signalized Intersection:	**Figure 9** **2027 No-Build Conditions** **AM, PM, & SAT Peak Hours**



Colliers Engineering & Design	Mariano's Northbrook Project No. 25012699A Village of Northbrook, Cook County, Illinois	**Legend** AM Peak Hour: ### PM Peak Hour: (###) SAT Peak Hour: [###] Through Movement: Turning Movement: Signalized Intersection:	**Figure 10** **2027 Build Conditions** **AM, PM, & SAT Peak Hours**

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Traffic Impact Study

Appendix C | Traffic Count Data

Dundee Rd & Skokie Blvd - RTOR x4 - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344082, Location: 42.137918, -87.791637

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Skokie Blvd						Skokie Blvd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	Int
2025-10-09 7:00AM	26	167	39	0	8	**240**	39	144	23	0	4	**210**	28	37	14	0	15	**94**	17	24	4	0	30	**75**	**619**
7:15AM	35	173	46	0	11	**265**	16	164	14	0	3	**197**	20	50	13	0	26	**109**	26	54	15	0	16	**111**	**682**
7:30AM	56	264	41	0	14	**375**	38	170	20	0	11	**239**	25	58	15	0	18	**116**	22	38	15	0	29	**104**	**834**
7:45AM	69	216	48	0	20	**353**	46	154	37	0	9	**246**	38	74	19	0	20	**151**	35	72	7	0	37	**151**	**901**
Hourly Total	186	820	174	0	53	**1233**	139	632	94	0	27	**892**	111	219	61	0	79	**470**	100	188	41	0	112	**441**	**3036**
8:00AM	53	187	44	0	19	**303**	75	180	30	0	14	**299**	36	82	13	0	30	**161**	30	80	18	0	21	**149**	**912**
8:15AM	80	288	79	0	36	**483**	60	197	29	0	7	**293**	25	80	23	0	18	**146**	41	62	14	0	26	**143**	**1065**
8:30AM	81	216	80	0	17	**394**	68	145	29	0	20	**262**	38	61	13	0	23	**135**	37	83	21	0	21	**162**	**953**
8:45AM	75	218	69	0	20	**382**	61	187	39	0	16	**303**	28	92	18	0	28	**166**	38	70	30	0	16	**154**	**1005**
Hourly Total	289	909	272	0	92	**1562**	264	709	127	0	57	**1157**	127	315	67	0	99	**608**	146	295	83	0	84	**608**	**3935**
4:00PM	67	174	46	0	15	**302**	52	203	27	0	15	**297**	71	128	23	0	30	**252**	60	143	36	0	48	**287**	**1138**
4:15PM	73	193	66	0	19	**351**	71	207	17	0	12	**307**	65	90	21	0	25	**201**	51	123	23	0	55	**252**	**1111**
4:30PM	51	171	53	0	26	**301**	42	206	23	1	21	**293**	66	88	16	0	11	**181**	65	147	44	0	42	**298**	**1073**
4:45PM	48	148	76	0	27	**299**	76	220	31	0	21	**348**	64	97	18	0	16	**195**	50	168	21	0	38	**277**	**1119**
Hourly Total	239	686	241	0	87	**1253**	241	836	98	1	69	**1245**	266	403	78	0	82	**829**	226	581	124	0	183	**1114**	**4441**
5:00PM	58	173	72	0	17	**320**	57	176	22	0	19	**274**	87	109	13	0	27	**236**	60	140	47	0	37	**284**	**1114**
5:15PM	62	191	57	0	21	**331**	59	178	25	0	21	**283**	63	105	19	0	20	**207**	72	169	68	0	41	**350**	**1171**
5:30PM	64	187	84	0	12	**347**	43	174	35	0	11	**263**	61	74	24	0	23	**182**	45	135	38	0	23	**241**	**1033**
5:45PM	52	185	63	0	19	**319**	52	179	39	1	17	**288**	61	92	24	0	18	**195**	60	147	32	0	35	**274**	**1076**
Hourly Total	236	736	276	0	69	**1317**	211	707	121	1	68	**1108**	272	380	80	0	88	**820**	237	591	185	0	136	**1149**	**4394**
Total	950	3151	963	0	301	**5365**	855	2884	440	2	221	**4402**	776	1317	286	0	348	**2727**	709	1655	433	0	515	**3312**	**15806**
% Approach	17.7%	58.7%	17.9%	0%	5.6%	**-**	19.4%	65.5%	10.0%	0%	5.0%	**-**	28.5%	48.3%	10.5%	0%	12.8%	**-**	21.4%	50.0%	13.1%	0%	15.5%	**-**	-
% Total	6.0%	19.9%	6.1%	0%	1.9%	**33.9%**	5.4%	18.2%	2.8%	0%	1.4%	**27.9%**	4.9%	8.3%	1.8%	0%	2.2%	**17.3%**	4.5%	10.5%	2.7%	0%	3.3%	**21.0%**	-
Lights	940	3073	946	0	299	**5258**	848	2845	432	2	219	**4346**	758	1273	280	0	347	**2658**	696	1599	423	0	496	**3214**	15476
% Lights	98.9%	97.5%	98.2%	0%	99.3%	**98.0%**	99.2%	98.6%	98.2%	100%	99.1%	**98.7%**	97.7%	96.7%	97.9%	0%	99.7%	**97.5%**	98.2%	96.6%	97.7%	0%	96.3%	**97.0%**	97.9%
Articulated Trucks	3	21	1	0	0	**25**	0	12	2	0	1	**15**	2	6	1	0	1	**10**	3	1	2	0	5	**11**	61
% Articulated Trucks	0.3%	0.7%	0.1%	0%	0%	**0.5%**	0%	0.4%	0.5%	0%	0.5%	**0.3%**	0.3%	0.5%	0.3%	0%	0.3%	**0.4%**	0.4%	0.1%	0.5%	0%	1.0%	**0.3%**	0.4%
Buses and Single-Unit Trucks	7	57	16	0	2	**82**	7	27	6	0	1	**41**	16	38	5	0	0	**59**	10	55	8	0	14	**87**	269
% Buses and Single-Unit Trucks	0.7%	1.8%	1.7%	0%	0.7%	**1.5%**	0.8%	0.9%	1.4%	0%	0.5%	**0.9%**	2.1%	2.9%	1.7%	0%	0%	**2.2%**	1.4%	3.3%	1.8%	0%	2.7%	**2.6%**	1.7%

*L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Dundee Rd & Skokie Blvd - RTOR x4 - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344082, Location: 42.137918, -87.791637

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Skokie Blvd						Skokie Blvd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	Int
2025-10-09 8:00AM	53	187	44	0	19	**303**	75	180	30	0	14	**299**	36	82	13	0	30	**161**	30	80	18	0	21	**149**	**912**
8:15AM	80	288	79	0	36	**483**	60	197	29	0	7	**293**	25	80	23	0	18	**146**	41	62	14	0	26	**143**	**1065**
8:30AM	81	216	80	0	17	**394**	68	145	29	0	20	**262**	38	61	13	0	23	**135**	37	83	21	0	21	**162**	**953**
8:45AM	75	218	69	0	20	**382**	61	187	39	0	16	**303**	28	92	18	0	28	**166**	38	70	30	0	16	**154**	**1005**
Total	289	909	272	0	92	**1562**	264	709	127	0	57	**1157**	127	315	67	0	99	**608**	146	295	83	0	84	**608**	**3935**
% Approach	18.5%	58.2%	17.4%	0%	5.9%	**-**	22.8%	61.3%	11.0%	0%	4.9%	**-**	20.9%	51.8%	11.0%	0%	16.3%	**-**	24.0%	48.5%	13.7%	0%	13.8%	**-**	-
% Total	7.3%	23.1%	6.9%	0%	2.3%	**39.7%**	6.7%	18.0%	3.2%	0%	1.4%	**29.4%**	3.2%	8.0%	1.7%	0%	2.5%	**15.5%**	3.7%	7.5%	2.1%	0%	2.1%	**15.5%**	-
PHF	0.892	0.789	0.850	-	0.639	**0.808**	0.880	0.900	0.814	-	0.713	**0.955**	0.836	0.856	0.728	-	0.825	**0.916**	0.890	0.889	0.692	-	0.808	**0.938**	0.924
Lights	286	885	262	0	91	**1524**	261	695	123	0	56	**1135**	120	307	66	0	99	**592**	143	273	80	0	82	**578**	3829
% Lights	99.0%	97.4%	96.3%	0%	98.9%	**97.6%**	98.9%	98.0%	96.9%	0%	98.2%	**98.1%**	94.5%	97.5%	98.5%	0%	100%	**97.4%**	97.9%	92.5%	96.4%	0%	97.6%	**95.1%**	97.3%
Articulated Trucks	2	8	1	0	0	**11**	0	8	0	0	0	**8**	0	2	0	0	0	**2**	1	1	1	0	0	**3**	24
% Articulated Trucks	0.7%	0.9%	0.4%	0%	0%	**0.7%**	0%	1.1%	0%	0%	0%	**0.7%**	0%	0.6%	0%	0%	0%	**0.3%**	0.7%	0.3%	1.2%	0%	0%	**0.5%**	0.6%
Buses and Single-Unit Trucks	1	16	9	0	1	**27**	3	6	4	0	1	**14**	7	6	1	0	0	**14**	2	21	2	0	2	**27**	82
% Buses and Single-Unit Trucks	0.3%	1.8%	3.3%	0%	1.1%	**1.7%**	1.1%	0.8%	3.1%	0%	1.8%	**1.2%**	5.5%	1.9%	1.5%	0%	0%	**2.3%**	1.4%	7.1%	2.4%	0%	2.4%	**4.4%**	2.1%

*L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Dundee Rd & Skokie Blvd - RTOR x4 - TMC

Thu Oct 9, 2025
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344082, Location: 42.137918, -87.791637

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Skokie Blvd						Skokie Blvd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	RR	**App**	L	T	R	U	RR	**App**	L	T	R	U	RR	**App**	L	T	R	U	RR	**App**	**Int**
2025-10-09 4:30PM	51	171	53	0	26	**301**	42	206	23	1	21	**293**	66	88	16	0	11	**181**	65	147	44	0	42	**298**	**1073**
4:45PM	48	148	76	0	27	**299**	76	220	31	0	21	**348**	64	97	18	0	16	**195**	50	168	21	0	38	**277**	**1119**
5:00PM	58	173	72	0	17	**320**	57	176	22	0	19	**274**	87	109	13	0	27	**236**	60	140	47	0	37	**284**	**1114**
5:15PM	62	191	57	0	21	**331**	59	178	25	0	21	**283**	63	105	19	0	20	**207**	72	169	68	0	41	**350**	**1171**
Total	219	683	258	0	91	**1251**	234	780	101	1	82	**1198**	280	399	66	0	74	**819**	247	624	180	0	158	**1209**	**4477**
% Approach	17.5%	54.6%	20.6%	0%	7.3%	**-**	19.5%	65.1%	8.4%	0.1%	6.8%	**-**	34.2%	48.7%	8.1%	0%	9.0%	**-**	20.4%	51.6%	14.9%	0%	13.1%	**-**	-
% Total	4.9%	15.3%	5.8%	0%	2.0%	**27.9%**	5.2%	17.4%	2.3%	0%	1.8%	**26.8%**	6.3%	8.9%	1.5%	0%	1.7%	**18.3%**	5.5%	13.9%	4.0%	0%	3.5%	**27.0%**	-
PHF	0.883	0.894	0.849	-	0.843	**0.945**	0.770	0.886	0.815	0.250	0.976	**0.861**	0.805	0.915	0.868	-	0.685	**0.868**	0.858	0.923	0.662	-	0.940	**0.864**	0.956
Lights	217	677	254	0	90	**1238**	231	774	101	1	81	**1188**	278	397	66	0	73	**814**	242	619	179	0	156	**1196**	4436
% Lights	99.1%	99.1%	98.4%	0%	98.9%	**99.0%**	98.7%	99.2%	100%	100%	98.8%	**99.2%**	99.3%	99.5%	100%	0%	98.6%	**99.4%**	98.0%	99.2%	99.4%	0%	98.7%	**98.9%**	99.1%
Articulated Trucks	0	1	0	0	0	**1**	0	1	0	0	1	**2**	0	1	0	0	1	**2**	1	0	0	0	0	**1**	6
% Articulated Trucks	0%	0.1%	0%	0%	0%	**0.1%**	0%	0.1%	0%	0%	1.2%	**0.2%**	0%	0.3%	0%	0%	1.4%	**0.2%**	0.4%	0%	0%	0%	0%	**0.1%**	0.1%
Buses and Single-Unit Trucks	2	5	4	0	1	**12**	3	5	0	0	0	**8**	2	1	0	0	0	**3**	4	5	1	0	2	**12**	35
% Buses and Single-Unit Trucks	0.9%	0.7%	1.6%	0%	1.1%	**1.0%**	1.3%	0.6%	0%	0%	0%	**0.7%**	0.7%	0.3%	0%	0%	0%	**0.4%**	1.6%	0.8%	0.6%	0%	1.3%	**1.0%**	0.8%

*L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Dundee Rd & Skokie Blvd - RTOR x4 - TMC

Sat Oct 11, 2025
Midday Peak (WKND) (11:30 AM - 12:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344083, Location: 42.137918, -87.791637

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Skokie Blvd						Skokie Blvd						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	L	T	R	U	RR	App	Int
2025-10-11 11:30AM	64	158	28	0	5	**255**	41	158	25	0	15	**239**	43	66	19	0	12	**140**	55	60	23	0	30	**168**	**802**
11:45AM	73	148	18	0	12	**251**	42	147	42	0	21	**252**	45	105	24	0	20	**194**	50	91	23	0	29	**193**	**890**
12:00PM	78	146	17	0	14	**255**	46	151	38	0	10	**245**	41	64	25	0	15	**145**	54	73	33	0	29	**189**	**834**
12:15PM	62	152	24	0	6	**244**	40	171	31	0	9	**251**	35	90	25	0	23	**173**	53	85	29	0	20	**187**	**855**
Total	277	604	87	0	37	**1005**	169	627	136	0	55	**987**	164	325	93	0	70	**652**	212	309	108	0	108	**737**	**3381**
% Approach	27.6%	60.1%	8.7%	0%	3.7%	**-**	17.1%	63.5%	13.8%	0%	5.6%	**-**	25.2%	49.8%	14.3%	0%	10.7%	**-**	28.8%	41.9%	14.7%	0%	14.7%	**-**	-
% Total	8.2%	17.9%	2.6%	0%	1.1%	**29.7%**	5.0%	18.5%	4.0%	0%	1.6%	**29.2%**	4.9%	9.6%	2.8%	0%	2.1%	**19.3%**	6.3%	9.1%	3.2%	0%	3.2%	**21.8%**	-
PHF	0.888	0.956	0.777	-	0.661	**0.985**	0.918	0.917	0.810	-	0.655	**0.979**	0.911	0.774	0.930	-	0.761	**0.840**	0.964	0.849	0.818	-	0.900	**0.955**	0.950
Lights	275	597	85	0	36	**993**	168	621	134	0	55	**978**	162	324	91	0	70	**647**	212	308	107	0	106	**733**	3351
% Lights	99.3%	98.8%	97.7%	0%	97.3%	**98.8%**	99.4%	99.0%	98.5%	0%	100%	**99.1%**	98.8%	99.7%	97.8%	0%	100%	**99.2%**	100%	99.7%	99.1%	0%	98.1%	**99.5%**	99.1%
Articulated Trucks	0	1	0	0	1	**2**	0	1	0	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	1	**1**	4
% Articulated Trucks	0%	0.2%	0%	0%	2.7%	**0.2%**	0%	0.2%	0%	0%	0%	**0.1%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0.9%	**0.1%**	0.1%
Buses and Single-Unit Trucks	2	6	2	0	0	**10**	1	5	2	0	0	**8**	2	1	2	0	0	**5**	0	1	1	0	1	**3**	26
% Buses and Single-Unit Trucks	0.7%	1.0%	2.3%	0%	0%	**1.0%**	0.6%	0.8%	1.5%	0%	0%	**0.8%**	1.2%	0.3%	2.2%	0%	0%	**0.8%**	0%	0.3%	0.9%	0%	0.9%	**0.4%**	0.8%

*L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Dundee Road (SR 68) and Site Access - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344072, Location: 42.137974, -87.79377

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Car Wash Access						Site Access						Southwest						
Direction	Eastbound						Westbound						Northbound						Southbound						Northeastbound						
Time	L	T	R	HR	U	App	L	BL	T	R	U	App	HL	L	T	R	U	App	L	T	BR	R	U	App	HL	BL	BR	HR	U	App	Int
2025-10-09 7:00AM	6	255	1	0	0	**262**	0	0	187	6	0	**193**	0	0	0	0	0	**0**	0	0	0	10	0	**10**	0	0	0	0	0	**0**	**465**
7:15AM	11	266	2	1	0	**280**	0	0	229	3	0	**232**	0	0	0	0	0	**0**	0	0	0	13	0	**13**	1	0	0	0	0	**1**	**526**
7:30AM	14	373	3	1	0	**391**	0	0	238	7	0	**245**	0	0	0	0	0	**0**	0	0	0	14	0	**14**	0	0	0	0	0	**0**	**650**
7:45AM	10	361	1	0	0	**372**	0	0	239	7	0	**246**	0	0	0	0	0	**0**	0	0	0	13	0	**13**	0	0	0	0	0	**0**	**631**
Hourly Total	41	1255	7	2	0	**1305**	0	0	893	23	0	**916**	0	0	0	0	0	**0**	0	0	0	50	0	**50**	1	0	0	0	0	**1**	**2272**
8:00AM	6	300	1	0	0	**307**	0	0	254	16	0	**270**	0	0	0	0	0	**0**	0	0	0	15	0	**15**	0	0	0	0	0	**0**	**592**
8:15AM	15	479	5	0	0	**499**	1	0	272	5	0	**278**	0	0	0	0	0	**0**	0	0	0	15	0	**15**	1	0	0	0	0	**1**	**793**
8:30AM	17	395	3	2	0	**417**	2	0	209	13	0	**224**	0	0	0	0	0	**0**	0	0	0	5	0	**5**	1	0	0	0	0	**1**	**647**
8:45AM	16	393	0	0	0	**409**	0	0	253	16	0	**269**	0	0	0	0	0	**0**	0	0	0	19	0	**19**	0	0	0	0	0	**0**	**697**
Hourly Total	54	1567	9	2	0	**1632**	3	0	988	50	0	**1041**	0	0	0	0	0	**0**	0	0	0	54	0	**54**	2	0	0	0	0	**2**	**2729**
4:00PM	24	287	3	1	0	**315**	3	0	356	12	0	**371**	0	0	0	0	0	**0**	0	0	0	35	0	**35**	1	0	3	0	0	**4**	**725**
4:15PM	27	337	0	0	1	**365**	0	1	355	11	0	**367**	0	0	0	0	0	**0**	0	0	0	30	0	**30**	0	0	1	0	0	**1**	**763**
4:30PM	23	310	2	0	0	**335**	0	0	364	16	0	**380**	0	0	0	0	0	**0**	0	0	0	30	0	**30**	0	0	0	0	0	**0**	**745**
4:45PM	24	321	0	3	0	**348**	0	0	361	9	0	**370**	0	0	0	0	0	**0**	0	0	0	31	0	**31**	0	0	0	0	0	**0**	**749**
Hourly Total	98	1255	5	4	1	**1363**	3	1	1436	48	0	**1488**	0	0	0	0	0	**0**	0	0	0	126	0	**126**	1	0	4	0	0	**5**	**2982**
5:00PM	20	339	0	1	0	**360**	0	1	368	15	0	**384**	0	0	0	0	0	**0**	0	0	0	43	0	**43**	0	0	0	0	0	**0**	**787**
5:15PM	22	334	1	0	0	**357**	0	1	388	16	0	**405**	0	0	0	0	0	**0**	0	0	0	32	0	**32**	0	0	0	0	0	**0**	**794**
5:30PM	26	344	0	0	0	**370**	0	1	310	18	0	**329**	0	0	0	1	0	**1**	0	0	0	25	0	**25**	2	0	0	0	0	**2**	**727**
5:45PM	19	336	0	0	0	**355**	0	1	328	20	0	**349**	0	0	0	0	0	**0**	1	0	0	31	0	**32**	0	0	0	0	0	**0**	**736**
Hourly Total	87	1353	1	1	0	**1442**	0	4	1394	69	0	**1467**	0	0	0	1	0	**1**	1	0	0	131	0	**132**	2	0	0	0	0	**2**	**3044**
Total	280	5430	22	9	1	**5742**	6	5	4711	190	0	**4912**	0	0	0	1	0	**1**	1	0	0	361	0	**362**	6	0	4	0	0	**10**	**11027**
% Approach	4.9%	94.6%	0.4%	0.2%	0%	**-**	0.1%	0.1%	95.9%	3.9%	0%	**-**	0%	0%	0%	100%	0%	**-**	0.3%	0%	0%	99.7%	0%	**-**	60.0%	0%	40.0%	0%	0%	**-**	-
% Total	2.5%	49.2%	0.2%	0.1%	0%	**52.1%**	0.1%	0%	42.7%	1.7%	0%	**44.5%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	3.3%	0%	**3.3%**	0.1%	0%	0%	0%	0%	**0.1%**	-
Lights	274	5314	22	9	1	**5620**	6	5	4597	184	0	**4792**	0	0	0	1	0	**1**	1	0	0	352	0	**353**	6	0	4	0	0	**10**	10776
% Lights	97.9%	97.9%	100%	100%	100%	**97.9%**	100%	100%	97.6%	96.8%	0%	**97.6%**	0%	0%	0%	100%	0%	**100%**	100%	0%	0%	97.5%	0%	**97.5%**	100%	0%	100%	0%	0%	**100%**	97.7%
Articulated Trucks	3	13	0	0	0	**16**	0	0	38	2	0	**40**	0	0	0	0	0	**0**	0	0	0	1	0	**1**	0	0	0	0	0	**0**	57
% Articulated Trucks	1.1%	0.2%	0%	0%	0%	**0.3%**	0%	0%	0.8%	1.1%	0%	**0.8%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0.3%	0%	**0.3%**	0%	0%	0%	0%	0%	**0%**	0.5%
Buses and Single-Unit Trucks	3	103	0	0	0	**106**	0	0	76	4	0	**80**	0	0	0	0	0	**0**	0	0	0	8	0	**8**	0	0	0	0	0	**0**	194
% Buses and Single-Unit Trucks	1.1%	1.9%	0%	0%	0%	**1.8%**	0%	0%	1.6%	2.1%	0%	**1.6%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	2.2%	0%	**2.2%**	0%	0%	0%	0%	0%	**0%**	1.8%

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Dundee Road (SR 68) and Site Access - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344072, Location: 42.137974, -87.79377

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Car Wash Access						Site Access						Southwest						
Direction	Eastbound						Westbound						Northbound						Southbound						Northeastbound						
Time	L	T	R	HR	U	App	L	BL	T	R	U	App	HL	L	T	R	U	App	L	T	BR	R	U	App	HL	BL	BR	HR	U	App	Int
2025-10-09 8:00AM	6	300	1	0	0	**307**	0	0	254	16	0	**270**	0	0	0	0	0	**0**	0	0	0	15	0	**15**	0	0	0	0	0	**0**	**592**
8:15AM	15	479	5	0	0	**499**	1	0	272	5	0	**278**	0	0	0	0	0	**0**	0	0	0	15	0	**15**	1	0	0	0	0	**1**	**793**
8:30AM	17	395	3	2	0	**417**	2	0	209	13	0	**224**	0	0	0	0	0	**0**	0	0	0	5	0	**5**	1	0	0	0	0	**1**	**647**
8:45AM	16	393	0	0	0	**409**	0	0	253	16	0	**269**	0	0	0	0	0	**0**	0	0	0	19	0	**19**	0	0	0	0	0	**0**	**697**
Total	54	1567	9	2	0	**1632**	3	0	988	50	0	**1041**	0	0	0	0	0	**0**	0	0	0	54	0	**54**	2	0	0	0	0	**2**	**2729**
% Approach	3.3%	96.0%	0.6%	0.1%	0%	**-**	0.3%	0%	94.9%	4.8%	0%	**-**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	100%	0%	**-**	100%	0%	0%	0%	0%	**-**	-
% Total	2.0%	57.4%	0.3%	0.1%	0%	**59.8%**	0.1%	0%	36.2%	1.8%	0%	**38.1%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	2.0%	0%	**2.0%**	0.1%	0%	0%	0%	0%	**0.1%**	-
PHF	0.794	0.818	0.450	0.250	-	**0.818**	0.375	-	0.908	0.781	-	**0.936**	-	-	-	-	-	**-**	-	-	-	0.711	-	**0.711**	0.500	-	-	-	-	**0.500**	0.860
Lights	51	1528	9	2	0	**1590**	3	0	960	48	0	**1011**	0	0	0	0	0	**0**	0	0	0	54	0	**54**	2	0	0	0	0	**2**	2657
% Lights	94.4%	97.5%	100%	100%	0%	**97.4%**	100%	0%	97.2%	96.0%	0%	**97.1%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	100%	0%	**100%**	100%	0%	0%	0%	0%	**100%**	97.4%
Articulated Trucks	2	6	0	0	0	**8**	0	0	13	0	0	**13**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	21
% Articulated Trucks	3.7%	0.4%	0%	0%	0%	**0.5%**	0%	0%	1.3%	0%	0%	**1.2%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	0.8%
Buses and Single-Unit Trucks	1	33	0	0	0	**34**	0	0	15	2	0	**17**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	51
% Buses and Single-Unit Trucks	1.9%	2.1%	0%	0%	0%	**2.1%**	0%	0%	1.5%	4.0%	0%	**1.6%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	1.9%

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Dundee Road (SR 68) and Site Access - TMC

Thu Oct 9, 2025
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344072, Location: 42.137974, -87.79377

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Car Wash Access						Site Access						Southwest						
Direction	Eastbound						Westbound						Northbound						Southbound						Northeastbound						
Time	L	T	R	HR	U	App	L	BL	T	R	U	App	HL	L	T	R	U	App	L	T	BR	R	U	App	HL	BL	BR	HR	U	App	Int
2025-10-09 4:30PM	23	310	2	0	0	**335**	0	0	364	16	0	**380**	0	0	0	0	0	**0**	0	0	0	30	0	**30**	0	0	0	0	0	**0**	**745**
4:45PM	24	321	0	3	0	**348**	0	0	361	9	0	**370**	0	0	0	0	0	**0**	0	0	0	31	0	**31**	0	0	0	0	0	**0**	**749**
5:00PM	20	339	0	1	0	**360**	0	1	368	15	0	**384**	0	0	0	0	0	**0**	0	0	0	43	0	**43**	0	0	0	0	0	**0**	**787**
5:15PM	22	334	1	0	0	**357**	0	1	388	16	0	**405**	0	0	0	0	0	**0**	0	0	0	32	0	**32**	0	0	0	0	0	**0**	**794**
Total	89	1304	3	4	0	**1400**	0	2	1481	56	0	**1539**	0	0	0	0	0	**0**	0	0	0	136	0	**136**	0	0	0	0	0	**0**	**3075**
% Approach	6.4%	93.1%	0.2%	0.3%	0%	**-**	0%	0.1%	96.2%	3.6%	0%	**-**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	100%	0%	**-**	0%	0%	0%	0%	0%	**-**	-
% Total	2.9%	42.4%	0.1%	0.1%	0%	**45.5%**	0%	0.1%	48.2%	1.8%	0%	**50.0%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	4.4%	0%	**4.4%**	0%	0%	0%	0%	0%	**0%**	-
PHF	0.927	0.962	0.375	0.333	-	**0.972**	-	0.500	0.954	0.875	-	**0.950**	-	-	-	-	-	**-**	-	-	-	0.791	-	**0.791**	-	-	-	-	-	**-**	0.968
Lights	88	1290	3	4	0	**1385**	0	2	1446	56	0	**1504**	0	0	0	0	0	**0**	0	0	0	136	0	**136**	0	0	0	0	0	**0**	3025
% Lights	98.9%	98.9%	100%	100%	0%	**98.9%**	0%	100%	97.6%	100%	0%	**97.7%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	100%	0%	**100%**	0%	0%	0%	0%	0%	**-**	98.4%
Articulated Trucks	1	1	0	0	0	**2**	0	0	4	0	0	**4**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	6
% Articulated Trucks	1.1%	0.1%	0%	0%	0%	**0.1%**	0%	0%	0.3%	0%	0%	**0.3%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**-**	0.2%
Buses and Single-Unit Trucks	0	13	0	0	0	**13**	0	0	31	0	0	**31**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	44
% Buses and Single-Unit Trucks	0%	1.0%	0%	0%	0%	**0.9%**	0%	0%	2.1%	0%	0%	**2.0%**	0%	0%	0%	0%	0%	**-**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**-**	1.4%

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Dundee Road (SR 68) and Site Access - TMC

Sat Oct 11, 2025
Midday Peak (WKND) (11:30 AM - 12:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344077, Location: 42.137974, -87.79377

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

Leg	Dundee Rd (SR 68)						Dundee Rd (SR 68)						Car Wash Access						Site Access						Southwest						
Direction	Eastbound						Westbound						Northbound						Southbound						Northeastbound						
Time	L	T	R	HR	U	App	L	BL	T	R	U	App	HL	L	T	R	U	App	L	T	BR	R	U	App	HL	BL	BR	HR	U	App	Int
2025-10-11 11:30AM	20	257	2	1	0	**280**	1	0	247	17	0	**265**	0	0	0	0	0	**0**	0	0	0	24	0	**24**	0	0	0	0	0	**0**	**569**
11:45AM	20	242	3	0	0	**265**	3	1	239	15	0	**258**	0	0	0	2	0	**2**	1	0	0	29	0	**30**	2	0	1	0	0	**3**	**558**
12:00PM	31	243	1	2	0	**277**	0	1	245	11	0	**257**	0	0	0	1	0	**1**	0	0	0	26	0	**26**	1	0	1	0	0	**2**	**563**
12:15PM	22	237	1	0	0	**260**	1	1	247	18	0	**267**	0	0	0	0	0	**0**	0	0	0	29	0	**29**	0	1	0	0	0	**1**	**557**
Total	93	979	7	3	0	**1082**	5	3	978	61	0	**1047**	0	0	0	3	0	**3**	1	0	0	108	0	**109**	3	1	2	0	0	**6**	**2247**
% Approach	8.6%	90.5%	0.6%	0.3%	0%	**-**	0.5%	0.3%	93.4%	5.8%	0%	**-**	0%	0%	0%	100%	0%	**-**	0.9%	0%	0%	99.1%	0%	**-**	50.0%	16.7%	33.3%	0%	0%	**-**	-
% Total	4.1%	43.6%	0.3%	0.1%	0%	**48.2%**	0.2%	0.1%	43.5%	2.7%	0%	**46.6%**	0%	0%	0%	0.1%	0%	**0.1%**	0%	0%	0%	4.8%	0%	**4.9%**	0.1%	0%	0.1%	0%	0%	**0.3%**	-
PHF	0.750	0.952	0.583	0.375	-	**0.966**	0.417	0.750	0.990	0.847	-	**0.980**	-	-	-	0.375	-	**0.375**	0.250	-	-	0.931	-	**0.908**	0.375	0.250	0.500	-	-	**0.500**	0.987
Lights	93	970	7	3	0	**1073**	5	3	968	61	0	**1037**	0	0	0	3	0	**3**	1	0	0	108	0	**109**	3	1	2	0	0	**6**	2228
% Lights	100%	99.1%	100%	100%	0%	**99.2%**	100%	100%	99.0%	100%	0%	**99.0%**	0%	0%	0%	100%	0%	**100%**	100%	0%	0%	100%	0%	**100%**	100%	100%	100%	0%	0%	**100%**	99.2%
Articulated Trucks	0	1	0	0	0	**1**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	2
% Articulated Trucks	0%	0.1%	0%	0%	0%	**0.1%**	0%	0%	0.1%	0%	0%	**0.1%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	0.1%
Buses and Single-Unit Trucks	0	8	0	0	0	**8**	0	0	9	0	0	**9**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	17
% Buses and Single-Unit Trucks	0%	0.8%	0%	0%	0%	**0.7%**	0%	0%	0.9%	0%	0%	**0.9%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	0%	**0%**	0.8%

*BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Skokie Boulevard and Site Access - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344073, Location: 42.139327, -87.792604

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

Leg	Site Access					Driveway Access					Skokie Blvd					Skokie Blvd					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2025-10-09 7:00AM	0	0	6	0	**6**	0	0	0	0	**0**	1	90	1	0	**92**	0	71	0	0	**71**	**169**
7:15AM	0	0	4	0	**4**	0	0	0	0	**0**	1	98	4	0	**103**	2	109	1	0	**112**	**219**
7:30AM	0	0	2	0	**2**	0	0	0	0	**0**	1	143	7	1	**152**	1	108	1	0	**110**	**264**
7:45AM	0	0	4	0	**4**	1	1	0	0	**2**	1	179	8	0	**188**	0	145	2	0	**147**	**341**
Hourly Total	0	0	16	0	**16**	1	1	0	0	**2**	4	510	20	1	**535**	3	433	4	0	**440**	**993**
8:00AM	0	1	5	0	**6**	0	0	0	0	**0**	0	162	4	0	**166**	2	144	0	0	**146**	**318**
8:15AM	1	0	9	0	**10**	0	0	0	0	**0**	1	195	5	0	**201**	1	144	4	0	**149**	**360**
8:30AM	0	0	3	0	**3**	1	0	0	0	**1**	2	188	2	1	**193**	1	153	2	0	**156**	**353**
8:45AM	0	0	13	0	**13**	0	0	0	0	**0**	2	205	9	0	**216**	0	137	2	0	**139**	**368**
Hourly Total	1	1	30	0	**32**	1	0	0	0	**1**	5	750	20	1	**776**	4	578	8	0	**590**	**1399**
4:00PM	0	0	22	0	**22**	7	0	1	0	**8**	2	223	1	1	**227**	2	276	6	0	**284**	**541**
4:15PM	0	0	24	0	**24**	6	0	2	0	**8**	3	183	1	1	**188**	2	234	2	0	**238**	**458**
4:30PM	0	0	19	0	**19**	9	0	6	0	**15**	4	157	0	0	**161**	2	300	5	0	**307**	**502**
4:45PM	1	0	22	0	**23**	2	0	4	0	**6**	3	189	1	0	**193**	0	296	7	0	**303**	**525**
Hourly Total	1	0	87	0	**88**	24	0	13	0	**37**	12	752	3	2	**769**	6	1106	20	0	**1132**	**2026**
5:00PM	0	0	15	0	**15**	7	0	4	0	**11**	1	205	0	0	**206**	0	292	3	0	**295**	**527**
5:15PM	0	0	20	0	**20**	5	0	1	0	**6**	3	210	0	1	**214**	0	316	8	0	**324**	**564**
5:30PM	2	0	22	0	**24**	3	0	4	0	**7**	2	178	0	0	**180**	0	270	3	0	**273**	**484**
5:45PM	0	0	22	0	**22**	2	0	1	0	**3**	3	194	1	0	**198**	1	270	5	0	**276**	**499**
Hourly Total	2	0	79	0	**81**	17	0	10	0	**27**	9	787	1	1	**798**	1	1148	19	0	**1168**	**2074**
Total	4	1	212	0	**217**	43	1	23	0	**67**	30	2799	44	5	**2878**	14	3265	51	0	**3330**	**6492**
% Approach	1.8%	0.5%	97.7%	0%	**-**	64.2%	1.5%	34.3%	0%	**-**	1.0%	97.3%	1.5%	0.2%	**-**	0.4%	98.0%	1.5%	0%	**-**	-
% Total	0.1%	0%	3.3%	0%	**3.3%**	0.7%	0%	0.4%	0%	**1.0%**	0.5%	43.1%	0.7%	0.1%	**44.3%**	0.2%	50.3%	0.8%	0%	**51.3%**	-
Lights	4	1	211	0	**216**	43	1	21	0	**65**	29	2741	43	5	**2818**	14	3169	50	0	**3233**	6332
% Lights	100%	100%	99.5%	0%	**99.5%**	100%	100%	91.3%	0%	**97.0%**	96.7%	97.9%	97.7%	100%	**97.9%**	100%	97.1%	98.0%	0%	**97.1%**	97.5%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	6	1	0	**7**	0	12	0	0	**12**	19
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0.2%	2.3%	0%	**0.2%**	0%	0.4%	0%	0%	**0.4%**	0.3%
Buses and Single-Unit Trucks	0	0	1	0	**1**	0	0	2	0	**2**	1	52	0	0	**53**	0	84	1	0	**85**	141
% Buses and Single-Unit Trucks	0%	0%	0.5%	0%	**0.5%**	0%	0%	8.7%	0%	**3.0%**	3.3%	1.9%	0%	0%	**1.8%**	0%	2.6%	2.0%	0%	**2.6%**	2.2%

*L: Left, R: Right, T: Thru, U: U-Turn

Skokie Boulevard and Site Access - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344073, Location: 42.139327, -87.792604

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

Leg	Site Access					Driveway Access					Skokie Blvd					Skokie Blvd					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2025-10-09 8:00AM	0	1	5	0	**6**	0	0	0	0	**0**	0	162	4	0	**166**	2	144	0	0	**146**	**318**
8:15AM	1	0	9	0	**10**	0	0	0	0	**0**	1	195	5	0	**201**	1	144	4	0	**149**	**360**
8:30AM	0	0	3	0	**3**	1	0	0	0	**1**	2	188	2	1	**193**	1	153	2	0	**156**	**353**
8:45AM	0	0	13	0	**13**	0	0	0	0	**0**	2	205	9	0	**216**	0	137	2	0	**139**	**368**
Total	1	1	30	0	**32**	1	0	0	0	**1**	5	750	20	1	**776**	4	578	8	0	**590**	**1399**
% Approach	3.1%	3.1%	93.8%	0%	**-**	100%	0%	0%	0%	**-**	0.6%	96.6%	2.6%	0.1%	**-**	0.7%	98.0%	1.4%	0%	**-**	-
% Total	0.1%	0.1%	2.1%	0%	**2.3%**	0.1%	0%	0%	0%	**0.1%**	0.4%	53.6%	1.4%	0.1%	**55.5%**	0.3%	41.3%	0.6%	0%	**42.2%**	-
PHF	0.250	0.250	0.577	-	**0.615**	0.250	-	-	-	**0.250**	0.625	0.915	0.556	0.250	**0.898**	0.500	0.944	0.500	-	**0.946**	0.950
Lights	1	1	30	0	**32**	1	0	0	0	**1**	5	736	20	1	**762**	4	547	7	0	**558**	1353
% Lights	100%	100%	100%	0%	**100%**	100%	0%	0%	0%	**100%**	100%	98.1%	100%	100%	**98.2%**	100%	94.6%	87.5%	0%	**94.6%**	96.7%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	4	0	0	**4**	0	5	0	0	**5**	9
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0.5%	0%	0%	**0.5%**	0%	0.9%	0%	0%	**0.8%**	0.6%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	10	0	0	**10**	0	26	1	0	**27**	37
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	1.3%	0%	0%	**1.3%**	0%	4.5%	12.5%	0%	**4.6%**	2.6%

*L: Left, R: Right, T: Thru, U: U-Turn

Skokie Boulevard and Site Access - TMC

Thu Oct 9, 2025
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344073, Location: 42.139327, -87.792604

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

Leg	Site Access					Driveway Access					Skokie Blvd					Skokie Blvd					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2025-10-09 4:30PM	0	0	19	0	**19**	9	0	6	0	**15**	4	157	0	0	**161**	2	300	5	0	**307**	**502**
4:45PM	1	0	22	0	**23**	2	0	4	0	**6**	3	189	1	0	**193**	0	296	7	0	**303**	**525**
5:00PM	0	0	15	0	**15**	7	0	4	0	**11**	1	205	0	0	**206**	0	292	3	0	**295**	**527**
5:15PM	0	0	20	0	**20**	5	0	1	0	**6**	3	210	0	1	**214**	0	316	8	0	**324**	**564**
Total	1	0	76	0	**77**	23	0	15	0	**38**	11	761	1	1	**774**	2	1204	23	0	**1229**	**2118**
% Approach	1.3%	0%	98.7%	0%	**-**	60.5%	0%	39.5%	0%	**-**	1.4%	98.3%	0.1%	0.1%	**-**	0.2%	98.0%	1.9%	0%	**-**	-
% Total	0%	0%	3.6%	0%	**3.6%**	1.1%	0%	0.7%	0%	**1.8%**	0.5%	35.9%	0%	0%	**36.5%**	0.1%	56.8%	1.1%	0%	**58.0%**	-
PHF	0.250	-	0.864	-	**0.837**	0.639	-	0.625	-	**0.633**	0.688	0.906	0.250	0.250	**0.904**	0.250	0.953	0.719	-	**0.948**	0.939
Lights	1	0	75	0	**76**	23	0	14	0	**37**	11	760	0	1	**772**	2	1191	23	0	**1216**	2101
% Lights	100%	0%	98.7%	0%	**98.7%**	100%	0%	93.3%	0%	**97.4%**	100%	99.9%	0%	100%	**99.7%**	100%	98.9%	100%	0%	**98.9%**	99.2%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	1	0	**1**	0	1	0	0	**1**	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	100%	0%	**0.1%**	0%	0.1%	0%	0%	**0.1%**	0.1%
Buses and Single-Unit Trucks	0	0	1	0	**1**	0	0	1	0	**1**	0	1	0	0	**1**	0	12	0	0	**12**	15
% Buses and Single-Unit Trucks	0%	0%	1.3%	0%	**1.3%**	0%	0%	6.7%	0%	**2.6%**	0%	0.1%	0%	0%	**0.1%**	0%	1.0%	0%	0%	**1.0%**	0.7%

*L: Left, R: Right, T: Thru, U: U-Turn

Skokie Boulevard and Site Access - TMC

Sat Oct 11, 2025
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344078, Location: 42.139327, -87.792604

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

Leg	Site Access					Driveway Access					Skokie Blvd					Skokie Blvd					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2025-10-11 11:30AM	1	0	19	0	**20**	0	0	0	0	**0**	2	168	2	0	**172**	0	161	4	0	**165**	**357**
11:45AM	2	0	23	0	**25**	0	0	0	0	**0**	4	234	0	0	**238**	1	155	6	0	**162**	**425**
12:00PM	3	0	22	0	**25**	0	0	0	0	**0**	6	190	0	0	**196**	0	172	8	0	**180**	**401**
12:15PM	0	0	17	0	**17**	0	0	2	0	**2**	1	188	0	0	**189**	0	157	6	0	**163**	**371**
Total	6	0	81	0	**87**	0	0	2	0	**2**	13	780	2	0	**795**	1	645	24	0	**670**	**1554**
% Approach	6.9%	0%	93.1%	0%	**-**	0%	0%	100%	0%	**-**	1.6%	98.1%	0.3%	0%	**-**	0.1%	96.3%	3.6%	0%	**-**	-
% Total	0.4%	0%	5.2%	0%	**5.6%**	0%	0%	0.1%	0%	**0.1%**	0.8%	50.2%	0.1%	0%	**51.2%**	0.1%	41.5%	1.5%	0%	**43.1%**	-
PHF	0.500	-	0.880	-	**0.870**	-	-	0.250	-	**0.250**	0.542	0.833	0.250	-	**0.835**	0.250	0.938	0.750	-	**0.931**	0.914
Lights	6	0	81	0	**87**	0	0	1	0	**1**	13	775	2	0	**790**	1	643	24	0	**668**	1546
% Lights	100%	0%	100%	0%	**100%**	0%	0%	50.0%	0%	**50.0%**	100%	99.4%	100%	0%	**99.4%**	100%	99.7%	100%	0%	**99.7%**	99.5%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	1	0	**1**	0	5	0	0	**5**	0	2	0	0	**2**	8
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	50.0%	0%	**50.0%**	0%	0.6%	0%	0%	**0.6%**	0%	0.3%	0%	0%	**0.3%**	0.5%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 2 - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344074, Location: 42.139073, -87.793364

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

Leg	East Internal Access				South Internal Access				North Internal Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 7:00AM	1	1	0	**2**	4	2	0	**6**	3	6	0	**9**	**17**
7:15AM	0	0	0	**0**	3	1	0	**4**	3	8	0	**11**	**15**
7:30AM	0	2	0	**2**	11	1	0	**12**	1	7	0	**8**	**22**
7:45AM	2	2	0	**4**	10	1	0	**11**	3	10	0	**13**	**28**
Hourly Total	3	5	0	**8**	28	5	0	**33**	10	31	0	**41**	**82**
8:00AM	0	0	0	**0**	11	2	0	**13**	3	9	0	**12**	**25**
8:15AM	1	2	0	**3**	8	1	0	**9**	7	11	0	**18**	**30**
8:30AM	1	4	0	**5**	12	1	0	**13**	4	2	0	**6**	**24**
8:45AM	3	4	0	**7**	12	1	0	**13**	9	11	0	**20**	**40**
Hourly Total	5	10	0	**15**	43	5	0	**48**	23	33	0	**56**	**119**
4:00PM	2	9	0	**11**	16	3	0	**19**	13	16	0	**29**	**59**
4:15PM	1	6	0	**7**	20	1	0	**21**	23	16	0	**39**	**67**
4:30PM	1	6	0	**7**	16	3	0	**19**	16	12	0	**28**	**54**
4:45PM	6	9	0	**15**	19	2	0	**21**	18	9	0	**27**	**63**
Hourly Total	10	30	0	**40**	71	9	0	**80**	70	53	0	**123**	**243**
5:00PM	5	5	0	**10**	11	4	0	**15**	15	19	0	**34**	**59**
5:15PM	6	2	0	**8**	22	5	0	**27**	17	11	0	**28**	**63**
5:30PM	2	11	0	**13**	18	5	0	**23**	11	10	0	**21**	**57**
5:45PM	1	5	0	**6**	17	0	0	**17**	14	10	0	**24**	**47**
Hourly Total	14	23	0	**37**	68	14	0	**82**	57	50	0	**107**	**226**
Total	32	68	0	**100**	210	33	0	**243**	160	167	0	**327**	**670**
% Approach	32.0%	68.0%	0%	**-**	86.4%	13.6%	0%	**-**	48.9%	51.1%	0%	**-**	-
% Total	4.8%	10.1%	0%	**14.9%**	31.3%	4.9%	0%	**36.3%**	23.9%	24.9%	0%	**48.8%**	-
Lights	32	67	0	**99**	210	33	0	**243**	159	164	0	**323**	665
% Lights	100%	98.5%	0%	**99.0%**	100%	100%	0%	**100%**	99.4%	98.2%	0%	**98.8%**	99.3%
Articulated Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	1	0	**1**	0	0	0	**0**	1	3	0	**4**	5
% Buses and Single-Unit Trucks	0%	1.5%	0%	**1.0%**	0%	0%	0%	**0%**	0.6%	1.8%	0%	**1.2%**	0.7%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 2 - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344074, Location: 42.139073, -87.793364

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

Leg	East Internal Access				South Internal Access				North Internal Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 8:00AM	0	0	0	**0**	11	2	0	**13**	3	9	0	**12**	**25**
8:15AM	1	2	0	**3**	8	1	0	**9**	7	11	0	**18**	**30**
8:30AM	1	4	0	**5**	12	1	0	**13**	4	2	0	**6**	**24**
8:45AM	3	4	0	**7**	12	1	0	**13**	9	11	0	**20**	**40**
Total	5	10	0	**15**	43	5	0	**48**	23	33	0	**56**	**119**
% Approach	33.3%	66.7%	0%	**-**	89.6%	10.4%	0%	**-**	41.1%	58.9%	0%	**-**	-
% Total	4.2%	8.4%	0%	**12.6%**	36.1%	4.2%	0%	**40.3%**	19.3%	27.7%	0%	**47.1%**	-
PHF	0.417	0.625	-	**0.536**	0.896	0.625	-	**0.923**	0.639	0.750	-	**0.700**	0.744
Lights	5	9	0	**14**	43	5	0	**48**	23	33	0	**56**	118
% Lights	100%	90.0%	0%	**93.3%**	100%	100%	0%	**100%**	100%	100%	0%	**100%**	99.2%
Articulated Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	1	0	**1**	0	0	0	**0**	0	0	0	**0**	1
% Buses and Single-Unit Trucks	0%	10.0%	0%	**6.7%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0.8%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 2 - TMC

Thu Oct 9, 2025
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344074, Location: 42.139073, -87.793364

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

Leg	East Internal Access				South Internal Access				North Internal Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 4:30PM	1	6	0	**7**	16	3	0	**19**	16	12	0	**28**	**54**
4:45PM	6	9	0	**15**	19	2	0	**21**	18	9	0	**27**	**63**
5:00PM	5	5	0	**10**	11	4	0	**15**	15	19	0	**34**	**59**
5:15PM	6	2	0	**8**	22	5	0	**27**	17	11	0	**28**	**63**
Total	18	22	0	**40**	68	14	0	**82**	66	51	0	**117**	**239**
% Approach	45.0%	55.0%	0%	**-**	82.9%	17.1%	0%	**-**	56.4%	43.6%	0%	**-**	-
% Total	7.5%	9.2%	0%	**16.7%**	28.5%	5.9%	0%	**34.3%**	27.6%	21.3%	0%	**49.0%**	-
PHF	0.750	0.611	-	**0.667**	0.773	0.700	-	**0.759**	0.917	0.671	-	**0.860**	0.948
Lights	18	22	0	**40**	68	14	0	**82**	65	51	0	**116**	238
% Lights	100%	100%	0%	**100%**	100%	100%	0%	**100%**	98.5%	100%	0%	**99.1%**	99.6%
Articulated Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	0	0	**0**	0	0	0	**0**	1	0	0	**1**	1
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	1.5%	0%	0%	**0.9%**	0.4%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 2 - TMC

Sat Oct 11, 2025
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344079, Location: 42.139073, -87.793364

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

Leg Direction	East Internal Access Westbound				South Internal Access Northbound				Nor;th Internal Access Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-11 11:30AM	3	5	0	**8**	17	5	0	**22**	12	10	0	**22**	**52**
11:45AM	3	8	0	**11**	14	1	0	**15**	23	12	0	**35**	**61**
12:00PM	4	11	0	**15**	15	4	0	**19**	16	19	0	**35**	**69**
12:15PM	1	8	0	**9**	19	4	0	**23**	14	16	0	**30**	**62**
Total	11	32	0	**43**	65	14	0	**79**	65	57	0	**122**	**244**
% Approach	25.6%	74.4%	0%	**-**	82.3%	17.7%	0%	**-**	53.3%	46.7%	0%	**-**	-
% Total	4.5%	13.1%	0%	**17.6%**	26.6%	5.7%	0%	**32.4%**	26.6%	23.4%	0%	**50.0%**	-
PHF	0.688	0.727	-	**0.717**	0.855	0.700	-	**0.859**	0.707	0.750	-	**0.871**	0.884
Lights	11	32	0	**43**	65	14	0	**79**	65	57	0	**122**	244
% Lights	100%	100%	0%	**100%**	100%	100%	0%	**100%**	100%	100%	0%	**100%**	100%
Articulated Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 3 - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344075, Location: 42.13836, -87.793471

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

Leg	West Internal Access					East Internal Access					Roti Access					Parking Lot Access					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2025-10-09 7:00AM	1	7	0	0	**8**	0	7	0	0	**7**	0	0	0	0	**0**	0	0	0	0	**0**	**15**
7:15AM	1	5	1	0	**7**	0	8	0	0	**8**	0	0	0	0	**0**	0	0	0	0	**0**	**15**
7:30AM	0	11	1	0	**12**	0	6	0	0	**6**	0	0	0	0	**0**	0	0	1	0	**1**	**19**
7:45AM	1	11	1	0	**13**	1	11	0	0	**12**	0	0	0	0	**0**	0	0	0	0	**0**	**25**
Hourly Total	3	34	3	0	**40**	1	32	0	0	**33**	0	0	0	0	**0**	0	0	1	0	**1**	**74**
8:00AM	3	15	0	0	**18**	0	9	0	0	**9**	0	0	0	0	**0**	0	0	0	0	**0**	**27**
8:15AM	1	13	1	0	**15**	1	10	0	0	**11**	1	0	0	0	**1**	0	0	0	0	**0**	**27**
8:30AM	1	15	2	0	**18**	0	3	0	0	**3**	2	0	0	0	**2**	0	0	0	0	**0**	**23**
8:45AM	3	19	3	0	**25**	0	12	1	0	**13**	0	0	0	0	**0**	0	0	1	0	**1**	**39**
Hourly Total	8	62	6	0	**76**	1	34	1	0	**36**	3	0	0	0	**3**	0	0	1	0	**1**	**116**
4:00PM	1	22	5	0	**28**	0	20	0	0	**20**	1	0	0	0	**1**	0	0	0	0	**0**	**49**
4:15PM	2	23	5	0	**30**	0	17	0	0	**17**	8	0	0	0	**8**	0	0	0	0	**0**	**55**
4:30PM	1	22	7	0	**30**	0	12	0	0	**12**	5	0	2	0	**7**	0	0	0	0	**0**	**49**
4:45PM	2	20	5	0	**27**	0	16	0	0	**16**	4	0	1	0	**5**	0	0	0	0	**0**	**48**
Hourly Total	6	87	22	0	**115**	0	65	0	0	**65**	18	0	3	0	**21**	0	0	0	0	**0**	**201**
5:00PM	1	17	7	0	**25**	2	21	1	0	**24**	1	0	1	0	**2**	0	0	4	0	**4**	**55**
5:15PM	0	26	8	0	**34**	0	18	0	0	**18**	5	0	2	0	**7**	0	0	0	0	**0**	**59**
5:30PM	1	25	11	0	**37**	1	12	0	0	**13**	9	0	0	0	**9**	0	0	0	0	**0**	**59**
5:45PM	0	20	14	0	**34**	0	14	0	0	**14**	7	1	1	0	**9**	0	0	0	0	**0**	**57**
Hourly Total	2	88	40	0	**130**	3	65	1	0	**69**	22	1	4	0	**27**	0	0	4	0	**4**	**230**
Total	19	271	71	0	**361**	5	196	2	0	**203**	43	1	7	0	**51**	0	0	6	0	**6**	**621**
% Approach	5.3%	75.1%	19.7%	0%	**-**	2.5%	96.6%	1.0%	0%	**-**	84.3%	2.0%	13.7%	0%	**-**	0%	0%	100%	0%	**-**	-
% Total	3.1%	43.6%	11.4%	0%	**58.1%**	0.8%	31.6%	0.3%	0%	**32.7%**	6.9%	0.2%	1.1%	0%	**8.2%**	0%	0%	1.0%	0%	**1.0%**	-
Lights	18	271	71	0	**360**	5	193	2	0	**200**	42	1	7	0	**50**	0	0	6	0	**6**	616
% Lights	94.7%	100%	100%	0%	**99.7%**	100%	98.5%	100%	0%	**98.5%**	97.7%	100%	100%	0%	**98.0%**	0%	0%	100%	0%	**100%**	99.2%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	1	0	0	0	**1**	0	3	0	0	**3**	1	0	0	0	**1**	0	0	0	0	**0**	5
% Buses and Single-Unit Trucks	5.3%	0%	0%	0%	**0.3%**	0%	1.5%	0%	0%	**1.5%**	2.3%	0%	0%	0%	**2.0%**	0%	0%	0%	0%	**0%**	0.8%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 3 - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344075, Location: 42.13836, -87.793471

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

Leg	West Internal Access					East Internal Access					Roti Access					Parking Lot Access					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2025-10-09 8:00AM	3	15	0	0	**18**	0	9	0	0	**9**	0	0	0	0	**0**	0	0	0	0	**0**	**27**
8:15AM	1	13	1	0	**15**	1	10	0	0	**11**	1	0	0	0	**1**	0	0	0	0	**0**	**27**
8:30AM	1	15	2	0	**18**	0	3	0	0	**3**	2	0	0	0	**2**	0	0	0	0	**0**	**23**
8:45AM	3	19	3	0	**25**	0	12	1	0	**13**	0	0	0	0	**0**	0	0	1	0	**1**	**39**
Total	8	62	6	0	**76**	1	34	1	0	**36**	3	0	0	0	**3**	0	0	1	0	**1**	**116**
% Approach	10.5%	81.6%	7.9%	0%	**-**	2.8%	94.4%	2.8%	0%	**-**	100%	0%	0%	0%	**-**	0%	0%	100%	0%	**-**	-
% Total	6.9%	53.4%	5.2%	0%	**65.5%**	0.9%	29.3%	0.9%	0%	**31.0%**	2.6%	0%	0%	0%	**2.6%**	0%	0%	0.9%	0%	**0.9%**	-
PHF	0.667	0.816	0.500	-	**0.760**	0.250	0.708	0.250	-	**0.692**	0.375	-	-	-	**0.375**	-	-	0.250	-	**0.250**	0.744
Lights	7	62	6	0	**75**	1	34	1	0	**36**	3	0	0	0	**3**	0	0	1	0	**1**	115
% Lights	87.5%	100%	100%	0%	**98.7%**	100%	100%	100%	0%	**100%**	100%	0%	0%	0%	**100%**	0%	0%	100%	0%	**100%**	99.1%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	1	0	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	1
% Buses and Single-Unit Trucks	12.5%	0%	0%	0%	**1.3%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0.9%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 3 - TMC

Thu Oct 9, 2025
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344075, Location: 42.13836, -87.793471

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

Leg	West Internal Access					East Internal Access					Roti Access					Parking Lot Access					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2025-10-09 4:30PM	1	22	7	0	**30**	0	12	0	0	**12**	5	0	2	0	**7**	0	0	0	0	**0**	**49**
4:45PM	2	20	5	0	**27**	0	16	0	0	**16**	4	0	1	0	**5**	0	0	0	0	**0**	**48**
5:00PM	1	17	7	0	**25**	2	21	1	0	**24**	1	0	1	0	**2**	0	0	4	0	**4**	**55**
5:15PM	0	26	8	0	**34**	0	18	0	0	**18**	5	0	2	0	**7**	0	0	0	0	**0**	**59**
Total	4	85	27	0	**116**	2	67	1	0	**70**	15	0	6	0	**21**	0	0	4	0	**4**	**211**
% Approach	3.4%	73.3%	23.3%	0%	**-**	2.9%	95.7%	1.4%	0%	**-**	71.4%	0%	28.6%	0%	**-**	0%	0%	100%	0%	**-**	-
% Total	1.9%	40.3%	12.8%	0%	**55.0%**	0.9%	31.8%	0.5%	0%	**33.2%**	7.1%	0%	2.8%	0%	**10.0%**	0%	0%	1.9%	0%	**1.9%**	-
PHF	0.500	0.817	0.844	-	**0.853**	0.250	0.798	0.250	-	**0.729**	0.750	-	0.750	-	**0.750**	-	-	0.250	-	**0.250**	0.894
Lights	4	85	27	0	**116**	2	67	1	0	**70**	15	0	6	0	**21**	0	0	4	0	**4**	211
% Lights	100%	100%	100%	0%	**100%**	100%	100%	100%	0%	**100%**	100%	0%	100%	0%	**100%**	0%	0%	100%	0%	**100%**	100%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 3 - TMC

Sat Oct 11, 2025
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344080, Location: 42.13836, -87.793471

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

Leg	West Internal Access					East Internal Access					Roti Access					Parking Lot Access					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2025-10-11 11:30AM	1	22	8	0	**31**	0	14	0	0	**14**	3	1	2	0	**6**	0	0	1	0	**1**	**52**
11:45AM	0	16	10	0	**26**	0	17	0	0	**17**	4	0	0	0	**4**	0	0	0	0	**0**	**47**
12:00PM	1	23	5	0	**29**	0	23	0	0	**23**	2	0	0	0	**2**	1	0	0	0	**1**	**55**
12:15PM	5	23	6	0	**34**	0	20	1	0	**21**	1	0	0	0	**1**	0	0	0	0	**0**	**56**
Total	7	84	29	0	**120**	0	74	1	0	**75**	10	1	2	0	**13**	1	0	1	0	**2**	**210**
% Approach	5.8%	70.0%	24.2%	0%	**-**	0%	98.7%	1.3%	0%	**-**	76.9%	7.7%	15.4%	0%	**-**	50.0%	0%	50.0%	0%	**-**	-
% Total	3.3%	40.0%	13.8%	0%	**57.1%**	0%	35.2%	0.5%	0%	**35.7%**	4.8%	0.5%	1.0%	0%	**6.2%**	0.5%	0%	0.5%	0%	**1.0%**	-
PHF	0.350	0.913	0.725	-	**0.882**	-	0.804	0.250	-	**0.815**	0.625	0.250	0.250	-	**0.542**	0.250	-	0.250	-	**0.500**	0.938
Lights	7	83	29	0	**119**	0	74	1	0	**75**	10	1	2	0	**13**	1	0	1	0	**2**	209
% Lights	100%	98.8%	100%	0%	**99.2%**	0%	100%	100%	0%	**100%**	100%	100%	100%	0%	**100%**	100%	0%	100%	0%	**100%**	99.5%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	1
% Buses and Single-Unit Trucks	0%	1.2%	0%	0%	**0.8%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0.5%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 4 - TMC

Thu Oct 9, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344076, Location: 42.138221, -87.793818

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

Leg	East Internal Access				South Internal Access				Parking Lot Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 7:00AM	9	0	0	**9**	3	9	0	**12**	0	2	0	**2**	**23**
7:15AM	8	0	0	**8**	6	8	0	**14**	0	4	0	**4**	**26**
7:30AM	7	0	0	**7**	5	16	0	**21**	0	7	0	**7**	**35**
7:45AM	11	0	0	**11**	6	13	0	**19**	0	2	0	**2**	**32**
Hourly Total	35	0	0	**35**	20	46	0	**66**	0	15	0	**15**	**116**
8:00AM	10	0	0	**10**	1	23	0	**24**	0	4	0	**4**	**38**
8:15AM	11	0	0	**11**	8	16	0	**24**	0	3	0	**3**	**38**
8:30AM	4	1	0	**5**	14	20	0	**34**	0	1	0	**1**	**40**
8:45AM	12	1	0	**13**	8	27	0	**35**	0	7	0	**7**	**55**
Hourly Total	37	2	0	**39**	31	86	0	**117**	0	15	0	**15**	**171**
4:00PM	19	0	0	**19**	5	31	0	**36**	0	16	0	**16**	**71**
4:15PM	26	0	0	**26**	7	31	0	**38**	0	6	0	**6**	**70**
4:30PM	18	0	0	**18**	6	34	0	**40**	0	13	0	**13**	**71**
4:45PM	22	0	0	**22**	5	28	0	**33**	0	8	0	**8**	**63**
Hourly Total	85	0	0	**85**	23	124	0	**147**	0	43	0	**43**	**275**
5:00PM	26	0	0	**26**	6	28	1	**35**	0	16	0	**16**	**77**
5:15PM	25	0	0	**25**	4	37	0	**41**	0	6	0	**6**	**72**
5:30PM	20	0	0	**20**	4	38	0	**42**	0	7	0	**7**	**69**
5:45PM	22	0	0	**22**	3	37	0	**40**	0	9	0	**9**	**71**
Hourly Total	93	0	0	**93**	17	140	1	**158**	0	38	0	**38**	**289**
Total	250	2	0	**252**	91	396	1	**488**	0	111	0	**111**	**851**
% Approach	99.2%	0.8%	0%	**-**	18.6%	81.1%	0.2%	**-**	0%	100%	0%	**-**	-
% Total	29.4%	0.2%	0%	**29.6%**	10.7%	46.5%	0.1%	**57.3%**	0%	13.0%	0%	**13.0%**	-
Lights	247	2	0	**249**	82	394	1	**477**	0	105	0	**105**	831
% Lights	98.8%	100%	0%	**98.8%**	90.1%	99.5%	100%	**97.7%**	0%	94.6%	0%	**94.6%**	97.6%
Articulated Trucks	0	0	0	**0**	5	0	0	**5**	0	0	0	**0**	5
% Articulated Trucks	0%	0%	0%	**0%**	5.5%	0%	0%	**1.0%**	0%	0%	0%	**0%**	0.6%
Buses and Single-Unit Trucks	3	0	0	**3**	4	2	0	**6**	0	6	0	**6**	15
% Buses and Single-Unit Trucks	1.2%	0%	0%	**1.2%**	4.4%	0.5%	0%	**1.2%**	0%	5.4%	0%	**5.4%**	1.8%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 4 - TMC

Thu Oct 9, 2025
AM Peak (8 AM - 9 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344076, Location: 42.138221, -87.793818

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

Leg	East Internal Access				South Internal Access				Parking Lot Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 8:00AM	10	0	0	**10**	1	23	0	**24**	0	4	0	**4**	**38**
8:15AM	11	0	0	**11**	8	16	0	**24**	0	3	0	**3**	**38**
8:30AM	4	1	0	**5**	14	20	0	**34**	0	1	0	**1**	**40**
8:45AM	12	1	0	**13**	8	27	0	**35**	0	7	0	**7**	**55**
Total	37	2	0	**39**	31	86	0	**117**	0	15	0	**15**	**171**
% Approach	94.9%	5.1%	0%	**-**	26.5%	73.5%	0%	**-**	0%	100%	0%	**-**	-
% Total	21.6%	1.2%	0%	**22.8%**	18.1%	50.3%	0%	**68.4%**	0%	8.8%	0%	**8.8%**	-
PHF	0.771	0.500	-	**0.750**	0.554	0.796	-	**0.836**	-	0.536	-	**0.536**	0.777
Lights	37	2	0	**39**	27	85	0	**112**	0	15	0	**15**	166
% Lights	100%	100%	0%	**100%**	87.1%	98.8%	0%	**95.7%**	0%	100%	0%	**100%**	97.1%
Articulated Trucks	0	0	0	**0**	3	0	0	**3**	0	0	0	**0**	3
% Articulated Trucks	0%	0%	0%	**0%**	9.7%	0%	0%	**2.6%**	0%	0%	0%	**0%**	1.8%
Buses and Single-Unit Trucks	0	0	0	**0**	1	1	0	**2**	0	0	0	**0**	2
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	3.2%	1.2%	0%	**1.7%**	0%	0%	0%	**0%**	1.2%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 4 - TMC

Thu Oct 9, 2025
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344076, Location: 42.138221, -87.793818

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

Leg	East Internal Access				South Internal Access				Parking Lot Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-09 4:30PM	18	0	0	**18**	6	34	0	**40**	0	13	0	**13**	**71**
4:45PM	22	0	0	**22**	5	28	0	**33**	0	8	0	**8**	**63**
5:00PM	26	0	0	**26**	6	28	1	**35**	0	16	0	**16**	**77**
5:15PM	25	0	0	**25**	4	37	0	**41**	0	6	0	**6**	**72**
Total	91	0	0	**91**	21	127	1	**149**	0	43	0	**43**	**283**
% Approach	100%	0%	0%	**-**	14.1%	85.2%	0.7%	**-**	0%	100%	0%	**-**	-
% Total	32.2%	0%	0%	**32.2%**	7.4%	44.9%	0.4%	**52.7%**	0%	15.2%	0%	**15.2%**	-
PHF	0.875	-	-	**0.875**	0.875	0.858	0.250	**0.909**	-	0.672	-	**0.672**	0.919
Lights	91	0	0	**91**	20	127	1	**148**	0	43	0	**43**	282
% Lights	100%	0%	0%	**100%**	95.2%	100%	100%	**99.3%**	0%	100%	0%	**100%**	99.6%
Articulated Trucks	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	1
% Articulated Trucks	0%	0%	0%	**0%**	4.8%	0%	0%	**0.7%**	0%	0%	0%	**0%**	0.4%
Buses and Single-Unit Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

Internal Access 4 - TMC

Sat Oct 11, 2025
Forced Peak (11:30 AM - 12:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1344081, Location: 42.138221, -87.793818

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

Leg	East Internal Access				South Internal Access				Parking Lot Access				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2025-10-11 11:30AM	17	0	0	**17**	3	34	0	**37**	0	5	0	**5**	**59**
11:45AM	23	0	0	**23**	6	27	2	**35**	0	4	0	**4**	**62**
12:00PM	26	0	0	**26**	11	31	0	**42**	0	2	0	**2**	**70**
12:15PM	24	0	0	**24**	5	36	0	**41**	0	4	0	**4**	**69**
Total	90	0	0	**90**	25	128	2	**155**	0	15	0	**15**	**260**
% Approach	100%	0%	0%	**-**	16.1%	82.6%	1.3%	**-**	0%	100%	0%	**-**	-
% Total	34.6%	0%	0%	**34.6%**	9.6%	49.2%	0.8%	**59.6%**	0%	5.8%	0%	**5.8%**	-
PHF	0.865	-	-	**0.865**	0.568	0.889	0.250	**0.923**	-	0.750	-	**0.750**	0.929
Lights	90	0	0	**90**	25	128	2	**155**	0	15	0	**15**	260
% Lights	100%	0%	0%	**100%**	100%	100%	100%	**100%**	0%	100%	0%	**100%**	100%
Articulated Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Articulated Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%
Buses and Single-Unit Trucks	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

Colliers Engineering & Design

Traffic Impact Study

Appendix D | Signal Timing Directive

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Configuration Phase Sequence

Controller Sequence (MM)1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.

Phases In Use / Exclusive PED (MM)1-2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phases in Use	X	X	X	X	X	X	X	X								
Exclusive PED																

Phase Compatibility (MM)1-1-2

Phase	Compatible Phase
1	5
1	6
2	5
2	6
3	7
3	8
4	7
4	8
9	11

9	12
10	11
10	12
13	15
13	16
14	15
14	16

Phase and Overlap Descriptions

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Description																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**L**	**K**	**L**	**M**	**N**	**O**
Description																

Administration (MM)1-7-1

Enable CU/Cabinet Interlock CRC	No
Request Download Controller Data	No
Controller Database CRC	0000
Enable Automatic Backup to Datakey	Yes

Backup Prevent (MM)1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing /	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Backup	2	X		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	X		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	X		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	X		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM)1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	X	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	6	.	X	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
With	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MMU Channel) (MM)1-3

	Phase / Overlap	Type	Dimming				Power Up				Auto		Flash Together
			Red	Yellow	Green	Dark	Auto	Red	Yellow	Dark	Red	Yellow	
1	1	V				+	X				X		X
2	2	V				+	X				X		X
3	3	V				+	X				X		
4	4	V				+	X				X		
5	5	V				-	X				X		X
6	6	V				-	X				X		X
7	7	V				-	X				X		
8	8	V				-	X				X		
9	2	P				+	X						
10	4	P				+	X						
11	6	P				-	X						
12	8	P				-	X						
13	1	O				+	X				X		X
14	2	O				-	X				X		
15	3	O				+	X				X		X
16	4	O				-	X				X		

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Configuration Port 1 (SDLC)

SDLC Options (MM)1-4-1

BIU	1	2	3	4	5	6	7	8
Term and Facility Enable	X	X						
Detector Rack Enable	X							

Enable TS2/MMU Type Cabinet: Yes
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: No
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM)1-4-2

Channel Can Serve with Channel	
Channel 1	**Channel 2**
1	5
1	6
1	11
1	14
1	16
2	5
2	6
2	9
2	11
2	14
3	7
3	8
3	12
3	13
3	15
4	7
4	8
4	10
4	12
4	15
5	9
5	14
5	16
6	9
6	11
6	16
7	10
7	13
7	15
8	10
8	12
8	13
9	11
9	14
10	12
10	15
11	16
12	13
13	15
14	16

Color Check Enable (MM)1-4-3

Enable Color Check: Yes

MMU Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow	X	X	X	X	X	X	X	X					X	X	X	X
Red		X		X		X		X								

Secondary To Secondary Addressing (MM)1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term and Facility Enable									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack Enable									

Diagonstics (Test Fixture) Enable: No

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Configuration Communications

Ethernet Port Configuration (MM)1-5-1

Controller IP: 172.16.1.254
Subnet Mask: 255.255.0.0
Default Gateway IP: 0.0.0.0
Server IP: 10.70.10.1

NTCIP Parameters (MM)1-5-5

Backup Time: 0
UDP Port: 501
Ethernet Priority: 1
Port 2 Priority: 4
Port 3A Priority: 2
Port 3B Priority: 3

Port Configuration (MM)1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	NTCIP	ECPIP	ECPIP
Enable	No	Yes	No
Data Rate	9600	9600	1200
Data Parity Stop	8 N 1	8 N 1	8 0 1
Modem Setup String	None	None	None
User String			
Comm Port Address	0	11	11
System Detector 9-1	0	0	0
Telemetry Response Delay	0.0	8.0	0.0
Duplex Half/Full	Full	Full	Full
Flow Control	No	No	Yes
AB3418 NTCIP Group Address	0	0	0
AB3418 NTCIP Single Flag Enable	Yes	Yes	No
RTS to CTS Delay	0.0	0.0	3.0
RTS Turn Off Delay	0.0	0.0	2.0
Droupout Time	10	10	300
Early RTS	No	No	No
Telemetry Mode	FSK	FSK	FSK
Rail Road	0	0	0
Rail Road Line	0	0	0
ATCS Group	0	0	0
Wayside Device	0	0	0
ATCS Device	0	0	0
Wayside SubNode	0	0	0
ATCS SubNode	0	0	0

ECPIP Parameters (MM)1-5-6

Controller Address: 11
Expanded System Detector Address: 0

Local System Detector

Local System Detector	Number

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Configuration Logging/Display

Event Logging (MM)1-6-1

Critical RFE's	Yes	3 Critical RFE's in 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Faults	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preempt	Yes	TSP	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online/Offline	Yes		

Alarm Log	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM)1-7-2

Key Click Enable:	Yes
Backlight Enable:	Yes
LED Mode:	Auto
Main Status Display Mode:	Advanced
Screen Format:	Advanced
Trans Mode Pop-up Disable:	No

Sign On (MM)8-5

Sign On Message Line 1: Solutions that Move the World
Sign On Message Line 2:

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Logic Processor Page 1

Statement Control (MM)1-8-1

LP	Statement Control
1	E
2	E
3	E
4	E
5	E
6	E

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Logic Processor Page 2

Logic Statements (MM)1-8-2

Statement Number: 1

IF:

	Assignment	#		State
IF	PED CLEAR ON PHASE	2	IS	ON
OR	PED CLEAR ON PHASE	6	IS	ON

THEN:

Assignment	#	State
SET LOGIC FLAG	3	ON

ELSE:

Assignment	#	State

Statement Number: 2

IF:

	Assignment	#		State
IF	LOGIC FLAG	3	IS	ON

THEN:

Assignment	#	State
SET COORD FREE		ON

ELSE:

Assignment	#	State

Statement Number: 3

IF:

	Assignment	#		State
IF	YELLOW ON PHASE	4	IS	ON
OR	YELLOW ON PHASE	8	IS	ON

THEN:

Assignment	#	State
SET LOGIC FLAG	3	OFF

ELSE:

Assignment	#	State

Statement Number: 4

IF:

	Assignment	#		State
IF	PED CLEAR ON PHASE	4	IS	ON
OR	PED CLEAR ON PHASE	8	IS	ON

THEN:

Assignment	#	State
SET LOGIC FLAG	2	ON

ELSE:

Assignment	#	State

Statement Number: 5

IF:

	Assignment	#		State
IF	LOGIC FLAG	2	IS	ON

THEN:

Assignment	#	State
SET COORD FREE		ON

ELSE:

Assignment	#	State

Statement Number: 6

IF:

	Assignment	#		State
IF	YELLOW ON PHASE	2	IS	ON

OR YELLOW ON PHASE 6 IS ON

THEN:

Assignment	**#**	**State**
SET LOGIC FLAG	2	OFF

ELSE:

Assignment	**#**	**State**

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Controller Timing Plan (MM)2-1
Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	3	15	3	15	3	15	3	15	0	0	0	0	0	0	0	0
BK Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	13	0	7	0	7	0	8	0	0	0	0	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	38	0	25	0	36	0	27	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	7.0	3.0	7.0	3.0	7.0	3.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max 1	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 2	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Stp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	25	0	25	0	25	0	25	0	0	0	0	0	0	0	0
Time B4	0	25	0	25	0	25	0	25	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPT Duc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce	0	20	0	20	0	20	0	20	0	0	0	0	0	0	0	0
Min Gap	0.0	4.0	0.0	4.0	0.0	4.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	3	15	3	8	3	15	3	8	0	0	0	0	0	0	0	0
BK Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	7.0	3.0	5.0	3.0	7.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max 1	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 2	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Stp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Time B4	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPT Duc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	3	15	3	8	3	15	3	8	0	0	0	0	0	0	0	0
BK Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	7.0	3.0	5.0	3.0	7.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max 1	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 2	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Stp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Time B4	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPT Duc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	3	15	3	8	3	15	3	8	0	0	0	0	0	0	0	0
BK Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	7.0	3.0	5.0	3.0	7.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max 1	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 2	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Stp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Time B4	0	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPT Duc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	4.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Controller Overlaps

Vehicle Overlaps (MM)2-2

Overlap	Type	Lag Green	Yellow	Red	Advance Green
B	Normal	0.0	0.0	0.0	0.0
C	Normal	0.0	0.0	0.0	0.0
D	Normal	0.0	0.0	0.0	0.0
E	Normal	0.0	0.0	0.0	0.0
F	Normal	0.0	0.0	0.0	0.0
G	Normal	0.0	0.0	0.0	0.0
H	Normal	0.0	0.0	0.0	0.0
I	Normal	0.0	0.0	0.0	0.0
J	Normal	0.0	0.0	0.0	0.0
K	Normal	0.0	0.0	0.0	0.0
L	Normal	0.0	0.0	0.0	0.0
M	Normal	0.0	0.0	0.0	0.0
N	Normal	0.0	0.0	0.0	0.0
O	Normal	0.0	0.0	0.0	0.0
P	Normal	0.0	0.0	0.0	0.0

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phase	Lag 2 Phase	Flash Green
A	3	Yes	No	No	No		No	No	0
B	5	Yes	No	No	No		No	No	0
C	7	Yes	No	No	No		No	No	0
D	1	Yes	No	No	No		No	No	0

PPLT FYA

Overlap	Protected Phase	Permissive Phase	Flash Arrow Output	Flash Arrow Channel	FYA Delay	FYA Clearance	Special Function Disable

Guaranteed Minimum Time Data (MM) 2-4

Phase Time Data

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	0	0	7	3.0	0.0	0
B02	0	0	7	3.0	0.0	0
C03	0	0	7	3.0	0.0	0
D04	0	0	7	3.0	0.0	0
E05	0	0	7	3.0	0.0	0
F06	0	0	7	3.0	0.0	0
G07	0	0	7	3.0	0.0	0
H08	0	0	7	3.0	0.0	0
I09	0	0	7	3.0	0.0	0
J10	0	0	7	3.0	0.0	0
K11	0	0	7	3.0	0.0	0
L12	0	0	7	3.0	0.0	0
M13	0	0	7	3.0	0.0	0
N14	0	0	7	3.0	0.0	0
O15	0	0	7	3.0	0.0	0
P16	0	0	7	3.0	0.0	0

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Controller **Pedestrian Overlaps**
Pedestrian Overlaps (MM) 2-3

Included Phase	Ped Overlap

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Controller Start/Fash (MM) 2-5

Startup

Phase	Phase Setting
2	Y
6	Y

Overlap

Flash > Mon: No
Flash Time: 0
All Red: 0
Power Start Sequence: 1
MUTCD Enabled: No
MUTCD Yellow to Green: n/a

Automatic Flash

Entry Phase
2
6

Exit Phase
2
6

Overlap Exit

Flash > Mon: No
Exit Flash Interval: Y
Minimum Auto Flash: 8
Minimumin Recall: No
Cycle Through Phase: No

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Controller Options

Controller Options (MM)2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Green Phase																
Guaranteed Passage																
Non Act 1		X				X										
Non Act 2				X				X								
Dual Entry		X		X		X		X								
Conditional Service																
Conditional Reservice																
Ped Reservice																
Rest In Walk																
Flashing Walk																
Ped Clear Yellow																
Ped Clear Red																
IGRN + Veh Ext																

Ped Clear Protect: On Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Act Pre-Time (MM)2-7

Pre-Time Mode Enable: No Free Input Enables Pre-Timed: Yes

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed Phase																

Phase Recall Options (MM)2-8

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X		X		X		X								
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Coordination Options

Coordination Options (MM)3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Percent	Offsets In	Percent
Transition	Smooth	Max Select	MAXINH
Dwell/Add Time	0		
Delay Coord Walk to LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	Yes
Local Zero Override	No	FO Added Initial Green	Yes
Re-Sync Count	3	Multisync	No

Auto Perm Minimum Green (Seconds) (MM)3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM)3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Coordination Pattern Data
Pattern Data (MM)3-2

Pattern - 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits in	Percent
Cycle	100	Std (COS)	111	Offsets in	Percent
Offset Value	98%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 1)	16	44	15	25	23	37	15	25	0	0	0	0	0	0	0	0
Preference 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preference 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Disp.	-	0	0	0
Split Sum	100%	100%	0%	0%

Misc. Data

Veh. Permissive 1	0	Veh. Permissive 2	0	Veh. Permissive 2 Disp.	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coordinated Phases		X				X										
Vehicle Recalls																
Ped Recalls																
Max Recalls																
Phase Omit									X	X	X	X	X	X	X	X
Special Function Output																

Pattern - 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits in	Percent
Cycle	135	Std (COS)	211	Offsets in	Percent
Offset Value	41%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 2)	11	52	11	26	27	36	11	26	0	0	0	0	0	0	0	0
Preference 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preference 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Disp.	-	0	0	0
Split Sum	100%	100%	0%	0%

Misc. Data

Veh. Permissive 1	0	Veh. Permissive 2	0	Veh. Permissive 2 Disp.	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coordinated Phases		X				X										
Vehicle Recalls																
Ped Recalls																
Max Recalls																
Phase Omit									X	X	X	X	X	X	X	X
Special Function Output																

Pattern - 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits in	Percent
Cycle	140	Std (COS)	311	Offsets in	Percent
Offset Value	35%	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	0		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 3)	12	47	16	25	27	32	16	25	0	0	0	0	0	0	0	0
Preference 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preference 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Disp.	-	0	0	0
Split Sum	100%	100%	0%	0%

Misc. Data

Veh. Permissive 1	0	Veh. Permissive 2	0	Veh. Permissive 2 Disp.	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coordinated Phases		X				X										
Vehicle Recalls																
Ped Recalls																
Max Recalls																
Phase Omit									X	X	X	X	X	X	X	X
Special Function Output																

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Preemptor

Preempt Plan (MM)4-1

Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Track Clear Vehicle																
Track Clear Overlap																
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Vehicle		X				X										
Dwell Ped																
Dwell Overlap																
Cycling Vehicle																
Cycling Ped																
Cycling Overlap																
Exit Phase																
Exit Calls																
Special Funciton																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Detector Lock	No	Delay	0	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Overlap Asap	No	PC Through Yellow	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	Flash Exit Color	Green	Exit Option	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Preempt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	0.0	180	25.5	25.5

Preempt Active Out	F1	Preempt Active Dwell	No
Other Priority Preempt	F1	Non-Priority Preempt	On
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return % Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Track Clear Vehicle																
Track Clear Overlap																
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Vehicle				X				X								
Dwell Ped																
Dwell Overlap																
Cycling Vehicle																
Cycling Ped																
Cycling Overlap																
Exit Phase																
Exit Calls																
Special Funciton																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Detector Lock	No	Delay	0	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Overlap Asap	No	PC Through Yellow	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	Flash Exit Color	Green	Exit Option	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Preempt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	0	255	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	0.0	180	25.5	25.5

Preempt Active Out	F1	Preempt Active Dwell	No
Other Priority Preempt	F1	Non-Priority Preempt	On
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return % Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Time Base Clock/Calendar
Clock/Calendar Options (MM)5-1

Enable Action Plan:	0
Sync Reference Time:	3:15 AM
Sync Reference:	Reference Time
Day Light Savings:	USDLS
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Time Base Action Plan
Action Plan (MM)5-2

Action Plan - 1

Pattern	1	Override System	No
Timing Plan	0	Sequence	0
Veh Det Plan	0	Detector Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Diming Enable	No	Veh Priority Return	No
Ped Priority Return	No	Queue Delay	No
Prempt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Special Function																
Auxilliary Function																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15															
LP 16-30															
LP 31-45															
LP 46-60															
LP 61-75															
LP 76-90															
LP 91-100															

Action Plan - 2

Pattern	2	Override System	No
Timing Plan	0	Sequence	0
Veh Det Plan	0	Detector Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Diming Enable	No	Veh Priority Return	No
Ped Priority Return	No	Queue Delay	No
Prempt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Special Function																
Auxilliary Function																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15															
LP 16-30															
LP 31-45															
LP 46-60															
LP 61-75															
LP 76-90															
LP 91-100															

Action Plan - 3

Pattern	3	Override System	No
Timing Plan	0	Sequence	0
Veh Det Plan	0	Detector Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Diming Enable	No	Veh Priority Return	No
Ped Priority Return	No	Queue Delay	No
Prempt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Special Function																
Auxilliary Function																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15															
LP 16-30															
LP 31-45															
LP 46-60															
LP 61-75															
LP 76-90															
LP 91-100															

Action Plan - 100

Pattern	254 - FREE	Override System	No
Timing Plan	0	Sequence	0
Veh Det Plan	0	Detector Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Diming Enable	No	Veh Priority Return	No
Ped Priority Return	No	Queue Delay	No
Prempt Cond Delay	No		

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Special Function								
Auxilliary Function								

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
LP 1-15															
LP 16-30															
LP 31-45															
LP 46-60															
LP 61-75															
LP 76-90															
LP 91-100															

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Time Base Day Plan/Schedule
Day Plan (MM)5-3

Day Plan - 1

Event	Action Plan	Start Time
1	2	6:00 AM
2	1	9:30 AM
3	3	3:30 PM
4	1	6:30 PM
5	100	10:00 PM

Day Plan - 2

Event	Action Plan	Start Time
1	1	7:00 AM
2	100	11:00 PM

Day Plan - 3

Event	Action Plan	Start Time
1	1	9:00 AM
2	100	10:00 PM

Schedule (MM)5-4

Schedule Number - 1

Day Plan Number: 1

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	X	X	X	X	X	X	X	X	X	X	X	X

Day of Week	Sun	Mon	Tue	Wed	Thur	Fri	Sat
		X	X	X	X	X	

Day of Month	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan Number: 2

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	X	X	X	X	X	X	X	X	X	X	X	X

Day of Week	Sun	Mon	Tue	Wed	Thur	Fri	Sat
							X

Day of Month	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 3

Day Plan Number: 3

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	X	X	X	X	X	X	X	X	X	X	X	X

Day of Week	Sun	Mon	Tue	Wed	Thur	Fri	Sat
	X						

Day of Month	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Time Base Exceptions
Exception Day Program (MM)5-5

Day	Fixed/Float	Month	Day of Week/Month	Week of Month/Year	Day Plan
37	FIXED	255	255	65535	255
38	FIXED	255	255	65535	255
39	FIXED	255	255	65535	255
40	FIXED	255	255	65535	255
41	FIXED	255	255	65535	255
42	FIXED	255	255	65535	255
43	FIXED	255	255	65535	255
44	FIXED	255	255	65535	255
45	FIXED	255	255	65535	255
46	FIXED	255	255	65535	255
47	FIXED	255	255	65535	255
48	FIXED	255	255	65535	255
49	FIXED	255	255	65535	255
50	FIXED	255	255	65535	255
51	FIXED	255	255	65535	255
52	FIXED	255	255	65535	255
53	FIXED	255	255	65535	255
54	FIXED	255	255	65535	255
55	FIXED	255	255	65535	255
56	FIXED	255	255	65535	255
57	FIXED	255	255	65535	255
58	FIXED	255	255	65535	255
59	FIXED	255	255	65535	255
60	FIXED	255	255	65535	255
61	FIXED	255	255	65535	255
62	FIXED	255	255	65535	255
63	FIXED	255	255	65535	255
64	FIXED	255	255	65535	255
65	FIXED	255	255	65535	255
66	FIXED	255	255	65535	255
67	FIXED	255	255	65535	255
68	FIXED	255	255	65535	255
69	FIXED	255	255	65535	255
70	FIXED	255	255	65535	255
71	FIXED	255	255	65535	255
72	FIXED	255	255	65535	255
73	FIXED	255	255	65535	255
74	FIXED	255	255	65535	255
75	FIXED	255	255	65535	255
76	FIXED	255	255	65535	255
77	FIXED	255	255	65535	255
78	FIXED	255	255	65535	255
79	FIXED	255	255	65535	255
80	FIXED	255	255	65535	255
81	FIXED	255	255	65535	255
82	FIXED	255	255	65535	255
83	FIXED	255	255	65535	255
84	FIXED	255	255	65535	255
85	FIXED	255	255	65535	255
86	FIXED	255	255	65535	255
87	FIXED	255	255	65535	255
88	FIXED	255	255	65535	255
89	FIXED	255	255	65535	255
90	FIXED	255	255	65535	255

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Detectors

Detectors Page 1

Vehicle Detectors Setup (MM)6-1

Vehicle Plan	Detector Number	Called	Type
1	7	8	S
1	8	4	S

Vehicle Detector Setup (MM)6-2 continued

Detector Number	Type	TS2 Detector	Detector Description
1	S-STANDARD	Yes	
2	S-STANDARD	Yes	
3	S-STANDARD	Yes	
4	S-STANDARD	Yes	
5	S-STANDARD	Yes	
6	C-CALLING	Yes	
7	S-STANDARD	Yes	
8	S-STANDARD	Yes	
9	S-STANDARD	Yes	
10	S-STANDARD	Yes	
11	S-STANDARD	Yes	
12	C-CALLING	Yes	
13	S-STANDARD	Yes	
14	S-STANDARD	Yes	
15	S-STANDARD	Yes	
16	S-STANDARD	Yes	
17	S-STANDARD	Yes	
18	S-STANDARD	Yes	
19	S-STANDARD	Yes	
20	S-STANDARD	Yes	
21	S-STANDARD	Yes	
22	S-STANDARD	Yes	
23	S-STANDARD	Yes	
24	S-STANDARD	Yes	
25	S-STANDARD	Yes	
26	S-STANDARD	Yes	
27	S-STANDARD	Yes	
28	S-STANDARD	Yes	
29	S-STANDARD	Yes	
30	S-STANDARD	Yes	
31	S-STANDARD	Yes	
32	S-STANDARD	Yes	
33	S-STANDARD	Yes	
34	S-STANDARD	Yes	
35	S-STANDARD	Yes	
36	S-STANDARD	Yes	
37	S-STANDARD	Yes	
38	S-STANDARD	Yes	
39	S-STANDARD	Yes	
40	S-STANDARD	Yes	
41	S-STANDARD	Yes	
42	S-STANDARD	Yes	
43	S-STANDARD	Yes	
44	S-STANDARD	Yes	
45	S-STANDARD	Yes	
46	S-STANDARD	Yes	
47	S-STANDARD	Yes	
48	S-STANDARD	Yes	
49	S-STANDARD	Yes	
50	S-STANDARD	Yes	
51	S-STANDARD	Yes	
52	S-STANDARD	Yes	
53	S-STANDARD	Yes	
54	S-STANDARD	Yes	
55	S-STANDARD	Yes	
56	S-STANDARD	Yes	
57	S-STANDARD	Yes	
58	S-STANDARD	Yes	

59	S-STANDARD	Yes	
60	S-STANDARD	Yes	
61	S-STANDARD	Yes	
62	S-STANDARD	Yes	
63	S-STANDARD	Yes	
64	S-STANDARD	Yes	

Vehicle Detector Setup (MM)6-2 continued

Det Num	Veh Det Plan	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim / Discon. Time	Use Added Initial	Cross Switch Phase	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	2	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
1	2	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
1	3	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
1	4	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	1	6	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
2	2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	3	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	4	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	1	1	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
3	2	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	3	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	4	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	1	5	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
4	2	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	3	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	1	4	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
5	2	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	3	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	4	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	1	4	Yes	Yes	0.0	None	0.0	0	Yes	0	None	No	No	No
6	2	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
6	3	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
6	4	6	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
7	1	3	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
7	2	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	3	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	4	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	1	7	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
8	2	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	3	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
9	2	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	3	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	4	9	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
10	2	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	3	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	4	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	1	8	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
11	2	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	3	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	4	11	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	1	8	Yes	Yes	0.0	None	0.0	0	Yes	0	None	No	No	No
12	2	12	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
12	3	12	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
12	4	12	No	Yes	0.0	None	0.0	0	No	0	None	No	No	No
13	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
13	2	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	3	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	4	13	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
14	2	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	3	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	4	14	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
15	2	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	3	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	4	15	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	1	0	Yes	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	2	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	3	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	4	16	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

17	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
17	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
18	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
19	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
20	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
21	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
22	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
23	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
24	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
25	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
26	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
27	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
28	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
29	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
30	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
31	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
32	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
33	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
34	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
35	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
36	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
37	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
38	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
39	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
40	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
41	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
42	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
43	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
44	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
45	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
46	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
47	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
48	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
49	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
50	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
51	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
52	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
53	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
54	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
55	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
56	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
57	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
58	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
59	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
60	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
61	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
62	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
63	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	1	0	Yes	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
64	2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Options (MM)6-3

Phase Ped Detector (NTCIP)

Local Ped Detector	Number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16

IL 68 (Dundee Rd) & IL 43 (Waukegan) - IL 68 (Dundee Rd) & Skokie Blvd

Detectors

Detectors Page 2

Log - Speed Detector Setup (MM)6-4

NTCIP Log Period: 0 ECPI Log Period: TBAP Length Unit: Inch

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap Length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM)6-5

Plan	Detector	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay
1	1	0	0	0	1	255	0
1	2	0	0	0	1	255	0
1	3	0	0	0	1	255	0
1	4	0	0	0	1	255	0
1	5	0	0	0	1	255	0
1	6	0	0	0	1	255	0
1	7	0	0	0	1	255	0
1	8	0	0	0	1	255	0
1	9	0	0	0	1	255	0
1	10	0	0	0	1	255	0
1	11	0	0	0	1	255	0
1	12	0	0	0	1	255	0
1	13	0	0	0	1	255	0
1	14	0	0	0	1	255	0
1	15	0	0	0	1	255	0
1	16	0	0	0	1	255	0
1	17	0	0	0	1	255	0
1	18	0	0	0	1	255	0
1	19	0	0	0	1	255	0
1	20	0	0	0	1	255	0
1	21	0	0	0	1	255	0
1	22	0	0	0	1	255	0
1	23	0	0	0	1	255	0
1	24	0	0	0	1	255	0
1	25	0	0	0	1	255	0
1	26	0	0	0	1	255	0
1	27	0	0	0	1	255	0
1	28	0	0	0	1	255	0
1	29	0	0	0	1	255	0
1	30	0	0	0	1	255	0
1	31	0	0	0	1	255	0
1	32	0	0	0	1	255	0

Pedestrian Detector Diagnotics (MM)6-6

Plan	Detector	Counts	Act	Pres	Multiplier

Colliers Engineering & Design

Traffic Impact Study

Appendix E | Trip Generation Calculations

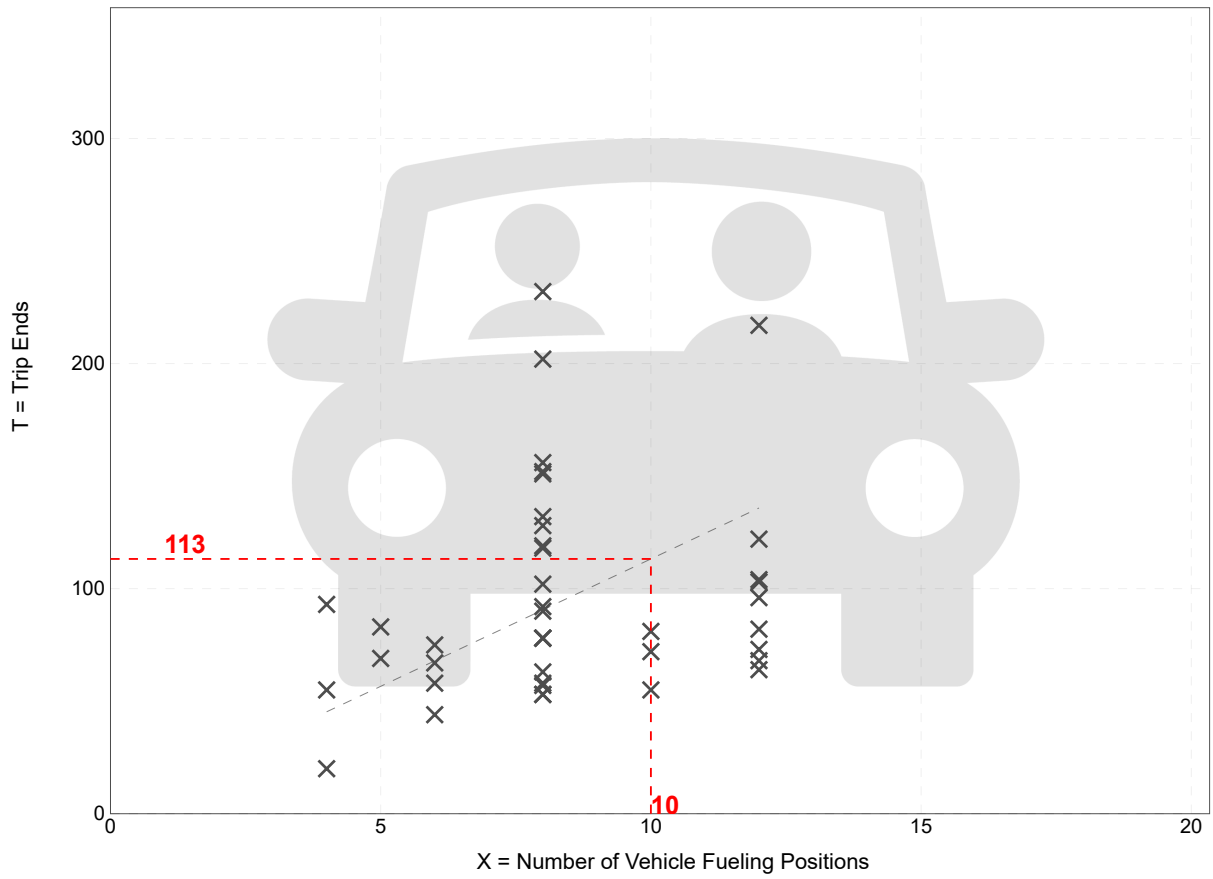
Gasoline/Service Station
(944)

Vehicle Trip Ends vs:	**Vehicle Fueling Positions**
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:	41
Avg. Num. of Vehicle Fueling Positions:	8
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
11.32	5.00 - 29.00	5.68

Data Plot and Equation



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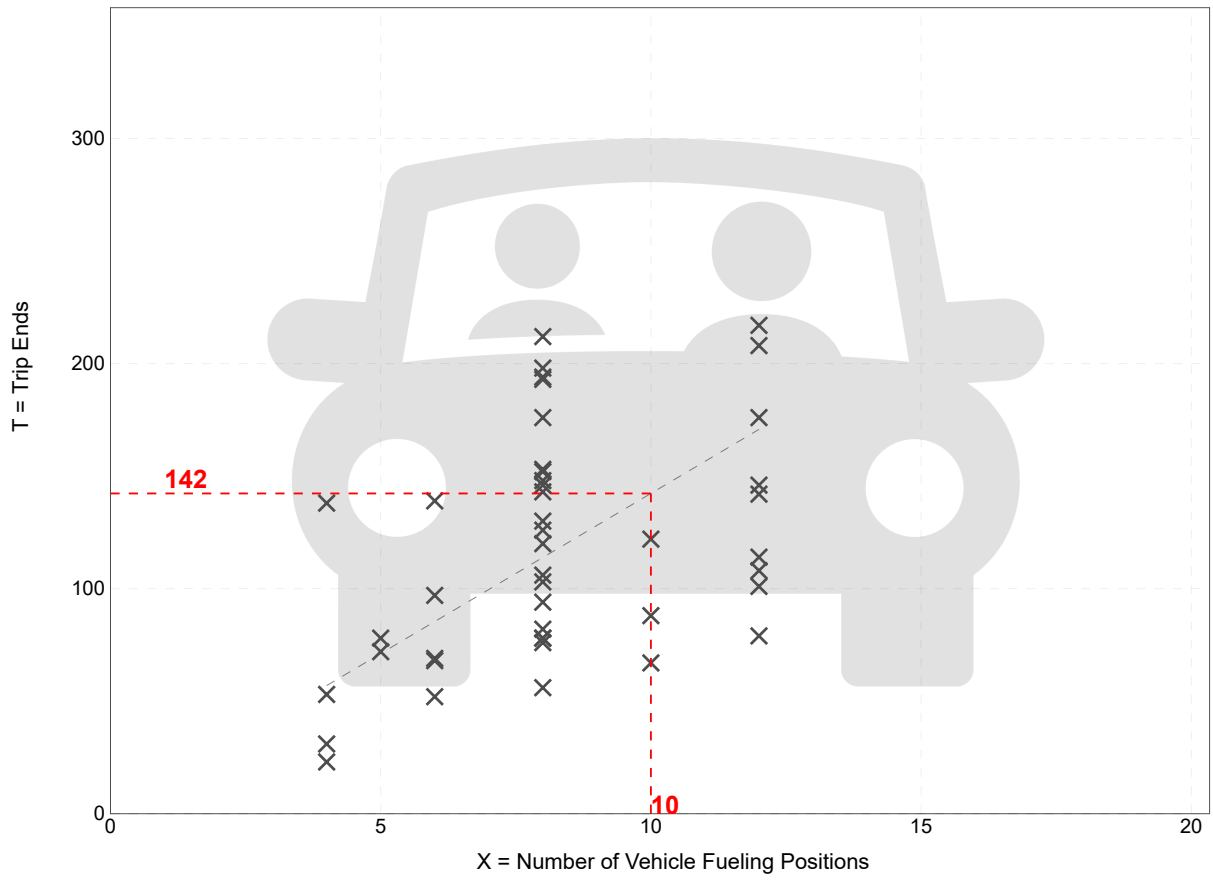
Gasoline/Service Station
(944)

Vehicle Trip Ends vs:	**Vehicle Fueling Positions**
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:	44
Avg. Num. of Vehicle Fueling Positions:	8
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
14.23	5.75 - 34.50	5.83

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ****

Trip Gen Manual, 12th Edition ● Institute of Transportation Engineers

Gasoline/Service Station
(944)

Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Saturday, Peak Hour of Generator**

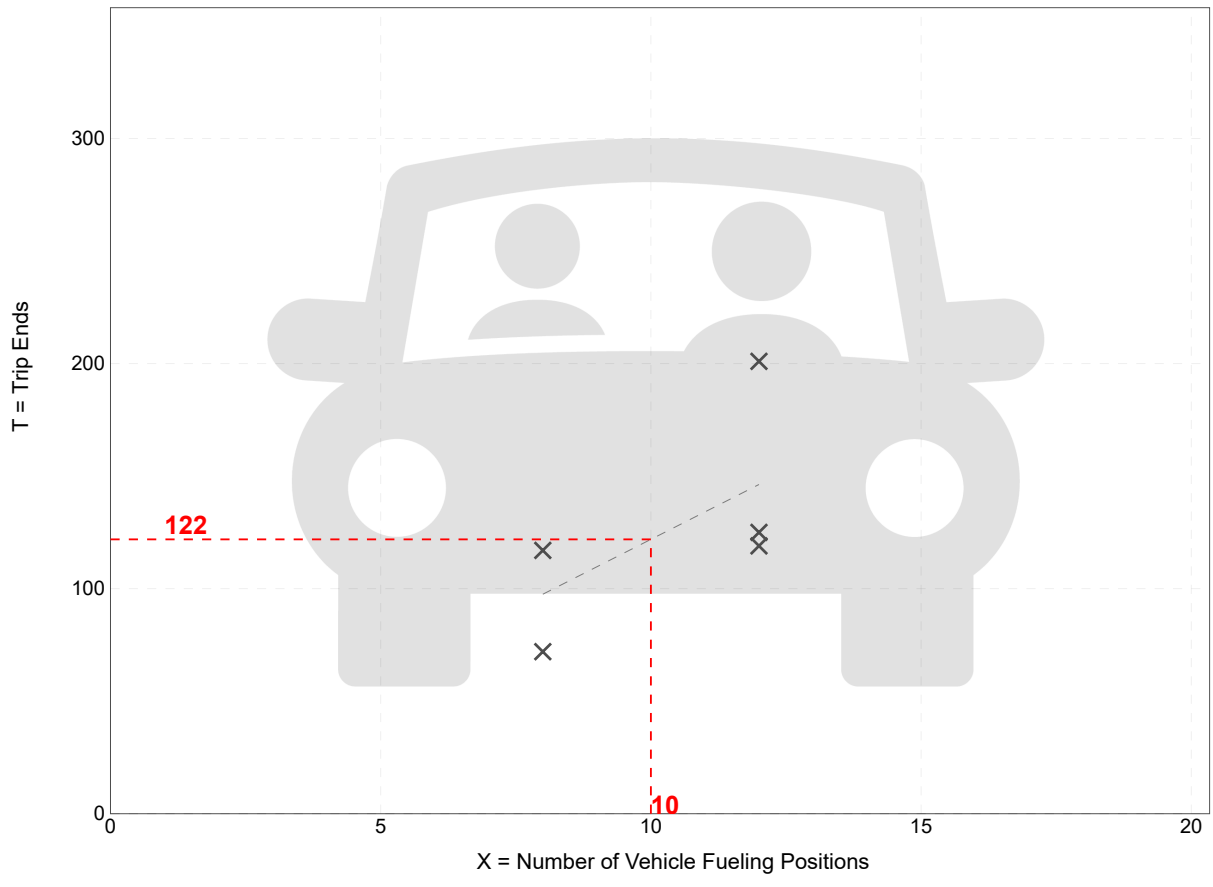
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. Num. of Vehicle Fueling Positions: 10
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.19	9.00 - 16.75	3.39

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

Trip Gen Manual, 12th Edition ● Institute of Transportation Engineers

Gasoline/Service Station
(944)

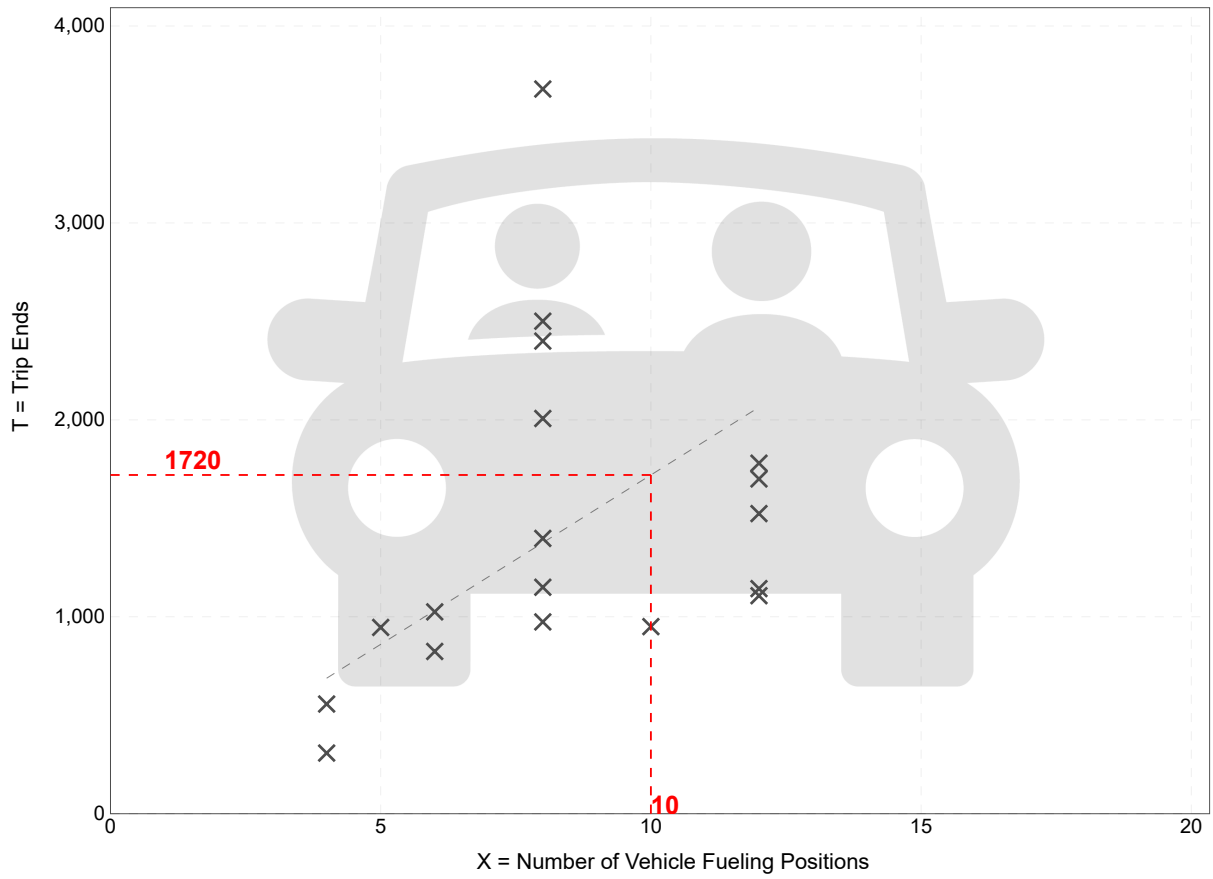
Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 18
Avg. Num. of Vehicle Fueling Positions: 8
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
172.01	77.00 - 460.00	96.45

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

Trip Gen Manual, 12th Edition ● Institute of Transportation Engineers

Colliers Engineering & Design

Traffic Impact Study

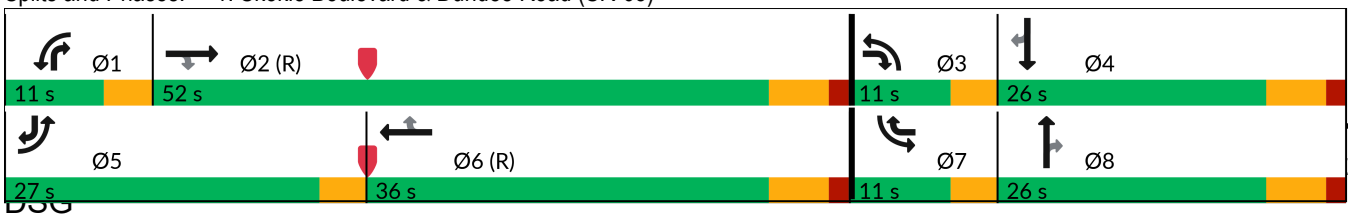
Appendix E | Capacity Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	289	909	364	264	709	184	127	315	166	146	295	167
Future Volume (vph)	289	909	364	264	709	184	127	315	166	146	295	167
Lane Group Flow (vph)	314	988	396	287	771	200	138	342	180	159	321	182
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	52.0	11.0	11.0	36.0	11.0	11.0	26.0	11.0	11.0	26.0	27.0
Total Split (%)	27.0%	52.0%	11.0%	11.0%	36.0%	11.0%	11.0%	26.0%	11.0%	11.0%	26.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
v/c Ratio	0.81	0.67	0.44	1.41	0.70	0.24	0.73	0.61	0.29	0.80	0.57	0.24
Control Delay (s/veh)	53.6	25.6	9.9	244.2	34.6	5.9	69.2	43.8	11.6	75.2	42.7	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.6	25.6	9.9	244.2	34.6	5.9	69.2	43.8	11.6	75.2	42.7	10.2
Queue Length 50th (ft)	187	256	93	~233	223	16	87	109	31	102	102	41
Queue Length 95th (ft)	#302	306	159	#443	299	61	#223	150	82	#255	141	76
Internal Link Dist (ft)		489			420			1163			501	
Turn Bay Length (ft)	400		275	300		150	300		280	400		
Base Capacity (vph)	422	1620	904	204	1102	817	188	701	620	198	697	786
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.61	0.44	1.41	0.70	0.24	0.73	0.49	0.29	0.80	0.46	0.23

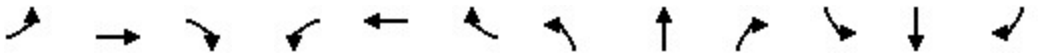
Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
~ 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: 1: Skokie Boulevard & Dundee Road (SR-68)



DSG



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	909	364	264	709	184	127	315	166	146	295	167
Future Volume (veh/h)	289	909	364	264	709	184	127	315	166	146	295	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1894	1879	1924	1909	1894	1811	1856	1945	1870	1868	1914
Adj Flow Rate, veh/h	314	988	296	287	771	138	138	342	72	159	321	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	3	4	1	2	3	6	3	2	2	7	4
Cap, veh/h	351	1836	932	137	1428	752	129	529	371	134	532	554
Arrive On Green	0.19	0.51	0.51	0.08	0.39	0.39	0.08	0.15	0.15	0.08	0.15	0.15
Sat Flow, veh/h	1833	3599	1593	1833	3628	1605	1725	3526	1648	1781	3549	1622
Grp Volume(v), veh/h	314	988	296	287	771	138	138	342	72	159	321	92
Grp Sat Flow(s),veh/h/ln	1833	1800	1593	1833	1814	1605	1725	1763	1648	1781	1775	1622
Q Serve(g_s), s	16.7	18.5	9.5	7.5	16.4	5.0	7.5	9.1	3.5	7.5	8.5	4.0
Cycle Q Clear(g_c), s	16.7	18.5	9.5	7.5	16.4	5.0	7.5	9.1	3.5	7.5	8.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	351	1836	932	137	1428	752	129	529	371	134	532	554
V/C Ratio(X)	0.90	0.54	0.32	2.09	0.54	0.18	1.07	0.65	0.19	1.19	0.60	0.17
Avail Cap(c_a), veh/h	431	1836	932	137	1428	752	129	705	453	134	710	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	16.5	10.6	46.3	23.3	15.4	46.3	40.0	31.4	46.3	39.7	23.0
Incr Delay (d2), s/veh	18.2	1.1	0.9	513.6	1.5	0.5	98.1	1.3	0.3	137.9	1.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.1	11.9	5.8	36.7	11.4	3.3	11.1	7.1	2.5	13.8	6.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.7	17.7	11.5	559.8	24.8	16.0	144.4	41.3	31.7	184.1	40.8	23.1
LnGrp LOS	E	B	B	F	C	B	F	D	C	F	D	C
Approach Vol, veh/h		1598			1196			552			572	
Approach Delay, s/veh		24.4			152.2			65.8			77.8	
Approach LOS		C			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	57.0	11.0	21.0	22.6	45.4	11.0	21.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	7.5	46.0	7.5	20.0	23.5	30.0	7.5	20.0
Max Q Clear Time (g_c+I1), s	9.5	20.5	9.5	10.5	18.7	18.4	9.5	11.1
Green Ext Time (p_c), s	0.0	8.9	0.0	1.5	0.4	4.4	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	77.0
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	61	1567	988	56	0	54
Future Vol, veh/h	61	1567	988	56	0	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	3	3	4	0	0
Mvmt Flow	71	1822	1149	65	0	63

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1214	0	-	0	-	574
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.22	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.26	-	-	-	-	3.3
Pot Cap-1 Maneuver	549	-	-	-	0	445
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	549	-	-	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.47	0	14.42
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	549	-	-	-	445
HCM Lane V/C Ratio	0.129	-	-	-	0.141
HCM Ctrl Dly (s/v)	12.5	-	-	-	14.4
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	32	0	755	578	15
Future Vol, veh/h	0	32	0	755	578	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	5	13
Mvmt Flow	0	34	0	795	608	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	304	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	710	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	710	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.33	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	710	-
HCM Lane V/C Ratio	-	0.047	-
HCM Ctrl Dly (s/v)	-	10.3	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.1	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	10	63	7	25	34
Future Vol, veh/h	5	10	63	7	25	34
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	0	10	0	0	0	0
Mvmt Flow	7	14	85	9	34	46
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7	7.4	7.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	33%	42%
Vol Thru, %	90%	0%	58%
Vol Right, %	10%	67%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	70	15	59
LT Vol	0	5	25
Through Vol	63	0	34
RT Vol	7	10	0
Lane Flow Rate	95	20	80
Geometry Grp	1	1	1
Degree of Util (X)	0.103	0.022	0.091
Departure Headway (Hd)	3.935	3.865	4.091
Convergence, Y/N	Yes	Yes	Yes
Cap	911	914	876
Service Time	1.96	1.938	2.115
HCM Lane V/C Ratio	0.104	0.022	0.091
HCM Control Delay, s/veh	7.4	7	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.1	0.3

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	70	7	1	37	1	3	0	0	0	0	1
Future Vol, veh/h	9	70	7	1	37	1	3	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	13	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	95	9	1	50	1	4	0	0	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	51	0	0	104	0	0	176	178	99	172	182	51
Stage 1	-	-	-	-	-	-	124	124	-	53	53	-
Stage 2	-	-	-	-	-	-	53	54	-	119	128	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1487	-	-	1500	-	-	783	712	959	795	716	1023
Stage 1	-	-	-	-	-	-	879	792	-	964	854	-
Stage 2	-	-	-	-	-	-	962	851	-	890	794	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1487	-	-	1500	-	-	774	706	959	788	709	1023
Mov Cap-2 Maneuver	-	-	-	-	-	-	774	706	-	788	709	-
Stage 1	-	-	-	-	-	-	872	785	-	963	854	-
Stage 2	-	-	-	-	-	-	960	850	-	883	787	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.78	0.19	9.67	8.52
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	774	185	-	-	46	-	-	1023
HCM Lane V/C Ratio	0.005	0.008	-	-	0.001	-	-	0.001
HCM Ctrl Dly (s/v)	9.7	7.4	0	-	7.4	0	-	8.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	15	39	2	31	86
Future Vol, veh/h	0	15	39	2	31	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	13	1
Mvmt Flow	0	19	50	3	40	110

Major/Minor	Minor2		Major2	
Conflicting Flow All	103	3	0	0
Stage 1	103	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	796	1087	-	-
Stage 1	819	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1087	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	EB	WB
HCM Ctrl Dly, s/v	8.37	
HCM LOS	A	

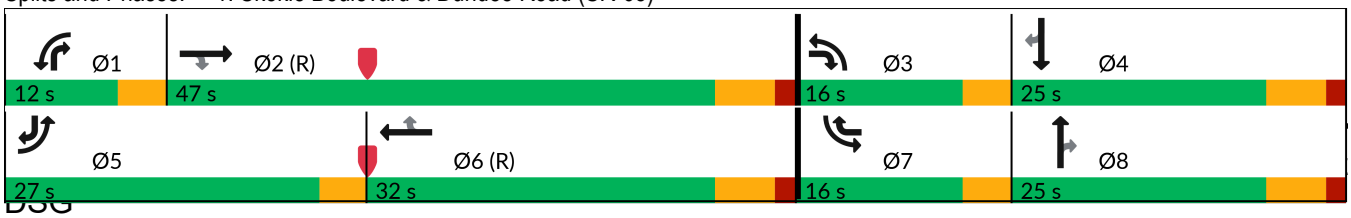
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1087	-	-
HCM Lane V/C Ratio	0.018	-	-
HCM Ctrl Dly (s/v)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	683	349	235	780	183	280	399	140	247	624	338
Future Volume (vph)	219	683	349	235	780	183	280	399	140	247	624	338
Lane Group Flow (vph)	228	711	364	245	813	191	292	416	146	257	650	352
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	47.0	16.0	12.0	32.0	16.0	16.0	25.0	12.0	16.0	25.0	27.0
Total Split (%)	27.0%	47.0%	16.0%	12.0%	32.0%	16.0%	16.0%	25.0%	12.0%	16.0%	25.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
v/c Ratio	0.74	0.50	0.40	1.61	0.75	0.22	1.24	0.61	0.23	1.10	0.93	0.47
Control Delay (s/veh)	52.3	23.9	9.9	335.5	37.4	3.3	175.8	41.6	8.7	131.0	60.9	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.3	23.9	9.9	335.5	37.4	3.3	175.8	41.6	8.7	131.0	60.9	17.4
Queue Length 50th (ft)	138	172	89	~225	241	1	~245	128	16	~200	216	122
Queue Length 95th (ft)	207	225	149	#377	#363	40	#410	180	59	#356	#323	180
Internal Link Dist (ft)		489			420			1163			501	
Turn Bay Length (ft)	400		275	300		150	300		280	400		
Base Capacity (vph)	403	1458	912	152	1085	876	236	679	631	233	701	837
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.49	0.40	1.61	0.75	0.22	1.24	0.61	0.23	1.10	0.93	0.42

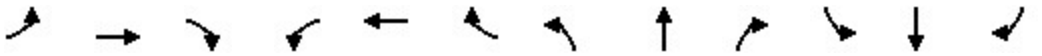
Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 41 (41%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
~ 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: 1: Skokie Boulevard & Dundee Road (SR-68)



DSG



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	683	349	235	780	183	280	399	140	247	624	338
Future Volume (veh/h)	219	683	349	235	780	183	280	399	140	247	624	338
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1909	1909	1909	1924	1924	1939	1885	1885	1976	1870	1961	1961
Adj Flow Rate, veh/h	228	711	269	245	813	106	292	416	69	257	650	309
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	1	1	0	1	1	0	2	1	1
Cap, veh/h	266	1487	866	156	1275	778	224	681	461	223	708	559
Arrive On Green	0.15	0.41	0.41	0.09	0.35	0.35	0.13	0.19	0.19	0.13	0.19	0.19
Sat Flow, veh/h	1818	3628	1618	1833	3656	1644	1795	3582	1675	1781	3725	1662
Grp Volume(v), veh/h	228	711	269	245	813	106	292	416	69	257	650	309
Grp Sat Flow(s),veh/h/ln	1818	1814	1618	1833	1828	1644	1795	1791	1675	1781	1863	1662
Q Serve(g_s), s	12.2	14.4	9.3	8.5	18.6	3.6	12.5	10.6	3.1	12.5	17.1	15.2
Cycle Q Clear(g_c), s	12.2	14.4	9.3	8.5	18.6	3.6	12.5	10.6	3.1	12.5	17.1	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1487	866	156	1275	778	224	681	461	223	708	559
V/C Ratio(X)	0.86	0.48	0.31	1.57	0.64	0.14	1.30	0.61	0.15	1.15	0.92	0.55
Avail Cap(c_a), veh/h	427	1487	866	156	1275	778	224	681	461	223	708	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	21.6	13.0	45.8	27.3	14.8	43.8	37.1	27.4	43.8	39.7	27.1
Incr Delay (d2), s/veh	9.5	1.1	0.9	286.3	2.4	0.4	164.1	1.6	0.1	108.2	17.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.1	10.1	6.0	26.1	13.0	2.4	24.5	8.2	2.2	18.8	14.2	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.1	22.8	13.9	332.0	29.7	15.2	207.9	38.7	27.6	152.0	56.8	28.2
LnGrp LOS	D	C	B	F	C	B	F	D	C	F	E	C
Approach Vol, veh/h		1208			1164			777			1216	
Approach Delay, s/veh		26.1			92.0			101.3			69.6	
Approach LOS		C			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.0	16.0	25.0	18.1	40.9	16.0	25.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	41.0	12.5	19.0	23.5	26.0	12.5	19.0
Max Q Clear Time (g_c+I1), s	10.5	16.4	14.5	19.1	14.2	20.6	14.5	12.6
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.4	2.6	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	69.2
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	91	1304	1481	57	0	136
Future Vol, veh/h	91	1304	1481	57	0	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	0	0	0
Mvmt Flow	94	1344	1527	59	0	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1586	0	-	0	-	763
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.21	-	-	-	-	3.3
Pot Cap-1 Maneuver	415	-	-	-	0	329
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	415	-	-	-	-	329
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.06	0	23.78
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	415	-	-	-	329
HCM Lane V/C Ratio	0.226	-	-	-	0.426
HCM Ctrl Dly (s/v)	16.2	-	-	-	23.8
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.9	-	-	-	2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	81	0	773	1204	41
Future Vol, veh/h	0	81	0	773	1204	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0
Mvmt Flow	0	86	0	822	1281	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	640	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.72	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.31	-	-	-	-
Pot Cap-1 Maneuver	0	435	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	435	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	435	-
HCM Lane V/C Ratio	-	0.198	-
HCM Ctrl Dly (s/v)	-	15.3	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.7	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	22	84	15	66	55
Future Vol, veh/h	19	22	84	15	66	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	20	23	88	16	69	58
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.4	7.6	8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	46%	55%
Vol Thru, %	85%	0%	45%
Vol Right, %	15%	54%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	99	41	121
LT Vol	0	19	66
Through Vol	84	0	55
RT Vol	15	22	0
Lane Flow Rate	104	43	127
Geometry Grp	1	1	1
Degree of Util (X)	0.115	0.05	0.148
Departure Headway (Hd)	3.98	4.172	4.197
Convergence, Y/N	Yes	Yes	Yes
Cap	894	864	851
Service Time	2.034	2.172	2.24
HCM Lane V/C Ratio	0.116	0.05	0.149
HCM Control Delay, s/veh	7.6	7.4	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.2	0.5

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	93	30	2	71	1	17	0	6	0	0	4
Future Vol, veh/h	4	93	30	2	71	1	17	0	6	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	104	34	2	80	1	19	0	7	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	81	0	0	138	0	0	215	216	121	198	232	80
Stage 1	-	-	-	-	-	-	130	130	-	85	85	-
Stage 2	-	-	-	-	-	-	84	85	-	113	147	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1530	-	-	1458	-	-	737	677	932	765	672	985
Stage 1	-	-	-	-	-	-	872	786	-	928	828	-
Stage 2	-	-	-	-	-	-	924	824	-	896	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1530	-	-	1458	-	-	731	674	932	756	668	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	731	674	-	756	668	-
Stage 1	-	-	-	-	-	-	869	784	-	927	827	-
Stage 2	-	-	-	-	-	-	919	823	-	887	777	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.23	0.2	9.81	8.67
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	774	54	-	-	49	-	-	985
HCM Lane V/C Ratio	0.033	0.003	-	-	0.002	-	-	0.005
HCM Ctrl Dly (s/v)	9.8	7.4	0	-	7.5	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	44	92	0	21	127
Future Vol, veh/h	0	44	92	0	21	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	5	0
Mvmt Flow	0	48	100	0	23	138

Major/Minor	Minor2		Major2	
Conflicting Flow All	200	0	0	0
Stage 1	200	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	707	-	-	-
Stage 1	748	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	EB	WB
HCM Ctrl Dly, s/v		
HCM LOS	-	

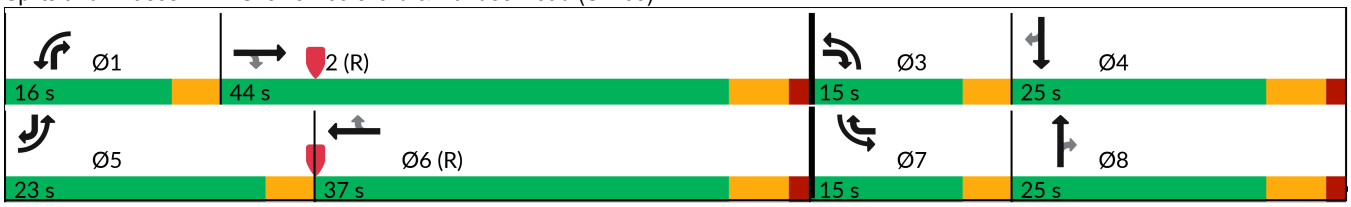
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

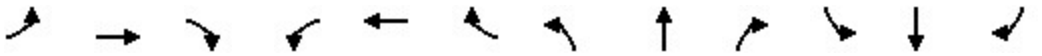
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	277	604	124	169	627	191	164	325	163	212	309	216
Future Volume (vph)	277	604	124	169	627	191	164	325	163	212	309	216
Lane Group Flow (vph)	292	636	131	178	660	201	173	342	172	223	325	227
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	14.0	6.5	6.5	14.0	6.5
Total Split (s)	23.0	44.0	15.0	16.0	37.0	15.0	15.0	25.0	16.0	15.0	25.0	23.0
Total Split (%)	23.0%	44.0%	15.0%	16.0%	37.0%	15.0%	15.0%	25.0%	16.0%	15.0%	25.0%	23.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
v/c Ratio	0.82	0.51	0.15	0.72	0.66	0.23	0.72	0.65	0.27	0.72	0.47	0.29
Control Delay (s/veh)	57.7	27.5	2.3	59.1	35.5	6.6	59.3	45.8	9.8	55.1	39.4	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	27.5	2.3	59.1	35.5	6.6	59.3	45.8	9.8	55.1	39.4	11.6
Queue Length 50th (ft)	172	174	0	107	204	25	103	109	26	135	101	52
Queue Length 95th (ft)	#322	210	25	#216	246	66	#231	150	70	#309	142	104
Internal Link Dist (ft)		489			420			1163			501	
Turn Bay Length (ft)	400		275	300		150	300		280	400		
Base Capacity (vph)	367	1364	872	253	1113	856	241	685	641	311	740	802
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.47	0.15	0.70	0.59	0.23	0.72	0.50	0.27	0.72	0.44	0.28

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	604	124	169	627	191	164	325	163	212	309	216
Future Volume (veh/h)	277	604	124	169	627	191	164	325	163	212	309	216
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1924	1909	1924	1924	1909	1885	1900	1945	1900	1976	1961
Adj Flow Rate, veh/h	292	636	92	178	660	143	173	342	98	223	325	113
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	1	2	1	0	2	0	0	1
Cap, veh/h	325	1661	919	210	1431	820	204	455	397	208	478	507
Arrive On Green	0.18	0.45	0.45	0.11	0.39	0.39	0.11	0.13	0.13	0.12	0.13	0.13
Sat Flow, veh/h	1833	3656	1618	1833	3656	1618	1795	3610	1648	1810	3754	1662
Grp Volume(v), veh/h	292	636	92	178	660	143	173	342	98	223	325	113
Grp Sat Flow(s),veh/h/ln	1833	1828	1618	1833	1828	1618	1795	1805	1648	1810	1877	1662
Q Serve(g_s), s	15.6	11.5	2.6	9.5	13.4	4.8	9.5	9.1	4.8	11.5	8.3	5.1
Cycle Q Clear(g_c), s	15.6	11.5	2.6	9.5	13.4	4.8	9.5	9.1	4.8	11.5	8.3	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	1661	919	210	1431	820	204	455	397	208	478	507
V/C Ratio(X)	0.90	0.38	0.10	0.85	0.46	0.17	0.85	0.75	0.25	1.07	0.68	0.22
Avail Cap(c_a), veh/h	357	1661	919	229	1431	820	206	686	503	208	713	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	18.0	9.9	43.4	22.6	13.4	43.5	42.2	30.6	44.3	41.7	25.9
Incr Delay (d2), s/veh	23.0	0.7	0.2	22.9	1.1	0.5	26.5	2.5	0.3	82.7	1.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.8	8.4	1.6	9.5	9.7	3.1	9.4	7.4	3.4	15.3	6.9	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.2	18.7	10.1	66.3	23.7	13.8	70.0	44.7	31.0	126.9	43.4	26.1
LnGrp LOS	E	B	B	E	C	B	E	D	C	F	D	C
Approach Vol, veh/h		1020			981			613			661	
Approach Delay, s/veh		30.7			30.0			49.7			68.6	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	51.4	14.9	18.7	21.3	45.1	15.0	18.6
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	12.5	38.0	11.5	19.0	19.5	31.0	11.5	19.0
Max Q Clear Time (g_c+I1), s	11.5	13.5	11.5	10.3	17.6	15.4	13.5	11.1
Green Ext Time (p_c), s	0.0	4.7	0.0	1.5	0.2	4.4	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	41.7
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	94	979	978	62	0	108
Future Vol, veh/h	94	979	978	62	0	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	95	989	988	63	0	109

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1051	0	-	0	-	494
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	670	-	-	-	0	505
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	670	-	-	-	-	505
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.99	0	14.08
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	670	-	-	-	505
HCM Lane V/C Ratio	0.142	-	-	-	0.216
HCM Ctrl Dly (s/v)	11.3	-	-	-	14.1
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.8

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	87	0	793	645	45
Future Vol, veh/h	0	87	0	793	645	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	0	96	0	871	709	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	354	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	661	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	661	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.37	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	661	-
HCM Lane V/C Ratio	-	0.145	-
HCM Ctrl Dly (s/v)	-	11.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.5	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	32	81	16	71	68
Future Vol, veh/h	13	32	81	16	71	68
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	15	36	92	18	81	77
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.4	7.6	8.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	29%	51%
Vol Thru, %	84%	0%	49%
Vol Right, %	16%	71%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	97	45	139
LT Vol	0	13	71
Through Vol	81	0	68
RT Vol	16	32	0
Lane Flow Rate	110	51	158
Geometry Grp	1	1	1
Degree of Util (X)	0.123	0.058	0.183
Departure Headway (Hd)	4.009	4.112	4.175
Convergence, Y/N	Yes	Yes	Yes
Cap	886	876	855
Service Time	2.072	2.112	2.222
HCM Lane V/C Ratio	0.124	0.058	0.185
HCM Control Delay, s/veh	7.6	7.4	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.2	0.7

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	94	31	0	80	1	11	1	2	1	0	1
Future Vol, veh/h	7	94	31	0	80	1	11	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	100	33	0	85	1	12	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	86	0	0	133	0	0	216	218	116	201	234	86
Stage 1	-	-	-	-	-	-	131	131	-	86	86	-
Stage 2	-	-	-	-	-	-	85	86	-	115	148	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1523	-	-	1464	-	-	735	676	938	762	670	979
Stage 1	-	-	-	-	-	-	871	786	-	927	828	-
Stage 2	-	-	-	-	-	-	923	823	-	894	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1523	-	-	1464	-	-	731	672	938	755	667	979
Mov Cap-2 Maneuver	-	-	-	-	-	-	731	672	-	755	667	-
Stage 1	-	-	-	-	-	-	866	781	-	927	828	-
Stage 2	-	-	-	-	-	-	922	823	-	886	774	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.39	0	9.9	9.23
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	750	91	-	-	1464	-	-	852
HCM Lane V/C Ratio	0.02	0.005	-	-	-	-	-	0.002
HCM Ctrl Dly (s/v)	9.9	7.4	0	-	0	-	-	9.2
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	16	92	0	25	132
Future Vol, veh/h	0	16	92	0	25	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	17	99	0	27	142

Major/Minor	Minor2		Major2	
Conflicting Flow All	198	0	0	0
Stage 1	198	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	709	-	-	-
Stage 1	749	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

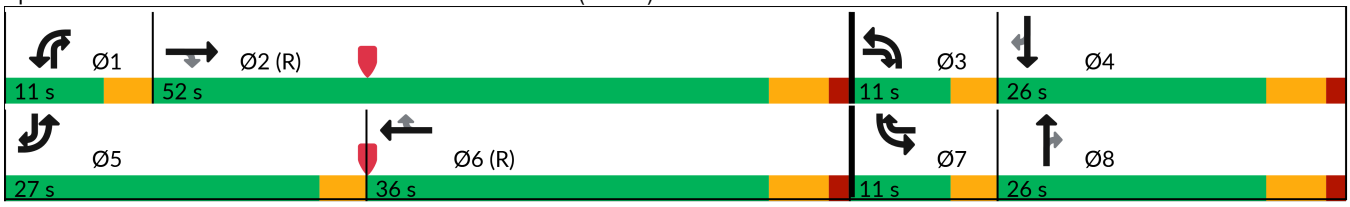
Approach	EB	WB
HCM Ctrl Dly, s/v		
HCM LOS	-	

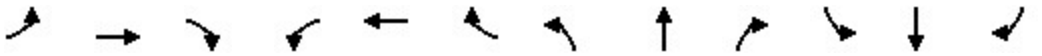
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	927	371	269	723	188	130	321	169	149	301	170
Future Volume (vph)	295	927	371	269	723	188	130	321	169	149	301	170
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	52.0	11.0	11.0	36.0	11.0	11.0	26.0	11.0	11.0	26.0	27.0
Total Split (%)	27.0%	52.0%	11.0%	11.0%	36.0%	11.0%	11.0%	26.0%	11.0%	11.0%	26.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	22.6	42.3	59.5	11.3	31.0	48.2	11.2	16.2	33.5	11.2	16.2	44.8
Actuated g/C Ratio	0.23	0.42	0.60	0.11	0.31	0.48	0.11	0.16	0.34	0.11	0.16	0.45
v/c Ratio	0.82	0.67	0.44	1.44	0.71	0.25	0.76	0.61	0.29	0.84	0.57	0.24
Control Delay (s/veh)	54.2	25.5	10.1	259.2	34.9	6.5	73.2	43.8	11.8	82.3	42.9	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.2	25.5	10.1	259.2	34.9	6.5	73.2	43.8	11.8	82.3	42.9	10.2
LOS	D	C	B	F	C	A	E	D	B	F	D	B
Approach Delay (s/veh)		27.3			81.5			41.3			43.5	
Approach LOS		C			F			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay (s/veh): 47.9	Intersection LOS: D
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	927	371	269	723	188	130	321	169	149	301	170
Future Volume (veh/h)	295	927	371	269	723	188	130	321	169	149	301	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1894	1879	1924	1909	1894	1811	1856	1945	1870	1868	1914
Adj Flow Rate, veh/h	321	1008	303	292	786	142	141	349	76	162	327	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	3	4	1	2	3	6	3	2	2	7	4
Cap, veh/h	357	1836	932	137	1415	746	129	529	371	134	532	560
Arrive On Green	0.20	0.51	0.51	0.08	0.39	0.39	0.08	0.15	0.15	0.08	0.15	0.15
Sat Flow, veh/h	1833	3599	1593	1833	3628	1605	1725	3526	1648	1781	3549	1622
Grp Volume(v), veh/h	321	1008	303	292	786	142	141	349	76	162	327	95
Grp Sat Flow(s),veh/h/ln	1833	1800	1593	1833	1814	1605	1725	1763	1648	1781	1775	1622
Q Serve(g_s), s	17.1	19.1	9.8	7.5	16.9	5.2	7.5	9.3	3.7	7.5	8.6	4.1
Cycle Q Clear(g_c), s	17.1	19.1	9.8	7.5	16.9	5.2	7.5	9.3	3.7	7.5	8.6	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	1836	932	137	1415	746	129	529	371	134	532	560
V/C Ratio(X)	0.90	0.55	0.33	2.12	0.56	0.19	1.09	0.66	0.20	1.21	0.61	0.17
Avail Cap(c_a), veh/h	431	1836	932	137	1415	746	129	705	453	134	710	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	16.7	10.6	46.3	23.8	15.7	46.3	40.1	31.5	46.3	39.8	22.8
Incr Delay (d2), s/veh	18.9	1.2	0.9	529.6	1.6	0.6	105.3	1.4	0.3	146.0	1.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.4	12.2	5.9	37.6	11.7	3.4	11.5	7.2	2.7	14.3	6.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	17.9	11.6	575.9	25.3	16.3	151.5	41.5	31.8	192.3	40.9	22.9
LnGrp LOS	E	B	B	F	C	B	F	D	C	F	D	C
Approach Vol, veh/h		1632			1220			566			584	
Approach Delay, s/veh		24.6			156.0			67.6			80.0	
Approach LOS		C			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	57.0	11.0	21.0	23.0	45.0	11.0	21.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	7.5	46.0	7.5	20.0	23.5	30.0	7.5	20.0
Max Q Clear Time (g_c+I1), s	9.5	21.1	9.5	10.6	19.1	18.9	9.5	11.3
Green Ext Time (p_c), s	0.0	9.1	0.0	1.5	0.4	4.3	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	78.8
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	62	1598	1008	57	0	55
Future Vol, veh/h	62	1598	1008	57	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	3	3	4	0	0
Mvmt Flow	72	1858	1172	66	0	64

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1238	0	-	0	-	586
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.22	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.26	-	-	-	-	3.3
Pot Cap-1 Maneuver	537	-	-	-	0	437
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	537	-	-	-	-	437
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.48	0	14.65
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	537	-	-	-	437
HCM Lane V/C Ratio	0.134	-	-	-	0.146
HCM Ctrl Dly (s/v)	12.7	-	-	-	14.7
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	33	0	770	590	15
Future Vol, veh/h	0	33	0	770	590	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	5	13
Mvmt Flow	0	35	0	811	621	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	311	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	703	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	703	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.38	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	703	-
HCM Lane V/C Ratio	-	0.049	-
HCM Ctrl Dly (s/v)	-	10.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.2	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	10	64	7	26	35
Future Vol, veh/h	5	10	64	7	26	35
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	0	10	0	0	0	0
Mvmt Flow	7	14	86	9	35	47
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7	7.4	7.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	33%	43%
Vol Thru, %	90%	0%	57%
Vol Right, %	10%	67%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	71	15	61
LT Vol	0	5	26
Through Vol	64	0	35
RT Vol	7	10	0
Lane Flow Rate	96	20	82
Geometry Grp	1	1	1
Degree of Util (X)	0.105	0.022	0.094
Departure Headway (Hd)	3.938	3.87	4.092
Convergence, Y/N	Yes	Yes	Yes
Cap	910	912	875
Service Time	1.963	1.948	2.117
HCM Lane V/C Ratio	0.105	0.022	0.094
HCM Control Delay, s/veh	7.4	7	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.1	0.3

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	71	7	1	38	1	3	0	0	0	0	1
Future Vol, veh/h	9	71	7	1	38	1	3	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	13	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	96	9	1	51	1	4	0	0	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	53	0	0	105	0	0	179	180	101	175	184	52
Stage 1	-	-	-	-	-	-	125	125	-	55	55	-
Stage 2	-	-	-	-	-	-	54	55	-	120	130	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1485	-	-	1499	-	-	779	710	958	792	713	1021
Stage 1	-	-	-	-	-	-	878	791	-	963	853	-
Stage 2	-	-	-	-	-	-	961	850	-	889	793	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1485	-	-	1499	-	-	771	703	958	784	707	1021
Mov Cap-2 Maneuver	-	-	-	-	-	-	771	703	-	784	707	-
Stage 1	-	-	-	-	-	-	870	784	-	962	852	-
Stage 2	-	-	-	-	-	-	958	849	-	881	786	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.77	0.19	9.69	8.53
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	771	183	-	-	45	-	-	1021
HCM Lane V/C Ratio	0.005	0.008	-	-	0.001	-	-	0.001
HCM Ctrl Dly (s/v)	9.7	7.4	0	-	7.4	0	-	8.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	15	40	2	32	88
Future Vol, veh/h	0	15	40	2	32	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	13	1
Mvmt Flow	0	19	51	3	41	113

Major/Minor	Minor2		Major2	
Conflicting Flow All	105	3	0	0
Stage 1	105	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	793	1087	-	-
Stage 1	817	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1087	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

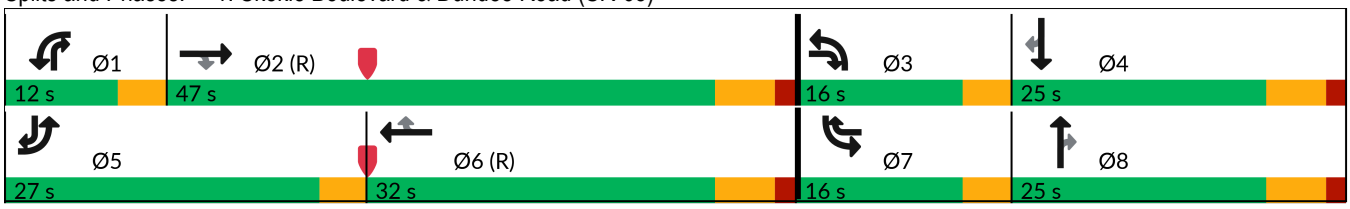
Approach	EB	WB
HCM Ctrl Dly, s/v	8.37	
HCM LOS	A	

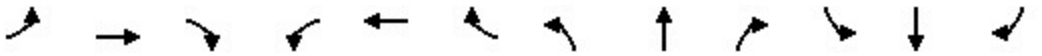
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1087	-	-
HCM Lane V/C Ratio	0.018	-	-
HCM Ctrl Dly (s/v)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	697	356	240	796	187	286	407	143	252	637	345
Future Volume (vph)	223	697	356	240	796	187	286	407	143	252	637	345
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	47.0	16.0	12.0	32.0	16.0	16.0	25.0	12.0	16.0	25.0	27.0
Total Split (%)	27.0%	47.0%	16.0%	12.0%	32.0%	16.0%	16.0%	25.0%	12.0%	16.0%	25.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	18.3	40.0	59.5	8.5	30.2	49.7	13.5	19.0	33.5	13.5	19.0	43.3
Actuated g/C Ratio	0.18	0.40	0.60	0.09	0.30	0.50	0.14	0.19	0.34	0.14	0.19	0.43
v/c Ratio	0.73	0.50	0.40	1.64	0.76	0.22	1.28	0.62	0.23	1.14	0.94	0.47
Control Delay (s/veh)	52.3	23.9	10.0	349.0	37.9	3.7	193.2	41.8	8.9	145.3	64.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.3	23.9	10.0	349.0	37.9	3.7	193.2	41.8	8.9	145.3	64.1	17.5
LOS	D	C	B	F	D	A	F	D	A	F	E	B
Approach Delay (s/veh)		25.0			93.8			88.0			67.7	
Approach LOS		C			F			F			E	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 41 (41%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay (s/veh): 66.5	Intersection LOS: E
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	697	356	240	796	187	286	407	143	252	637	345
Future Volume (veh/h)	223	697	356	240	796	187	286	407	143	252	637	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1909	1909	1909	1924	1924	1939	1885	1885	1976	1870	1961	1961
Adj Flow Rate, veh/h	232	726	276	250	829	110	298	424	72	262	664	316
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	1	1	0	1	1	0	2	1	1
Cap, veh/h	270	1487	866	156	1267	775	224	681	461	223	708	563
Arrive On Green	0.15	0.41	0.41	0.09	0.35	0.35	0.13	0.19	0.19	0.13	0.19	0.19
Sat Flow, veh/h	1818	3628	1618	1833	3656	1644	1795	3582	1675	1781	3725	1662
Grp Volume(v), veh/h	232	726	276	250	829	110	298	424	72	262	664	316
Grp Sat Flow(s),veh/h/ln	1818	1814	1618	1833	1828	1644	1795	1791	1675	1781	1863	1662
Q Serve(g_s), s	12.5	14.8	9.6	8.5	19.2	3.8	12.5	10.9	3.3	12.5	17.6	15.5
Cycle Q Clear(g_c), s	12.5	14.8	9.6	8.5	19.2	3.8	12.5	10.9	3.3	12.5	17.6	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	1487	866	156	1267	775	224	681	461	223	708	563
V/C Ratio(X)	0.86	0.49	0.32	1.60	0.65	0.14	1.33	0.62	0.16	1.18	0.94	0.56
Avail Cap(c_a), veh/h	427	1487	866	156	1267	775	224	681	461	223	708	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	21.8	13.0	45.8	27.6	15.0	43.8	37.2	27.5	43.8	39.9	27.0
Incr Delay (d2), s/veh	9.9	1.1	1.0	300.0	2.6	0.4	174.9	1.8	0.2	116.3	20.2	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	10.4	6.1	27.0	13.3	2.6	25.6	8.4	2.3	19.6	14.8	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.5	22.9	14.0	345.7	30.3	15.4	218.7	39.0	27.6	160.1	60.1	28.3
LnGrp LOS	D	C	B	F	C	B	F	D	C	F	E	C
Approach Vol, veh/h		1234			1189			794			1242	
Approach Delay, s/veh		26.3			95.2			105.4			73.1	
Approach LOS		C			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.0	16.0	25.0	18.4	40.6	16.0	25.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	41.0	12.5	19.0	23.5	26.0	12.5	19.0
Max Q Clear Time (g_c+I1), s	10.5	16.8	14.5	19.6	14.5	21.2	14.5	12.9
Green Ext Time (p_c), s	0.0	6.2	0.0	0.0	0.4	2.5	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	71.8
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	93	1330	1511	58	0	139
Future Vol, veh/h	93	1330	1511	58	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	0	0	0
Mvmt Flow	96	1371	1558	60	0	143

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1618	0	-	0	-	779
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.21	-	-	-	-	3.3
Pot Cap-1 Maneuver	404	-	-	-	0	321
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	404	-	-	-	-	321
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.09	0	24.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	404	-	-	-	321
HCM Lane V/C Ratio	0.238	-	-	-	0.446
HCM Ctrl Dly (s/v)	16.7	-	-	-	24.9
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.9	-	-	-	2.2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	83	0	789	1228	42
Future Vol, veh/h	0	83	0	789	1228	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0
Mvmt Flow	0	88	0	839	1306	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	653	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.72	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.31	-	-	-	-
Pot Cap-1 Maneuver	0	427	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	427	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	427	-
HCM Lane V/C Ratio	-	0.207	-
HCM Ctrl Dly (s/v)	-	15.6	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.8	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	22	86	15	67	56
Future Vol, veh/h	19	22	86	15	67	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	20	23	91	16	71	59
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.4	7.6	8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	46%	54%
Vol Thru, %	85%	0%	46%
Vol Right, %	15%	54%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	101	41	123
LT Vol	0	19	67
Through Vol	86	0	56
RT Vol	15	22	0
Lane Flow Rate	106	43	129
Geometry Grp	1	1	1
Degree of Util (X)	0.118	0.05	0.151
Departure Headway (Hd)	3.983	4.183	4.199
Convergence, Y/N	Yes	Yes	Yes
Cap	893	861	851
Service Time	2.038	2.183	2.243
HCM Lane V/C Ratio	0.119	0.05	0.152
HCM Control Delay, s/veh	7.6	7.4	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.2	0.5

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	95	31	2	72	1	17	0	6	0	0	4
Future Vol, veh/h	4	95	31	2	72	1	17	0	6	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	107	35	2	81	1	19	0	7	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	142	0	0	219	220	124	202	237	81
Stage 1	-	-	-	-	-	-	133	133	-	86	86	-
Stage 2	-	-	-	-	-	-	85	87	-	116	151	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1528	-	-	1454	-	-	733	674	929	761	668	984
Stage 1	-	-	-	-	-	-	869	784	-	927	828	-
Stage 2	-	-	-	-	-	-	923	823	-	894	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1528	-	-	1454	-	-	726	671	929	752	665	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	726	671	-	752	665	-
Stage 1	-	-	-	-	-	-	866	782	-	925	826	-
Stage 2	-	-	-	-	-	-	917	822	-	885	774	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.23	0.2	9.84	8.68
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	770	53	-	-	48	-	-	984
HCM Lane V/C Ratio	0.034	0.003	-	-	0.002	-	-	0.005
HCM Ctrl Dly (s/v)	9.8	7.4	0	-	7.5	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	45	94	0	21	130
Future Vol, veh/h	0	45	94	0	21	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	5	0
Mvmt Flow	0	49	102	0	23	141

Major/Minor	Minor2		Major2	
Conflicting Flow All	204	0	0	0
Stage 1	204	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	704	-	-	-
Stage 1	745	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

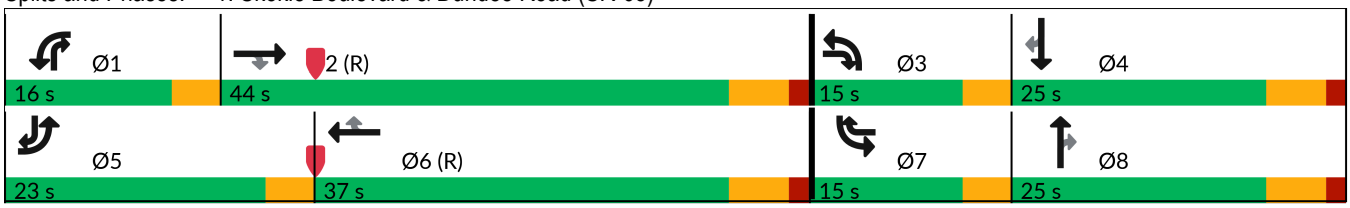
Approach	EB	WB
HCM Ctrl Dly, s/v		
HCM LOS	-	

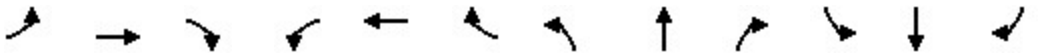
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	283	616	126	172	640	195	167	332	166	216	315	220
Future Volume (vph)	283	616	126	172	640	195	167	332	166	216	315	220
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	14.0	6.5	6.5	14.0	6.5
Total Split (s)	23.0	44.0	15.0	16.0	37.0	15.0	15.0	25.0	16.0	15.0	25.0	23.0
Total Split (%)	23.0%	44.0%	15.0%	16.0%	37.0%	15.0%	15.0%	25.0%	16.0%	15.0%	25.0%	23.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	20.7	34.5	54.6	13.8	27.6	51.5	14.1	14.9	34.7	17.8	18.6	45.3
Actuated g/C Ratio	0.21	0.35	0.55	0.14	0.28	0.52	0.14	0.15	0.35	0.18	0.19	0.45
v/c Ratio	0.83	0.52	0.15	0.73	0.68	0.24	0.72	0.64	0.27	0.72	0.47	0.29
Control Delay (s/veh)	58.7	27.8	2.5	59.8	36.1	7.1	59.6	45.7	10.0	56.2	39.5	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.7	27.8	2.5	59.8	36.1	7.1	59.6	45.7	10.0	56.2	39.5	12.1
LOS	E	C	A	E	D	A	E	D	B	E	D	B
Approach Delay (s/veh)		33.3			34.6			40.3			36.3	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 35.7	Intersection LOS: D
Intersection Capacity Utilization 71.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	616	126	172	640	195	167	332	166	216	315	220
Future Volume (veh/h)	283	616	126	172	640	195	167	332	166	216	315	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1924	1909	1924	1924	1909	1885	1900	1945	1900	1976	1961
Adj Flow Rate, veh/h	298	648	94	181	674	147	176	349	101	227	332	118
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	1	2	1	0	2	0	0	1
Cap, veh/h	331	1648	915	213	1413	811	206	462	403	208	480	513
Arrive On Green	0.18	0.45	0.45	0.12	0.39	0.39	0.12	0.13	0.13	0.12	0.13	0.13
Sat Flow, veh/h	1833	3656	1618	1833	3656	1618	1795	3610	1648	1810	3754	1662
Grp Volume(v), veh/h	298	648	94	181	674	147	176	349	101	227	332	118
Grp Sat Flow(s),veh/h/ln	1833	1828	1618	1833	1828	1618	1795	1805	1648	1810	1877	1662
Q Serve(g_s), s	15.9	11.8	2.7	9.7	13.9	5.0	9.6	9.3	4.9	11.5	8.5	5.3
Cycle Q Clear(g_c), s	15.9	11.8	2.7	9.7	13.9	5.0	9.6	9.3	4.9	11.5	8.5	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1648	915	213	1413	811	206	462	403	208	480	513
V/C Ratio(X)	0.90	0.39	0.10	0.85	0.48	0.18	0.85	0.76	0.25	1.09	0.69	0.23
Avail Cap(c_a), veh/h	357	1648	915	229	1413	811	206	686	505	208	713	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	18.3	10.0	43.3	23.1	13.7	43.4	42.1	30.4	44.3	41.7	25.7
Incr Delay (d2), s/veh	23.7	0.7	0.2	23.5	1.2	0.5	27.4	2.7	0.3	88.7	1.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.1	8.6	1.7	9.6	10.0	3.2	9.6	7.6	3.5	15.9	7.1	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.8	19.0	10.2	66.8	24.2	14.2	70.8	44.8	30.7	133.0	43.5	26.0
LnGrp LOS	E	B	B	E	C	B	E	D	C	F	D	C
Approach Vol, veh/h		1040			1002			626			677	
Approach Delay, s/veh		31.1			30.4			49.8			70.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	51.1	15.0	18.8	21.6	44.6	15.0	18.8
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	12.5	38.0	11.5	19.0	19.5	31.0	11.5	19.0
Max Q Clear Time (g_c+I1), s	11.7	13.8	11.6	10.5	17.9	15.9	13.5	11.3
Green Ext Time (p_c), s	0.0	4.8	0.0	1.5	0.2	4.4	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	42.4
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	96	999	998	63	0	110
Future Vol, veh/h	96	999	998	63	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	97	1009	1008	64	0	111

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1072	0	-	0	-	504
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	658	-	-	-	0	497
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	658	-	-	-	-	497
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1	0	14.31
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	658	-	-	-	497
HCM Lane V/C Ratio	0.147	-	-	-	0.224
HCM Ctrl Dly (s/v)	11.4	-	-	-	14.3
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.8

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	89	0	796	658	46
Future Vol, veh/h	0	89	0	796	658	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	0	98	0	875	723	51

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	362	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	654	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	654	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.47	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	654	-
HCM Lane V/C Ratio	-	0.15	-
HCM Ctrl Dly (s/v)	-	11.5	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.5	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	33	83	16	72	69
Future Vol, veh/h	13	33	83	16	72	69
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	15	38	94	18	82	78
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.4	7.7	8.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	28%	51%
Vol Thru, %	84%	0%	49%
Vol Right, %	16%	72%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	99	46	141
LT Vol	0	13	72
Through Vol	83	0	69
RT Vol	16	33	0
Lane Flow Rate	113	52	160
Geometry Grp	1	1	1
Degree of Util (X)	0.125	0.06	0.186
Departure Headway (Hd)	4.015	4.116	4.178
Convergence, Y/N	Yes	Yes	Yes
Cap	884	876	854
Service Time	2.081	2.116	2.228
HCM Lane V/C Ratio	0.128	0.059	0.187
HCM Control Delay, s/veh	7.7	7.4	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.2	0.7

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	96	32	0	82	1	11	1	2	1	0	1
Future Vol, veh/h	7	96	32	0	82	1	11	1	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	102	34	0	87	1	12	1	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	136	0	0	221	222	119	205	239	88
Stage 1	-	-	-	-	-	-	134	134	-	88	88	-
Stage 2	-	-	-	-	-	-	87	88	-	118	151	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1520	-	-	1460	-	-	730	672	935	757	666	976
Stage 1	-	-	-	-	-	-	868	783	-	925	826	-
Stage 2	-	-	-	-	-	-	921	822	-	892	776	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1520	-	-	1460	-	-	725	668	935	750	662	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	725	668	-	750	662	-
Stage 1	-	-	-	-	-	-	863	779	-	925	826	-
Stage 2	-	-	-	-	-	-	920	822	-	884	772	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.38	0	9.93	9.26
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	744	89	-	-	1460	-	-	848
HCM Lane V/C Ratio	0.02	0.005	-	-	-	-	-	0.003
HCM Ctrl Dly (s/v)	9.9	7.4	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	16	94	0	26	135
Future Vol, veh/h	0	16	94	0	26	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	17	101	0	28	145

Major/Minor	Minor2		Major2	
Conflicting Flow All	202	0	0	0
Stage 1	202	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	705	-	-	-
Stage 1	746	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	-	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

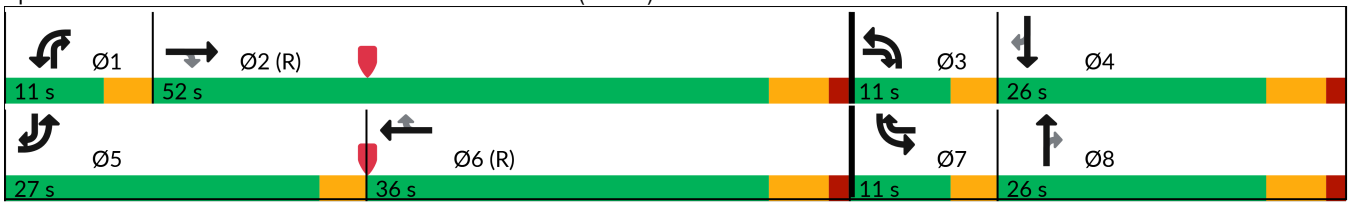
Approach	EB	WB
HCM Ctrl Dly, s/v		
HCM LOS	-	

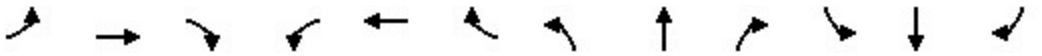
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Ctrl Dly (s/v)	-	-	-
HCM Lane LOS	-	-	-
HCM 95th %tile Q(veh)	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	911	371	269	728	188	135	318	169	170	303	170
Future Volume (vph)	295	911	371	269	728	188	135	318	169	170	303	170
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	52.0	11.0	11.0	36.0	11.0	11.0	26.0	11.0	11.0	26.0	27.0
Total Split (%)	27.0%	52.0%	11.0%	11.0%	36.0%	11.0%	11.0%	26.0%	11.0%	11.0%	26.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	22.6	42.4	59.5	11.4	31.1	48.3	11.1	16.1	33.5	11.1	16.1	44.7
Actuated g/C Ratio	0.23	0.42	0.60	0.11	0.31	0.48	0.11	0.16	0.34	0.11	0.16	0.45
v/c Ratio	0.81	0.66	0.44	1.43	0.71	0.25	0.80	0.61	0.29	0.97	0.58	0.24
Control Delay (s/veh)	54.0	25.2	10.1	256.2	35.0	6.4	77.6	43.8	11.8	106.9	43.1	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.0	25.2	10.1	256.2	35.0	6.4	77.6	43.8	11.8	106.9	43.1	10.2
LOS	D	C	B	F	D	A	E	D	B	F	D	B
Approach Delay (s/veh)		27.1			80.7			42.5			51.3	
Approach LOS		C			F			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay (s/veh): 49.1	Intersection LOS: D
Intersection Capacity Utilization 78.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	911	371	269	728	188	135	318	169	170	303	170
Future Volume (veh/h)	295	911	371	269	728	188	135	318	169	170	303	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1894	1879	1924	1909	1894	1811	1856	1945	1870	1868	1914
Adj Flow Rate, veh/h	321	990	303	292	791	142	147	346	76	185	329	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	3	4	1	2	3	6	3	2	2	7	4
Cap, veh/h	357	1836	932	137	1415	746	129	529	371	134	532	560
Arrive On Green	0.20	0.51	0.51	0.08	0.39	0.39	0.08	0.15	0.15	0.08	0.15	0.15
Sat Flow, veh/h	1833	3599	1593	1833	3628	1605	1725	3526	1648	1781	3549	1622
Grp Volume(v), veh/h	321	990	303	292	791	142	147	346	76	185	329	95
Grp Sat Flow(s),veh/h/ln	1833	1800	1593	1833	1814	1605	1725	1763	1648	1781	1775	1622
Q Serve(g_s), s	17.1	18.6	9.8	7.5	17.0	5.2	7.5	9.2	3.7	7.5	8.7	4.1
Cycle Q Clear(g_c), s	17.1	18.6	9.8	7.5	17.0	5.2	7.5	9.2	3.7	7.5	8.7	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	1836	932	137	1415	746	129	529	371	134	532	560
V/C Ratio(X)	0.90	0.54	0.33	2.12	0.56	0.19	1.14	0.65	0.20	1.38	0.62	0.17
Avail Cap(c_a), veh/h	431	1836	932	137	1415	746	129	705	453	134	710	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	16.6	10.6	46.3	23.8	15.7	46.3	40.1	31.5	46.3	39.8	22.8
Incr Delay (d2), s/veh	18.9	1.1	0.9	529.6	1.6	0.6	120.4	1.4	0.3	212.6	1.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.4	12.0	5.9	37.6	11.8	3.4	12.4	7.2	2.7	18.3	6.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	17.7	11.6	575.9	25.4	16.3	166.7	41.4	31.8	258.9	41.0	22.9
LnGrp LOS	E	B	B	F	C	B	F	D	C	F	D	C
Approach Vol, veh/h		1614			1225			569			609	
Approach Delay, s/veh		24.6			155.5			72.5			104.4	
Approach LOS		C			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	57.0	11.0	21.0	23.0	45.0	11.0	21.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	7.5	46.0	7.5	20.0	23.5	30.0	7.5	20.0
Max Q Clear Time (g_c+I1), s	9.5	20.6	9.5	10.7	19.1	19.0	9.5	11.2
Green Ext Time (p_c), s	0.0	9.0	0.0	1.5	0.4	4.3	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	83.4
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	86	1582	998	78	0	73
Future Vol, veh/h	86	1582	998	78	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	3	3	4	0	0
Mvmt Flow	100	1840	1160	91	0	85

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1251	0	-	0	-	580
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.22	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.26	-	-	-	-	3.3
Pot Cap-1 Maneuver	531	-	-	-	0	441
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	531	-	-	-	-	441
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.69	0	15.11
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	531	-	-	-	441
HCM Lane V/C Ratio	0.188	-	-	-	0.193
HCM Ctrl Dly (s/v)	13.4	-	-	-	15.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.7	-	-	-	0.7

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	63	0	767	584	26
Future Vol, veh/h	0	63	0	767	584	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	5	13
Mvmt Flow	0	66	0	807	615	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	307	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	706	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	706	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.62	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	706	-
HCM Lane V/C Ratio	-	0.094	-
HCM Ctrl Dly (s/v)	-	10.6	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.3	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	10	72	37	26	35
Future Vol, veh/h	16	10	72	37	26	35
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	0	10	0	0	0	0
Mvmt Flow	22	14	97	50	35	47
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.5	7.6	7.6
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	62%	43%
Vol Thru, %	66%	0%	57%
Vol Right, %	34%	38%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	109	26	61
LT Vol	0	16	26
Through Vol	72	0	35
RT Vol	37	10	0
Lane Flow Rate	147	35	82
Geometry Grp	1	1	1
Degree of Util (X)	0.156	0.041	0.095
Departure Headway (Hd)	3.819	4.184	4.157
Convergence, Y/N	Yes	Yes	Yes
Cap	935	843	859
Service Time	1.858	2.272	2.199
HCM Lane V/C Ratio	0.157	0.042	0.095
HCM Control Delay, s/veh	7.6	7.5	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.1	0.3

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	72	7	1	39	1	3	0	0	37	0	2
Future Vol, veh/h	10	72	7	1	39	1	3	0	0	37	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	13	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	97	9	1	53	1	4	0	0	50	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	54	0	0	107	0	0	184	186	102	180	190	53
Stage 1	-	-	-	-	-	-	129	129	-	56	56	-
Stage 2	-	-	-	-	-	-	55	57	-	124	134	-
Critical Hdwy	4.23	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.317	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1484	-	-	1497	-	-	773	705	956	786	709	1020
Stage 1	-	-	-	-	-	-	873	788	-	961	852	-
Stage 2	-	-	-	-	-	-	959	849	-	885	790	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1484	-	-	1497	-	-	763	697	956	777	701	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	763	697	-	777	701	-
Stage 1	-	-	-	-	-	-	865	780	-	960	851	-
Stage 2	-	-	-	-	-	-	955	848	-	876	782	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.84	0.18	9.75	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	763	199	-	-	44	-	-	787
HCM Lane V/C Ratio	0.005	0.009	-	-	0.001	-	-	0.067
HCM Ctrl Dly (s/v)	9.7	7.4	0	-	7.4	0	-	9.9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	32	41	3	77	89
Future Vol, veh/h	1	32	41	3	77	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	13	1
Mvmt Flow	1	41	53	4	99	114

Major/Minor	Minor2		Major2	
Conflicting Flow All	109	4	0	0
Stage 1	109	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	790	1086	-	-
Stage 1	814	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1086	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

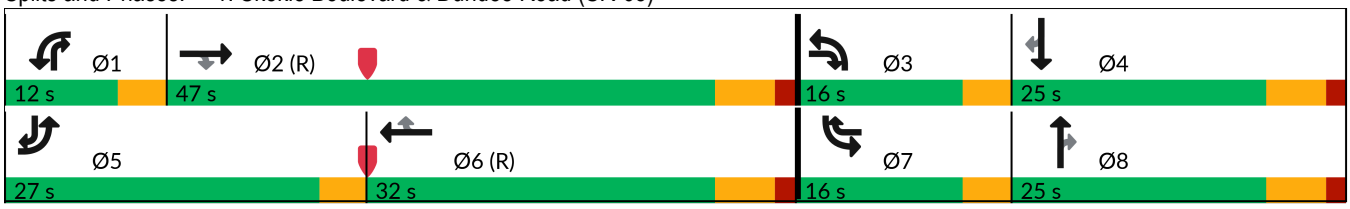
Approach	EB	WB
HCM Ctrl Dly, s/v	8.45	
HCM LOS	A	

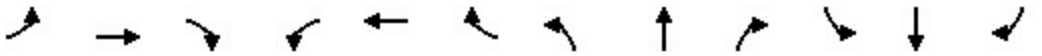
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1086	-	-
HCM Lane V/C Ratio	0.039	-	-
HCM Ctrl Dly (s/v)	8.5	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	685	356	240	804	187	293	403	143	271	640	345
Future Volume (vph)	223	685	356	240	804	187	293	403	143	271	640	345
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5	6.5	21.0	6.5
Total Split (s)	27.0	47.0	16.0	12.0	32.0	16.0	16.0	25.0	12.0	16.0	25.0	27.0
Total Split (%)	27.0%	47.0%	16.0%	12.0%	32.0%	16.0%	16.0%	25.0%	12.0%	16.0%	25.0%	27.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	18.3	40.1	59.5	8.5	30.3	49.7	13.4	19.0	33.5	13.4	19.0	43.3
Actuated g/C Ratio	0.18	0.40	0.60	0.09	0.30	0.50	0.13	0.19	0.34	0.13	0.19	0.43
v/c Ratio	0.73	0.50	0.40	1.64	0.77	0.22	1.32	0.61	0.23	1.23	0.95	0.47
Control Delay (s/veh)	52.3	23.7	10.0	349.0	38.2	3.7	207.3	41.7	8.9	176.5	64.9	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.3	23.7	10.0	349.0	38.2	3.7	207.3	41.7	8.9	176.5	64.9	17.5
LOS	D	C	B	F	D	A	F	D	A	F	E	B
Approach Delay (s/veh)		24.9			93.5			93.9			76.0	
Approach LOS		C			F			F			E	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 41 (41%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.64	
Intersection Signal Delay (s/veh): 69.9	Intersection LOS: E
Intersection Capacity Utilization 85.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	685	356	240	804	187	293	403	143	271	640	345
Future Volume (veh/h)	223	685	356	240	804	187	293	403	143	271	640	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1909	1909	1909	1924	1924	1939	1885	1885	1976	1870	1961	1961
Adj Flow Rate, veh/h	232	714	276	250	838	110	305	420	72	282	667	316
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	1	1	0	1	1	0	2	1	1
Cap, veh/h	270	1487	866	156	1267	775	224	681	461	223	708	563
Arrive On Green	0.15	0.41	0.41	0.09	0.35	0.35	0.13	0.19	0.19	0.13	0.19	0.19
Sat Flow, veh/h	1818	3628	1618	1833	3656	1644	1795	3582	1675	1781	3725	1662
Grp Volume(v), veh/h	232	714	276	250	838	110	305	420	72	282	667	316
Grp Sat Flow(s),veh/h/ln	1818	1814	1618	1833	1828	1644	1795	1791	1675	1781	1863	1662
Q Serve(g_s), s	12.5	14.5	9.6	8.5	19.4	3.8	12.5	10.8	3.3	12.5	17.7	15.5
Cycle Q Clear(g_c), s	12.5	14.5	9.6	8.5	19.4	3.8	12.5	10.8	3.3	12.5	17.7	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	1487	866	156	1267	775	224	681	461	223	708	563
V/C Ratio(X)	0.86	0.48	0.32	1.60	0.66	0.14	1.36	0.62	0.16	1.27	0.94	0.56
Avail Cap(c_a), veh/h	427	1487	866	156	1267	775	224	681	461	223	708	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	21.7	13.0	45.8	27.7	15.0	43.8	37.2	27.5	43.8	40.0	27.0
Incr Delay (d2), s/veh	9.9	1.1	1.0	300.0	2.7	0.4	187.7	1.7	0.2	150.5	20.9	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	10.2	6.1	27.0	13.5	2.6	26.8	8.3	2.3	23.0	15.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.5	22.8	14.0	345.7	30.4	15.4	231.4	38.9	27.6	194.3	60.9	28.3
LnGrp LOS	D	C	B	F	C	B	F	D	C	F	E	C
Approach Vol, veh/h		1222			1198			797			1265	
Approach Delay, s/veh		26.2			94.9			111.5			82.5	
Approach LOS		C			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	47.0	16.0	25.0	18.4	40.6	16.0	25.0
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	8.5	41.0	12.5	19.0	23.5	26.0	12.5	19.0
Max Q Clear Time (g_c+I1), s	10.5	16.5	14.5	19.7	14.5	21.4	14.5	12.8
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.4	2.4	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	75.6
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	116	1318	1497	87	0	165
Future Vol, veh/h	116	1318	1497	87	0	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	0	0	0
Mvmt Flow	120	1359	1543	90	0	170

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1633	0	-	0	-	772
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.21	-	-	-	-	3.3
Pot Cap-1 Maneuver	398	-	-	-	0	325
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	398	-	-	-	-	325
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.45	0	27.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	398	-	-	-	325
HCM Lane V/C Ratio	0.3	-	-	-	0.523
HCM Ctrl Dly (s/v)	17.9	-	-	-	27.6
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	1.2	-	-	-	2.9

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	0	785	1217	61
Future Vol, veh/h	0	116	0	785	1217	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0
Mvmt Flow	0	123	0	835	1295	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	647	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.72	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.31	-	-	-	-
Pot Cap-1 Maneuver	0	431	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	431	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.67	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	431	-
HCM Lane V/C Ratio	-	0.286	-
HCM Ctrl Dly (s/v)	-	16.7	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.2	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	22	98	48	67	56
Future Vol, veh/h	38	22	98	48	67	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	40	23	103	51	71	59
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.8	7.8	8.1
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	63%	54%
Vol Thru, %	67%	0%	46%
Vol Right, %	33%	37%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	146	60	123
LT Vol	0	38	67
Through Vol	98	0	56
RT Vol	48	22	0
Lane Flow Rate	154	63	129
Geometry Grp	1	1	1
Degree of Util (X)	0.167	0.077	0.154
Departure Headway (Hd)	3.911	4.416	4.271
Convergence, Y/N	Yes	Yes	Yes
Cap	905	816	831
Service Time	1.987	2.416	2.34
HCM Lane V/C Ratio	0.17	0.077	0.155
HCM Control Delay, s/veh	7.8	7.8	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.2	0.5

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	97	31	2	74	18	17	0	6	43	0	6
Future Vol, veh/h	6	97	31	2	74	18	17	0	6	43	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	109	35	2	83	20	19	0	7	48	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	144	0	0	228	248	126	220	255	93
Stage 1	-	-	-	-	-	-	140	140	-	98	98	-
Stage 2	-	-	-	-	-	-	88	108	-	122	157	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1501	-	-	1451	-	-	723	649	926	740	652	969
Stage 1	-	-	-	-	-	-	861	779	-	914	818	-
Stage 2	-	-	-	-	-	-	920	805	-	887	771	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1451	-	-	713	645	926	730	648	969
Mov Cap-2 Maneuver	-	-	-	-	-	-	713	645	-	730	648	-
Stage 1	-	-	-	-	-	-	857	775	-	912	817	-
Stage 2	-	-	-	-	-	-	913	804	-	876	768	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.33	0.16	9.91	10.16
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	759	77	-	-	37	-	-	753
HCM Lane V/C Ratio	0.034	0.004	-	-	0.002	-	-	0.073
HCM Ctrl Dly (s/v)	9.9	7.4	0	-	7.5	0	-	10.2
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	69	96	2	71	132
Future Vol, veh/h	2	69	96	2	71	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	5	0
Mvmt Flow	2	75	104	2	77	143

Major/Minor	Minor2		Major2	
Conflicting Flow All	211	2	0	0
Stage 1	211	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	698	1088	-	-
Stage 1	740	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1088	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

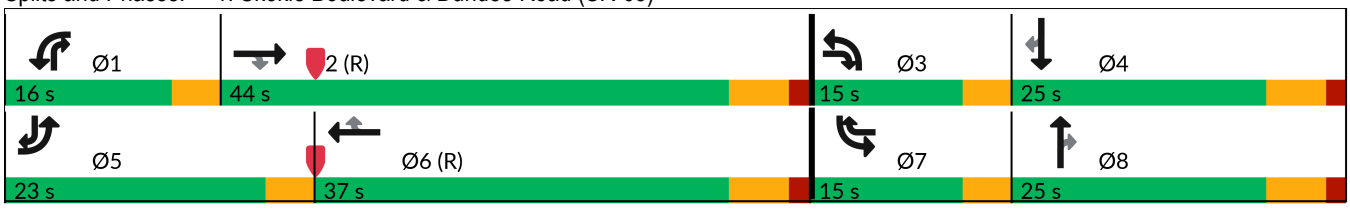
Approach	EB	WB
HCM Ctrl Dly, s/v	8.56	
HCM LOS	A	

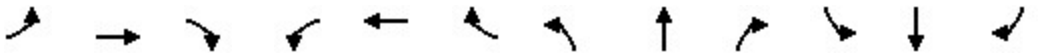
Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1088	-	-
HCM Lane V/C Ratio	0.071	-	-
HCM Ctrl Dly (s/v)	8.6	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	283	606	126	172	648	195	173	329	166	233	318	220
Future Volume (vph)	283	606	126	172	648	195	173	329	166	233	318	220
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	8.0	3.0	3.0	8.0	3.0
Minimum Split (s)	6.5	21.0	6.5	6.5	21.0	6.5	6.5	14.0	6.5	6.5	14.0	6.5
Total Split (s)	23.0	44.0	15.0	16.0	37.0	15.0	15.0	25.0	16.0	15.0	25.0	23.0
Total Split (%)	23.0%	44.0%	15.0%	16.0%	37.0%	15.0%	15.0%	25.0%	16.0%	15.0%	25.0%	23.0%
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
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	0.0
Total Lost Time (s)	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5	3.5	6.0	3.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	None	None	C-Min	None	None	Min	None	None	Min	None
Act Effct Green (s)	20.7	34.5	54.9	13.8	27.6	51.5	14.5	14.8	34.6	17.9	18.2	45.0
Actuated g/C Ratio	0.21	0.35	0.55	0.14	0.28	0.52	0.15	0.15	0.35	0.18	0.18	0.45
v/c Ratio	0.83	0.51	0.15	0.72	0.68	0.24	0.72	0.64	0.27	0.78	0.49	0.29
Control Delay (s/veh)	58.3	27.6	2.5	59.5	36.4	7.1	59.6	45.7	10.0	60.4	40.0	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.3	27.6	2.5	59.5	36.4	7.1	59.6	45.7	10.0	60.4	40.0	12.6
LOS	E	C	A	E	D	A	E	D	B	E	D	B
Approach Delay (s/veh)		33.1			34.7			40.5			38.4	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 98 (98%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay (s/veh): 36.2	Intersection LOS: D
Intersection Capacity Utilization 72.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Skokie Boulevard & Dundee Road (SR-68)





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	606	126	172	648	195	173	329	166	233	318	220
Future Volume (veh/h)	283	606	126	172	648	195	173	329	166	233	318	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.04
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1924	1924	1909	1924	1924	1909	1885	1900	1945	1900	1976	1961
Adj Flow Rate, veh/h	298	638	94	181	682	147	182	346	101	245	335	118
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	1	2	1	0	2	0	0	1
Cap, veh/h	331	1651	917	213	1416	813	206	459	401	208	477	511
Arrive On Green	0.18	0.45	0.45	0.12	0.39	0.39	0.12	0.13	0.13	0.12	0.13	0.13
Sat Flow, veh/h	1833	3656	1618	1833	3656	1618	1795	3610	1648	1810	3754	1662
Grp Volume(v), veh/h	298	638	94	181	682	147	182	346	101	245	335	118
Grp Sat Flow(s),veh/h/ln	1833	1828	1618	1833	1828	1618	1795	1805	1648	1810	1877	1662
Q Serve(g_s), s	15.9	11.6	2.7	9.7	14.0	5.0	10.0	9.3	4.9	11.5	8.6	5.3
Cycle Q Clear(g_c), s	15.9	11.6	2.7	9.7	14.0	5.0	10.0	9.3	4.9	11.5	8.6	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1651	917	213	1416	813	206	459	401	208	477	511
V/C Ratio(X)	0.90	0.39	0.10	0.85	0.48	0.18	0.88	0.75	0.25	1.18	0.70	0.23
Avail Cap(c_a), veh/h	357	1651	917	229	1416	813	206	686	505	208	713	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	18.2	10.0	43.3	23.1	13.6	43.6	42.1	30.5	44.3	41.8	25.8
Incr Delay (d2), s/veh	23.7	0.7	0.2	23.5	1.2	0.5	32.7	2.6	0.3	118.5	1.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.1	8.5	1.7	9.6	10.1	3.2	10.3	7.5	3.5	18.6	7.1	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.8	18.9	10.2	66.8	24.3	14.1	76.3	44.8	30.8	162.7	43.7	26.0
LnGrp LOS	E	B	B	E	C	B	E	D	C	F	D	C
Approach Vol, veh/h		1030			1010			629			698	
Approach Delay, s/veh		31.1			30.4			51.6			82.5	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	51.1	15.0	18.7	21.6	44.7	15.0	18.7
Change Period (Y+Rc), s	3.5	6.0	3.5	6.0	3.5	6.0	3.5	6.0
Max Green Setting (Gmax), s	12.5	38.0	11.5	19.0	19.5	31.0	11.5	19.0
Max Q Clear Time (g_c+I1), s	11.7	13.6	12.0	10.6	17.9	16.0	13.5	11.3
Green Ext Time (p_c), s	0.0	4.7	0.0	1.5	0.2	4.4	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	45.4
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	119	989	988	87	0	132
Future Vol, veh/h	119	989	988	87	0	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	150	-	-	175	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	3	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	120	999	998	88	0	133

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1086	0	-	0	-	499
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	-	7.2
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	-	-	3.3
Pot Cap-1 Maneuver	650	-	-	-	0	501
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	650	-	-	-	-	501
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.27	0	14.77
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	650	-	-	-	501
HCM Lane V/C Ratio	0.185	-	-	-	0.266
HCM Ctrl Dly (s/v)	11.8	-	-	-	14.8
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.7	-	-	-	1.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	0	806	665	61
Future Vol, veh/h	0	116	0	806	665	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-2	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	0	127	0	886	731	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	365	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.7	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	650	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	650	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.88	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	650	-
HCM Lane V/C Ratio	-	0.196	-
HCM Ctrl Dly (s/v)	-	11.9	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.7	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	33	94	43	72	69
Future Vol, veh/h	28	33	94	43	72	69
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	38	107	49	82	78
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay, s/veh	7.7	7.9	8.3
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	46%	51%
Vol Thru, %	69%	0%	49%
Vol Right, %	31%	54%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	137	61	141
LT Vol	0	28	72
Through Vol	94	0	69
RT Vol	43	33	0
Lane Flow Rate	156	69	160
Geometry Grp	1	1	1
Degree of Util (X)	0.171	0.084	0.189
Departure Headway (Hd)	3.955	4.347	4.243
Convergence, Y/N	Yes	Yes	Yes
Cap	894	829	836
Service Time	2.041	2.347	2.317
HCM Lane V/C Ratio	0.174	0.083	0.191
HCM Control Delay, s/veh	7.9	7.7	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.6	0.3	0.7

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	98	32	0	84	14	11	1	2	37	0	3
Future Vol, veh/h	9	98	32	0	84	14	11	1	2	37	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	1	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	104	34	0	89	15	12	1	2	39	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	104	0	0	138	0	0	230	245	121	221	254	97
Stage 1	-	-	-	-	-	-	140	140	-	97	97	-
Stage 2	-	-	-	-	-	-	89	104	-	124	157	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.3	6.7	6.3	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.7	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1500	-	-	1458	-	-	720	652	932	739	653	965
Stage 1	-	-	-	-	-	-	861	778	-	915	819	-
Stage 2	-	-	-	-	-	-	918	808	-	885	771	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1500	-	-	1458	-	-	713	647	932	731	648	965
Mov Cap-2 Maneuver	-	-	-	-	-	-	713	647	-	731	648	-
Stage 1	-	-	-	-	-	-	855	773	-	915	819	-
Stage 2	-	-	-	-	-	-	915	808	-	876	766	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.48	0	10.02	10.12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	732	111	-	-	1458	-	-	745
HCM Lane V/C Ratio	0.02	0.006	-	-	-	-	-	0.057
HCM Ctrl Dly (s/v)	10	7.4	0	-	0	-	-	10.1
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	36	96	2	71	137
Future Vol, veh/h	2	36	96	2	71	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-1	-	-	0	-1	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	39	103	2	76	147

Major/Minor	Minor2		Major2	
Conflicting Flow All	209	2	0	0
Stage 1	209	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.3	6.1	4.1	-
Critical Hdwy Stg 1	5.3	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	700	1088	-	-
Stage 1	742	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	1088	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	EB	WB
HCM Ctrl Dly, s/v	8.44	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	WBL	WBT
Capacity (veh/h)	1088	-	-
HCM Lane V/C Ratio	0.038	-	-
HCM Ctrl Dly (s/v)	8.4	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-

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