Community & Economic Development
1420 Miner Street, Des Plaines, IL 60016
P: 847.391.5392 | W: desplaines.org

Planning and Zoning Board Agenda
July 25, 2023
Room 102 – 7:00 P.M.

Chair Announcement: A public hearing for zoning map amendment for 900 Graceland/1217 Thacker – the southwest corner of Graceland and Thacker, or "Site A" in the proposed Contour Place redevelopment – will not be occurring at this meeting. However, a public hearing for map amendment for "Site B," or the property at approximately 919-921 Graceland (east side of Graceland), *is* on this meeting agenda and will be heard.

Under "New Business," after the Board's conducting of the two public hearings, Developer Luz & Associates will provide an update on their plans and petition for Site A.

Call to Order and Roll Call

Approval of Minutes: July 11, 2023

Public Comment: For matters that are not on the agenda

Pending Applications

1. **Address:** Citywide **Case Number:** 23-043-TA (Public Hearing)

The City is proposing text amendments to the Zoning Ordinance related to accessory structure definitions and regulations, and any other amendments as may be necessary.

PINs: Citywide
Petitioner: City of Des Plaines, 1420 Miner Street, Des Plaines, IL, 60016
Owner: n/a

2. **Address:** Approximately 919-921 Graceland Avenue (parking lot for 1217 Thacker Street) **Case Number:** 23-040-MAP (Public Hearing)

The petitioner has requested a zoning map amendment to rezone the subject property from C-3 General Commercial to R-4 Central Core Residential, and any other variations, waivers, and zoning relief as may be necessary.

PINs: 09-20-203-006-0000
Petitioner: Luz and Associates #1, LLC, 2030 West Wabansia Ave., Chicago, IL 60611
Owner: Contour Saws, Inc., 100 Lakeview Parkway, Ste. 100, Vernon Hills, 60061

New Business

1. Update from Luz & Associates on Plan and Application for 900 Graceland/1217 Thacker ("Site A") of the Contour Place Redevelopment

City of Des Plaines, in compliance with the Americans With Disabilities Act, requests that persons with disabilities, who require certain accommodations to allow them to observe and/or participate in the meeting(s) or have questions about the accessibility of the meeting(s) or facilities, contact the ADA Coordinator at 847-391-5486 to allow the City to make reasonable accommodations for these persons. The public hearing may be continued to a further date, time and place without publication of a further published notice such as this notice.

DES PLAINES PLANNING AND ZONING BOARD MEETING
July 11, 2023
DRAFT MINUTES

The Des Plaines Planning and Zoning Board held its regularly scheduled meeting on Tuesday, July 11, 2023, at 7:00 p.m. in Room 102 of the Des Plaines Civic Center.

Chair Szabo called the meeting to order at 7:00 p.m. and roll call was established.

PRESENT: Hofherr, Saletnik, Weaver, Szabo

ABSENT: Catalano, Fowler, Veremis

ALSO PRESENT: John Carlisle, AICP, CED Director
Samantha Redman, Planner
Margie Mosele, Executive Assistant

A quorum was present.

Call to Order and Roll Call

APPROVAL OF MINUTES FROM June 27, 2023

A motion was made by Board Member Weaver seconded by Board Member Saletnik to approve the meeting minutes of June 27, 2023.

AYES: Weaver, Saletnik, Szabo
NAYES: None
ABSTAIN: Hofherr

*****MOTION CARRIES ****

PUBLIC COMMENT ON NON-AGENDA ITEM

- None

1. Address: 1065 Lee Street Case Number 23-035-CU

The petitioner and contract purchaser, Krzysztof Bernatek, is proposing a conditional use to allow for auto service repair and motor vehicle sales at 1065 Lee St

PIN: 09-20-214-002-0000

Petitioner: Krzysztof Bernatek, 2017 De Cook Ave., Park Ridge, IL 60068

Owner/Property Control: Centrust Bank, 385 Waukegan Rd., Northbrook, IL 60062

Ward Number: #3, Alderman Sean Oskerka

Existing Zoning: C-3, General Commercial

Surrounding Zoning:
North: C-3, General Commercial
South: C-3, General Commercial
East: Railroad tracks; R-1, Single Family Residential
West: C-3, General Commercial

Surrounding Land Uses:
North: Parking lot
South: Commercial building
East: Commercial buildings
West: Railroad tracks

Street Classification: Lee Street is classified as a major road under jurisdiction of the Illinois Department of Transportation (IDOT).

Comprehensive Plan: Commercial is the recommended use for this property.

Property/Zoning History:

The property currently consists of a commercial building and a gravel parking area to the east. For several decades, Midwest Automotive operated at this property until closing in 2020. In 2001, a conditional use was granted to sell four motor vehicles on the site. In 2019, an amendment to the conditional use allowed for the sale of up to ten motor vehicles on the property; however, in 2020, the conditional use for motor vehicle sales was rescinded due to a number of code violations. Specifically, vehicles were parked on the adjacent lot (parking lot for 1062 Lee), vehicles

unassociated with the business were stored in the rear parking lot, and landscaping required by the previous conditional use was never installed. Since the closure of the business in 2020, several additional code enforcement issues have emerged, including debris stored on the site and the parking of trucks unassociated with a business in the rear gravel parking area.

Project Description:

The petitioner and contract purchaser, Krzysztof Bernatek, is proposing a conditional use to allow for auto service repair and motor vehicle sales at 1065 Lee St.

Proposed Use and Business Operation Details

Justpol Automotive is a proposed new auto service repair business. Currently the petitioner owns Kris Touhy Auto, which consists of two automotive repair businesses accessory to gas stations at 8801 Waukegan Road in Morton Grove and 5035 West Touhy Ave in Skokie. Currently, Kris Touhy Auto provides auto service repair (including tire replacement and repair, oil changes, and other activities associated with auto service repair) within gas stations. The petitioner intends to operate their first stand-alone auto service repair business at 1065 Lee St.

Six bays in the building will be used for auto repair; the office area will be used for general administrative duties as well as a waiting room and an area to display products for sale to auto repair customers. Per the petitioner, any retail activities will be associated with the auto service repair customers. No auto body repair will occur on this property.

Motor vehicle sales are a conditional use allowed within the C-3 Zoning District if they exceed 25,000 square feet. This property is 31,326 square feet. The motor vehicle sales will consist of five spaces, as noted on the Site Plan attachment. The petitioner may choose to expand the number of spaces used for motor vehicle sales in the future, after the rear parking lot is improved; expanding the number of sale spaces will require amendment to the conditional use.

Improvements to the Site

As discussed in the Property/Zoning History of this report, the property was previously an auto service repair business with long-term operations. Limited interior renovations are necessary to make the site suitable for the repair of vehicles in this location. Six repair bays are located within the building.

Proposed exterior improvements will include restriping and resurfacing of the parking lot, including adding two accessible spaces (as required by Section 12-9-8). The petitioner also plans to remove gravel from the rear parking area and pave an asphalt driveway in the back of the property leading to the dumpster enclosure and the rear overhead doors. Any unpaved areas on the property, including the remainder of the gravel parking lot in the rear, will be covered with grass, wood mulch, or other plant materials, as required by Section 12-10-6.A. Several suggested conditions of approval involve these property improvements, which per the site plan are intended to enhance the rear of the property and lessen the amount of hardscape (parking surface) in favor of increasing the amount of landscaped area.

Impact to Neighborhood

Noise and odor associated with this site will be typical of an auto service repair use, which is the historical use of this property. The proposed hours of operation will be 8:00 a.m. to 5:00 p.m., Monday through Friday, Saturday 8:00 a.m. to 12:00 p.m. The proposed number of employees will be 10 or fewer. No additional entrances are proposed at this site; access will be provided by the existing two driveways.

A traffic study was not requested by staff, as the scale of this operation is the same as the previous use in this location and no known issues with traffic were communicated by Police or Code Enforcement surrounding the business that previously operated at this site. However, several violations were issued for the previous business, as discussed in the Property/Zoning History section of this report. Several suggested conditions of approval were written to provide assurances this conditional use will not result in additional violations if this type of use is reinstated.

Parking

The below table provides an overview of required and provided parking for this building and uses. After improvement of the rear parking area, additional parking spaces will be added to the total; however, the petitioner does not have specific plans. If additional display spaces are requested in the future, the petitioner would be required to amend the conditional use, as specified in the suggested conditions of approval.

Use	Requirement	Total Required	Total Proposed
Automotive service repair	2 spaces per service bay, plus 1 space for every 200 square feet of accessory retail	6 service bays = 12 spaces 1425 sq ft of office = 8 spaces **20 spaces**	21 spaces
Motor vehicle sales	1 space for every 500 square feet of showroom and office floor area, plus 1 space for every 20 vehicle display spaces (required off street parking spaces cannot be occupied by motor vehicles for sale or for lease)	5 vehicle display spaces No showroom or office specifically for the motor vehicle sales **0 required spaces**	5 vehicle display spaces
Accessible Spaces	Parking lots with 21 to 50 spaces require 2 spaces	2 accessible spaces	2 accessible spaces
Total Spaces:		<u>Required</u> 20 off-street parking spaces 2 accessible spaces	<u>Proposed</u> 21 off street parking spaces* 5 display spaces for motor vehicle sales **26 total spaces**
*Includes accessible spaces			

Most vehicles will be repaired and returned to the customer within 24 hours, per the petitioner. A suggested condition of approval would require all inoperable vehicles to be placed inside the building or in the rear parking lot only in striped spaces that would comply with the dimensional requirements of the Zoning Ordinance.

An additional suggested condition of approval acknowledges issues with the former auto service repair business using the adjacent parking lot to park vehicles. This parking lot on 1062 Lee Street is owned by a separate property owner and may not be used to park or store vehicles. The suggested condition of approval requires signage indicating parking areas for the auto repair business and stating that no parking is permitted on the adjacent property.

<u>Standards for Conditional Use</u>

The following is a discussion of standards for conditional uses from Section 12-3-4(E) of the Zoning Ordinance. Rationale for how the proposed amendments would satisfy the standards is

provided below and in the petitioner's response to standards. The PZB may use this rationale toward its recommendation, or the Board may make up its own.

1. **The proposed Conditional Use is in fact a Conditional Use established within the specific Zoning district involved:**

Comment: Auto service repair and motor vehicle sales (on properties greater than 25,000 square feet) are conditional uses within the C-3, General Commercial District.

PZB Additions or Modifications (if necessary): _____

2. **The proposed Conditional Use is in accordance with the objectives of the City's Comprehensive Plan:**

Comment: The 2019 Comprehensive Plan illustrates this area to be used for Commercial. This business would bring commercial activity into this area; several buildings in this corridor are vacant, and revitalization with new businesses would be beneficial to the vitality of this area of Lee Street.

PZB Additions or Modifications (if necessary): _____

3. **The proposed Conditional Use is designed, constructed, operated, and maintained to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity:**

Comment: Many suggested conditions of approval are included with this case to provide assurances about the use being compliant with applicable zoning requirements, including requiring improvements to the parking lot, removal of gravel from the rear parking area, and providing landscaping around the pole sign and in front of the building or parking lot. No modifications to the exterior of the building are proposed.

PZB Additions or Modifications (if necessary): _____

4. **The proposed Conditional Use is not hazardous or disturbing to existing neighboring uses:**

Comment: As discussed in the Petitioner's Response to Standards, the business will operate Monday through Friday 8:00 a.m. to 5:00 p.m., and Saturday 8:00 a.m. to 12:00 p.m. The property is within an existing commercial area, with no residences directly adjacent. See the Petitioner's Narrative and Response to Standards for additional information about business operations. The suggested conditions of approval surrounding the location of parking, storage, disposal of materials, and landscaping are meant to provide assurances that limit any disturbance or nuisance to the neighborhood, either through the business operations or aesthetics of improvements.

PZB Additions or Modifications (if necessary): _____

5. **The proposed Conditional Use is to be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewer, and schools; or, agencies responsible for establishing the Conditional Use shall provide adequately any such services:**

Comment: The existing building has been adequately served by essential public facilities and services. Staff has no concerns that the proposed use will not be adequately served with essential public facilities and services. Prior to business registration approval, the petitioner must provide a waste oil agreement to the Fire Prevention Bureau and undergo an inspection of the building by the fire, building, and zoning divisions to determine compliance with this conditional use and all applicable local, state and federal regulations.

PZB Additions or Modifications (if necessary): _____

6. **The proposed Conditional Use does not create excessive additional requirements at public expense for public facilities and services and will not be detrimental to the economic well-being of the entire community:**

Comment: The proposed use would not create a burden on public facilities. This new business would be located within an existing building and provide additional business activity to this corridor.

PZB Additions or Modifications (if necessary): _____

7. **The proposed Conditional Use does not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke fumes, glare or odors:**

Comment: Traffic generated by these uses will be consistent with the amount of traffic previously generated at this site, and staff believes the existing street network can accommodate the traffic for this use. This auto service repair use would result in the same amount of fumes, noise, and odors as other similar businesses, including the former business at this location.

The petitioner indicates in their narrative and response to standards that any hazardous materials generated by this use (oil, tires, etc.) will be properly handled and meet city, state, and federal requirements. Used tires are picked up by a third-party tire disposal company every other week, per the petitioner's response to standards. A suggested condition of approval states where used tires may be located and requires the petitioner to provide to staff a copy of this tire disposal company contract.

No underground storage tanks (UST) are proposed for this property; a previous used oil tank was located on this site and removed in 1990, per the State Fire Marshall UST Database.

PZB Additions or Modifications (if necessary): _____

8. The proposed Conditional Use provides vehicular access to the property designed so that it does not create an interference with traffic on surrounding public thoroughfares:

Comment: Access to the building will continue to be provided by two existing driveways along Lee Street. Traffic generated by these uses will be consistent with the amount of traffic previously generated at this site, so a traffic study was not requested by staff. Staff believes that the existing street network can accommodate the traffic for this new use, as the intensity is not increased compared to the previous use at this location.

PZB Additions or Modifications (if necessary): _____

9. The proposed Conditional Use does not result in the destruction, loss, or damage of natural, scenic, or historic features of major importance:

Comment: The subject property is within an existing building and thus would not result in the loss or damage of natural, scenic, or historic features. No new development is proposed for this site.

PZB Additions or Modifications (if necessary): _____

10. The proposed Conditional Use complies with all additional regulations in the Zoning Ordinance specific to the Conditional Use requested:

Comment: The proposed uses comply with all applicable requirements as stated in the Zoning Ordinance. Several proposed improvements and related suggested conditions of approval are proposed that would bring this property into closer conformance with requirements, including providing handicap accessible parking spaces, landscaping, and removal of non-permitted landscaping material (gravel) from the rear parking area.

PZB Additions or Modifications (if necessary): _____

PZB Procedure and Recommended Conditions: Under Section 12-3-4.D (Procedure for Review and Decision for Conditional Uses) of the Zoning Ordinance, the PZB has the authority to *recommend* that the City Council approve, approve subject to conditions, or deny the above-mentioned conditional use permit. City Council has final authority on the proposal.

Consideration of the request should be based on a review of the information presented by the applicant and the findings made above, as specified in Section 12-3-4.E (Standards for Conditional Uses) of the Zoning Ordinance. If the PZB recommends and City Council ultimately approves the request, staff recommends the following conditions.

Recommended Conditions of Approval:

1 No motor vehicles unassociated with the petitioner's business operations may be parked in any of the parking areas associated with the property.
2. Except for operable motor vehicles, no materials or supplies related to this use may be stored outside the building or the dumpster enclosure. Prior to business registration, all debris must be removed from the property, including the rear parking area.
3. All used tires must be located inside a building or within a permitted accessory structure. A contract indicating at minimum biweekly pickup of used tires must be provided to Community and Economic Development staff prior to approval of business registration. This tire disposal contract must be active if the auto service repair use is active on this property.
4. Any vehicles related to this use must be stored on this property, on a dust-free hard surface. Any inoperable vehicles must be located inside the building or placed in the rear parking/driveway area, in which case the rear driveway area must contain striped parking spaces that satisfy all dimensional requirements of Chapter 12-9 (Off-Street Parking and Loading).
5. Identification and directional signs must be located on site noting the locations available for customers of the proposed business at 1065 Lee and noting that parking on the adjacent parking lot at 1062 Lee is prohibited.
6. Parking on the adjacent parking lot at 1062 Lee St is strictly prohibited, until and unless the petitioner acquires or leases this property, in which case the additional parking would be an expansion, and an amended conditional use would be required.
7. Motor vehicle sales requires a state dealer license. Prior to issuance of building registration, petitioner must obtain license; the City will cooperate in prerequisite process, such as signing the Certificate of Proper Zoning.
8. No more than five motor vehicles may be displayed for sale on site at one time. Through signs, striping, or a combination, these five spaces should be identified and reserved. Additional display spaces would require an amendment to the conditional use. Sufficient spaces to meet the minimum off-street parking requirements shall be provided on the property at all times.
9. All parking areas must be paved, striped, and landscaped according to all applicable Zoning Ordinance standards. Accessible parking spaces shall be located on site to meet accessibility standards pursuant to Section 12-9-8 and Illinois Accessibility Code. The petitioner may revise the site plan approved with this conditional use to adjust striping and landscaping; provided, however, the final plan includes the minimum number of spaces for this use.
10. Three feet of landscaping must be provided around the base of the existing pole sign, pursuant to Section 12-11-4.G. Landscaping or landscape planter boxes must be added to the street-facing portion of the building or parking lot prior to business registration.
11. A parking lot permit to reflect the site plan must be issued prior to business registration. The petitioner may revise the site plan approved with this conditional use; however, the paved area in the rear, if intended to be used for any parking, must meet dimensional requirements pursuant to Chapter 12-9. This permit must indicate all gravel will be

removed from the property and be replaced by an approved landscaping material (turf, wood mulch, or other plant materials), pursuant to Section 12-10-6.

Attachments:
Attachment 1: Location Map
Attachment 2: Site and Context Photos
Attachment 3: Project Narrative and Responses to Standards
Attachment 4: Plat of Survey
Attachment 5: Site Plan

Chair Szabo swore in petitioners, Christian Bernatek and Krzysztof Bernatek for 1065 Lee Street.

C. Bernatek stated that they are requesting two conditional use permits for Auto Repair and Auto Sales. He stated that they started their business in Park Ridge in 2005. They have since moved to two locations, one in Skokie and one in Morton Grove. They would like to merge the businesses under one roof in Des Plaines. He stated that they are mechanics, and they usually have the vehicles 1-2 days. Mr. C. Bernatek stated that they plan to resurface the front parking lot, refinish the stucco in the front, add two accessible parking spaces in the front. He plans to add landscaping. He proposes a driveway to access the two doors in the back. The rest of the area would be wood chips or other landscaping. He stated that the dumpster would be enclosed in the back. He discussed the site plan.

Chair Szabo asked where the dumpster would be located?

C. Bernatek stated they plan to put the dumpster in the back on a concrete pad. He plans to have the dumpster hidden.

Member Weaver asked about the parking space lines on the site map. He asked if the two accessible parking spots are in the front of the building. And if the alley is in the right of way and would be used for the garbage truck to get to the dumpster? He asked if he was planning to use the 8 feet of public way?

C. Bernatek stated that there would be two accessible parking spaces in the front and there would be parking on the side as well. He stated that he has 30 feet from the building allowing a driving area. The alley was used as a street in the past it dead ends into the railroad. No one uses it unless they are accessing the properties.

Member Hofherr asked how many vehicles do you anticipate inside and outside the business? He also said that the front of the business has spaces. Would the side spaces be used for employees?

K. Bernatek stated that they will have enough parking. He stated they could have between 5-10 vehicles at a time. Their goal is to have 50-75% of allowable spaces used. He stated that the

North end is designated for the front spaces. The bay doors will be used for customers and the side areas would most likely be used for employees.

Samantha Redman, Planner gave the staff report. She explained the two Conditional Use requests for 1065 Lee Street. One is for Auto Services and the other is for Motor Vehicle Sales. She gave a presentation explaining requests. The location is zoned C-3. She went over the site photos showing the bays, dumpster, and parking lots. Ms. Redman gave the background of the property. She explained the Conditional Use for Motor Vehicle Sales in C-3 requires 25,000 square feet. The petitioner has over 31, 00 square feet. She stated that the parking lot will need to be resurfaced and restriped. There are already parking spaces. They could request to vacate the alley in the future. They will also need to add landscaping. They will need to add accessible parking spaces. They currently have 6 bay spaces. There is a gravel parking lot in the rear that is not allowed in Des Plaines. There are plans to remove the gravel and redo the parking lot. There is currently a driveway in the back for the dumpster and bay door. There are 11 suggested Conditions of Approval.

Chair Szabo asked if the petitioner is aware of all the recommended conditions and if they have a problem with any of them.

C. Bernatek stated that they do not have a problem with any of the conditions.

Member Weaver asked about Condition 11, stating the petitioner may revise the site plan approved with this conditional use; however, the paved area in the rear, if intended to be used for any parking, must meet dimensional requirements pursuant to Chapter 12-9. This permit must indicate all gravel will be removed from the property and be replaced by an approved landscaping material (turf, wood mulch, or other plant materials), pursuant to Section 12-10-6. Member Weaver asked that if they have the ability to remove the gravel without needing to improve the parking lot. Ms. Redman stated yes, they will need to removal the gravel but do not need to get a full parking lot permit to do this; the intent with the condition is to provide flexibility.

Chair Szabo asked the audience if anyone is in favor or opposes this request. – No responses.

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to recommend that the City Council approve the Conditional Use permit with the eleven conditions drafted by staff.

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

2. Address: 733 Lee Street **Case Number: 23-038-TA-CU-V**

The petitioner is requesting the following under the Zoning Ordinance (summarized): (i) text amendments to allow a "School – Private, Elementary and High" in the 700 block of Lee Street in the C-5 Central Business District, with a conditional use permit, where currently such schools are allowed only in the 800 block of Lee; (ii) a conditional use to operate such type of school at 733 Lee, or an amendment to the conditional use granted by Ordinance Z-024-10, whichever is necessary; (iii) a conditional use for commercially zoned assembly; and (iv) variations that address various existing structure, sign, and site conditions; the recording requirement for collective parking agreements; and proposed partial compliance with parking lot landscaping requirements.

PIN: 09-20-200-042-0000, 09-20-200-006-000

Petitioner: ICCD Academy NFP, 733 Lee St., Des Plaines, IL, 60016
(Authorized agent/representative: Mark Daniel, Daniel Law Office, 17W733 Butterfield Road, Unit F, Oakbrook Terrace, IL 60181)

Owner: Trustee of Trust No. 16505, Parkway Bank and Trust Co., 4800 N. Harlem Ave., Harwood Heights, IL 60706
(Beneficiary: ICCD Academy, NFP)

Ward Number: #2, Alderman Colt Moylan

Existing Zoning: C-5, Central Business District

Surrounding Zoning:
North: C-5, Central Business
South: R-4, Central Core Residential
East: R-4, Central Core Residential
West: C-5, Central Business

Surrounding Land Uses:
North: Office building, City-owned library parking garage
South: Financial institution (Old National Bank) and parking lot
East: Private school
West: Vacant site

Street Classifications: Lee Street is an arterial roadway (IDOT jurisdiction); Prairie Avenue and Center Street are collectors (local jurisdiction).

Comprehensive Plan: The Comprehensive Plan illustrates this site as Higher Density Urban Mix with Residential.

Property/Zoning History:

This subject property/zoning lot is 33,177 square feet (just greater than .75 acres) and consists of two parcels. The lot is separate from both the small triangular lot and building at 1445 Prairie (not connected), as well as the lot and building at 749 Lee (currently Old National Bank; also not connected). The building on the subject property consists of three usable floors: a basement, first floor, and second floor. In addition, there is a surface parking lot in the east (rear), currently striped with 38 parking spaces per the Plat of Survey, accessible from Center Street. In 2010, Ordinance Z-024-10 (see attached) granted the subject property a conditional use to operate a school. This approving ordinance was requested at the time by Plato Academy, which occupied the building for several years before moving to 915 Lee Street. Plato shared the building with office tenants, notably the Greek American Restaurant Association. When Plato vacated, the office use remained. The petitioner purchased the property in 2022.

The petitioner approached staff in 2022 about opening Islamic City Center of Des Plaines Academy (ICCDA). The current Zoning Ordinance does not allow private schools in the 700 block of Lee (restriction was put in place in 2018). However, staff reviewed with the General Counsel and determined that the approving conditional use ordinance was written to run with the property and could be transferred to the same use – a private school – even though the new owner/operator was different than the original petitioner. Further, Section 12-3-4.H.3 states, "…a conditional use shall be deemed to relate to, and be for the benefit of, the use and lot in question, rather than the owner or operator of such use or lot." Therefore, the petitioner has been utilizing the conditional use for their operations and building, bound to the restrictions of being a legal nonconforming use (Section 12-5-5) and adherence to all conditions and limitations of the 2010 approval. The City and the petitioner entered into an agreement, dated August 30, 2022, which reinforced that all conditions and parameters of the approving ordinance would apply to ICCDA. These parameters included (i) using only portions of the floor plan illustrated in the approving ordinance for school purposes; (ii) limiting enrollment to no more than 60 students, as this was represented by Plato Academy when they received the original approval; (iii) maintaining unobstructed windows, except for uniform, non-permanent window treatments; and (iv) remaining willing to work with the City if any traffic issues arise. The City issued a business registration in September 2022 to allow school occupancy for the 2022-2023 academic year, and the school subsequently opened. They are now requesting approvals to operate in a larger portion of the building with more students, and to have non-accessory worship and religious activities ("commercially zoned assembly").

TEXT AMENDMENT

Request Description:

The petitioner, ICCDA, is requesting to amend Section 12-7-3.K of the Zoning Ordinance, specifically the Commercial Districts Use Matrix. Currently in the C-5 District, conditional use permits allow private schools only in the 800 block of Lee Street (currently the Little Bulgarian School/Center is in this block). This limitation was established in June 2018 (Ordinance Z-17-18). The requested text amendment would extend the possibility of private schools to the 700 block of Lee Street, but a conditional use would still be required, which means the PZB would hear and review and the City Council would have to approve any request for such school. The following are the proposed amendments (additions are **bold, double-underlined**; deletions are ~~struckthrough~~):

"12-7-3: COMMERCIAL DISTRICTS REGULATIONS:

***

K. Commercial Use Matrix:

TABLE 3
COMMERCIAL DISTRICTS USE MATRIX

P = Permitted use
C = Conditional use permit required

***							
	C-1	C-2	C-3	C-4	C-5	C-6	C-7
Schools, private - elementary and high school					C15		
***							

Notes:

***

15. For properties **with frontage** ~~located~~ on the **700 block and** 800 block of Lee Street only. **Provided that there is an elementary or high school, the school may also operate kindergarten and pre-kindergarten programs accessory to the school.**

***"

CONDITIONAL USES / AMENDED CONDITIONAL USE

Request Description:

The petitioner is requesting two conditional use permits: (i) a private school, as the primary principal use; and (ii) a commercially zoned assembly as a secondary principal use. In the event the requested text amendment is not approved, ICCDA requests consideration of an amendment to the original conditional use to achieve the desired expansion of school operations.

Private school

The petitioner has operated ICCDA at the property since September 2022. They completed their first fall-to-spring main academic year in June 2023 and are currently providing summer programming. The school's mission includes a traditional academic and religious curriculum, meaning that worship activities involving students, families, and staff are intrinsic and accessory to the school. Assuming the proposed text amendment is approved, the petitioner is seeking a new conditional use to entitle ICCDA specifically and to allow the organization to expand both student enrollment and the portions of the building that may be used for school purposes (i.e., basement and the second floor). In summary, the petitioner's statement and plans request and depict the following:

- An allowance of *up to* 233 students, pre-K through eighth grade, exclusive of volunteers and staff
- An expanded number of classrooms (20, including art rooms and science or other labs), on both the first and second floors
- An auditorium on the second floor and prayer/worship area(s) in the basement; these areas would be part of the daily school curriculum but also serve as the proposed commercially zoned assembly area (see separate discussion later in the report).

This table outlines approximate days and times of programming in the building.

Activity	**Days/Purpose**	**Time**
General school hours	Monday-Thursday	8 a.m.-4 p.m.
	Friday	8 a.m.-2 p.m.
	Saturday-Sunday	9 a.m.-2 p.m.
General before-school program	Weekdays	7-8 a.m.
General after-school program	Monday-Thursday	4-6:30 p.m.
	Friday	2-6:30 p.m.
General staff & janitorial arrival	Weekdays	5:30-7:30 a.m.
Planned Drop-off Period	Weekdays	7:30-8:45 a.m.
	Saturday-Sunday	8:30-9:30 a.m.

Planned Pick-up Period	Monday-Thursday	3:30-4:30 p.m.
	Friday	1:30-2:30 p.m.
	Saturday-Sunday	1:30-2:30 p.m.
Ramadan (Iftar)	Assembly*	6-10:30 p.m.

**A secondary principal use, not necessarily accessory to the school*

Drop-off and Pick-up Operations

The petitioner has provided a detailed description and graphical depiction of drop-off and pick-up of students, using the property's on-site parking lot, with vehicles entering from and exiting to Center Street. In a typical day, the combined drop-off and pick-up duration is two hours and 15 minutes, and per the provided table and description, and the periods would not overlap with staff arrival and departure. ICCDA employees would be assigned parking spaces in locations that would have the least potential conflict with the temporary lanes. The drop-off and pick-up locations within the parking lot intuitively allow the younger students and their parents the nearer positions to the door, and the plan identifies that staff from the school would be outside the building during the periods to help manage the flow.

The attached plan includes observations, data, and projections prepared with the engineering firm KLOA and grounded in the makeup of the current student population. Because of the school's tendency to enroll multiple students from a single family, the petitioner expects that the number of vehicles circulating through a pick-up or drop-off would not exceed half, or 50 percent, of the enrollment. Further, they project that approximately 15 percent of students will walk to school. Finally, the petitioner expresses willingness to work with the Police Department to the extent necessary or required. It is worth noting Police and other City staff do not support the incorporating *on*-street loading on any of the adjacent streets: Lee, Prairie, or Center. However, it is also worth noting that upon receiving this comment in staff review prior to the public hearing, the petitioner revised their plans to make the fullest and most deliberate possible use of their parking lot and drive aisles.

Building Safety and Occupancy

The greatest challenge in allowing the desired student enrollment in staff's view is not the external factors surrounding parking and traffic but instead the remodeling or retrofitting the building such that classrooms and all school-occupancy spaces have sufficient hallway widths to provide means of egress. In the past, this building has been a mix of school and office occupancies; it is now proposed to be school and assembly (worship). The Building Division has worked extensively with the petitioner's architect to advise on floor plans with dimensions that could allow the occupancy to approach what the petitioner desires. However, while the attached floor plans are provided for zoning consideration, they should not be considered building permit-ready drawings. In fact, staff recommends a condition that while the maximum desired student enrollment of 233 could eventually be reached in the future under conditional use approval, the occupant load of the building cannot exceed the maximum established by the Chief Building

Official and Fire Prevention Bureau; plans may be altered, and the occupant load may be increased, if required alterations are made.

Commercially Zoned Assembly

The petitioner describes certain activities that would be open to the public beyond ICCDA students, families, staff, and volunteers, particularly during holy periods during the calendar year. These activities are less frequent than the daily school operation, occupy only portions of the building (basement prayer areas, second-floor auditorium) and are therefore subordinate to the primary principal use; however, they are not incidental/accessory to the school, so the assembly activity is categorized as a secondary principal use and must be approved via a conditional use. No text amendment is required, as commercially zoned assemblies are already established as a conditional use in the C-5 District, without any additional prerequisites or restrictions.

The Iftar, or daily fast-breaking evening meal during the annual holy period (approximately one month) of Ramadan, is identified as the main time during the year when commercially zoned assembly would occur. In addition, the petitioner notes that on Fridays, the building would host Jumu'ah prayers, which may occasionally be open to the public—although the statement attests when open to the public, the Jumu'ah would not overlap with school activities. The Board may wish to ask the petitioner to explain how the overlap would not occur if the submitted schedule shows the school being open on Fridays. Further, the PZB may ask the petitioner to clarify how the food component of Iftar will occur (i.e., food brought from the outside versus prepared on site). Language within the petitioner's statements indicates no food would be prepared on site.

The basement prayer/library area spans two rooms and is 2,904 square feet per the submitted floor plan. It does not have fixed seating but lists a maximum occupancy of 194 people. The second-floor auditorium is 903 square feet and proposed to have a maximum occupancy of 60 people (presumably through fixed seating). Collectively, these are the proposed assembly use areas.

Off-Street Parking (Both Uses)

The petitioner's plans show a restriped parking lot that actually increases the number of spaces from the current striping: from 38 currently to 42. The addition stems from the ability to design the accessible parking area more efficiently because of recent updates to the Illinois Accessibility Code. Further, the property lies in the C-5 District. Section 12-9-1 instructs "… no off-street parking shall be required for the first two thousand five hundred (2,500) square feet of a *use*…in the C-5 central business district." The petitioner is proposing two principal uses – private school (primary) and commercially zoned assembly (secondary) – and the sum of both minimums will establish the overall minimum. However, Ordinance allows the 2,500-square-foot deduction from each use. The rationale is that as the central business district C-5 is different from other areas of Des Plaines because of the availability of public parking garages and public transportation, as well as residential density that lends itself to households walking and having a reduced need to drive and park.

The table on the following page breaks down the minimum requirements for both a private school and a commercially zoned assembly, which must be summed to determine the total requirement. In summary, the total requirement is 39 spaces, and 42 are proposed to be provided, after parking lot improvements (restriping, addition of landscape island), so the requirement would be met. However, the submittal does not contain a description of the projected attendance of the assembly events. The floor plans establish a maximum occupancy of 60 people in the auditorium and 194 in the basement prayer/library area, but the petitioner may not intend to have or project this many attendees. Although the petitioner expressed potential assembly occupancy in their attached Cover Statement – specifically in their proposed conditions – the PZB may wish to ask the petitioner to more clearly identify the potential number of people expected for an assembly.

Use, **Required Ratio**	**Floor Area**	**Required parking**
Private School (in this case "Elementary School"): 1 space for each classroom, plus 1 space per 200 square feet of area devoted to offices	Office: (all excluded because of C-5 District) 20 classrooms	20 spaces
Commercially zoned assembly (in this case, "Place of Worship"): 1 space for every 5 seats in the main auditorium, sanctuary, nave or similar place of assembly and other rooms … which are to be occupied simultaneously. In cases where there is no affixed seating, 1 space shall be provided for every 60 square feet of floor area.	Assuming maximum number of seats in the auditorium (60): 12 spaces. Assuming simultaneous occupancy of the prayer area: 2,904 square feet – 2,500 square feet for C-5 exemption = 404 square feet / 60 = 6.73 spaces (rounds up to 7)	12 for auditorium + 7 for prayer area = 19 spaces
	Total Required	**39 spaces**
	Total Proposed	**42 spaces**

Finally, regarding the refuse/dumpster, the existing dumpster is nonconforming, as it not enclosed. The site plan shows building a dumpster enclosure, which should bring the structure into conformance. The height and materials of the enclosure are not indicated on the site plan but would be regulated by Section 12-10-11.

VARIATIONS

Request Description:

The petitioner is electing to seek several variations related to existing conditions of the building and property, specifically its required yards (setbacks), parking lot, on-site and off-site/parkway landscaping, and signs. For this irregular corner lot, the front yard extends from the west lot line where it abuts Lee, the rear yard extends from the east lot line (Center), and there are three side yards: from the south lot line, which borders the Old National Bank parking and drive-through area; from the north lot line, which abuts Prairie; and from the west lot line portion that does not abut Lee but instead separates the ICCDA parking lot from the Old National parking lot. Based on real estate listing information,[1] the building was built originally in 1957 and renovated in 1977. Not surprising, the building is a nonconforming structure in multiple ways. While the variations requested may not be essential to entitling the operation of the school or assembly, they allow the petitioner to retain certain physical characteristics and make reasonable enhancements but not comply strictly with current Ordinance requirements. In particular, with the existing parking lot nonconforming regarding various minimum curb and landscaping uses, adding new striped spaces to it could be considered intensifying the nonconformity and requiring a full upgrade to strict adherence. Therefore, the petitioner is seeking variation to allow a partial upgrade – notably installing a landscape island down the middle of the central double-loaded parking stalls – but not installing perimeter buffer strips at the south or west lot lines. The necessary variation requests are listed in the following table:

Section	Requirement	Proposed	Type of Variation
12-7-3.L, Table 4	5-foot minimum side yard on the north lot line (Center Street)	Existing condition: 2-foot minimum side yard	Standard
12-9-3.A.4	Collective parking agreements shall be recorded.	n/a*	Major
**The petitioner requested relief from having to record a collective parking agreement, but their site plan shows the parking minimum would be met on site; therefore, petitioner has not submitted a collective parking agreement.*			
Related to Parking Lot Design and Landscaping			
12-9-6.D.	Install curb at least 3.5 feet from property lines at the parking lot perimeter.	Existing conditions: The south and west perimeters would not have curb.	Major

[1] Loopnet (2023). Accessed July 6, 2023 at https://www.loopnet.com/Listing/733-Lee-St-Des-Plaines-IL/3989538/

12-10-7	Parkway landscaping/trees with species and amounts as specified (applies here only in a small portion at near the corner of Prairie and Center)	Existing conditions in the area where the regulation is relevant.	Major
12-10-8.B.	Install perimeter parking lot landscaping at the south and western edges of the parking lot/lot lines	As shown in the site plan, install an interior landscape island but do not install perimeter landscaping at the south and west edges of the parking lot.	Major
Related to the Existing Pole Sign near Center			
12-11-4.G	Pole and monument signs shall be required to provide and maintain landscaping at the base of the sign	Existing conditions: no landscaping	Major
12-11-5.A.	No pole sign shall be constructed closer than five feet (5') from any property line.	Existing conditions: sign installed at lot line	Major

Standards for Text Amendments:

The following is a discussion of standards for zoning amendments from Section 12-3-7.E of the Zoning Ordinance. Rationale for how the proposed amendments would satisfy the standards is provided here and also in the attached Petitioner's Responses to Standards for Text Amendments. The PZB may use the statements below, use the petitioner's responses, or adopt its own rationale.

1. **Whether the proposed amendments are consistent with the goals, objectives, and policies of the comprehensive plan, as adopted and amended from time to time by the City Council;**

   Comment: Although the Comprehensive Plan illustrates the 700 block of Lee Street as "Higher Density Urban Mix with Residential," a school use can (i) provide the kind of regular, daily activity that bolsters the Central Business District and (ii) provide a nearby educational option for the many (and growing number) of nearby households.

   PZB Modifications (if any): _____

2. **Whether the proposed amendments are compatible with current conditions and the overall character of existing development;**

Comment: The amendments appear to be compatible because they reflect existing conditions on the east side of Lee Street. On the west side, the property is vacant and ripe for redevelopment, but the amendments would not automatically entitle a school; they simply expand the possibility for the conditional use process. The City would not be bound to approve a conditional use on, for example, the 750 Lee Street property on the west side of the street.

PZB Modifications (if any): _____

3. **Whether the proposed amendments are appropriate considering the adequacy of public facilities and services available;**

Comment: The hub for services that private schools may need (e.g., Police, Fire) are concentrated in the Central Business District already. The 700 block is directly adjacent to the 800 block, where a conditional use for private schools is already possible.

PZB Modifications (if any): _____

4. **Whether the proposed amendments will have an adverse effect on the value of properties throughout the jurisdiction; and**

Comment: The proposed amendments are not likely to bring a wave of private schools, and they reflect existing conditions, so there is not expected to be an effect on property values.

PZB Modifications (if any): _____

5. **Whether the proposed amendments reflect responsible standards for development and growth.**

Comment: Expanding the conditional use possibility for private schools in the C-5 District merely provides another option for development but does not automatically entitle their development or operation. The City would have the opportunity to review and authority to approve or deny specific requests.

PZB Modifications (if any): _____

Standards for Conditional Use

The following is a discussion of standards for conditional uses from Section 12-3-4(E) of the Zoning Ordinance. Rationale for how the proposed amendments may or may not satisfy the standards is provided below and in the petitioner's response to standards. For certain standards, comments are split between the consideration of the private school ("school") and the commercially zoned assembly ("assembly"). The PZB may use this rationale toward its recommendation, or the Board may make up its own.

1. **The proposed Conditional Use is in fact a Conditional Use established within the specific zoning district involved:**

*Comment (school)***:** This is pending the outcome of the proposed text amendment. However, the conditional use via Ordinance Z-024-10 dates to a time when private schools were an established conditional use at this subject property.

*Comment (assembly)***:** Yes, the requested use is a conditional use in the C-5 District.

PZB Modifications (if any): _____

2. **The proposed Conditional Use is in accordance with the objectives of the City's Comprehensive Plan:**

Comment (school and assembly): The 2019 Comprehensive Plan illustrates this site to be used for high-density urban mix with residential. However, the Plan also dedicates a chapter to strategies to enhancing downtown Des Plaines and inspiring visitation and commercial activity. A daily use such as a school brings people downtown every day and builds downtown visitation into their routine, which makes it possible they will also patronize businesses downtown, such as a grocery store, retail store, restaurant, dry cleaner, doctor's office, or services establishment.

PZB Modifications (if any): _____

3. **The proposed Conditional Use is designed, constructed, operated and maintained to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity:**

Comment (school and assembly): Any exterior alterations proposed with this application would, if anything, enhance the property and character of the area.

PZB Modifications (if any): _____

4. **The proposed Conditional Use is not hazardous or disturbing to existing neighboring uses:**

Comment (school): The petitioner has provided a thorough pick-up and drop-off plan, which utilizes their parking lot, to address the proposed increase in enrollment. Staff has not received any complaints about the current ICCDA's operation since September 2022, albeit with a notably smaller enrollment than what is proposed.

Comment (assembly): The Board may consider whether having a potential spike of additional traffic and activity during essentially one month of the year for a few hours at a time and on occasional Fridays rises to the level of being "hazardous" or "disturbing."

PZB Modifications (if any): _____

5. The proposed Conditional Use is to be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewer, and schools; or, agencies responsible for establishing the Conditional Use shall provide adequately any such services:

Comment (school and assembly): The existing building has been adequately served by essential public facilities and services. Staff has no concerns that the proposed use will not be adequately served with essential public facilities and services in the future.

PZB Modifications (if any): _____

6. The proposed Conditional Use does not create excessive additional requirements at public expense for public facilities and services and will not be detrimental to the economic well-being of the entire community:

Comment (school and assembly): While the petitioner is offering to collaborate with City staff and departments, such as Police, Fire, and Building/CED, staff does not interpret these as being obligatory activities. On the contrary, staff expects that approved conditional uses would set reasonable conditions and expectations and set the stage for long-term compliant occupancy and operation.

PZB Modifications (if any): _____

7. The proposed Conditional Use does not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke fumes, glare or odors:

Comment (school and assembly): All activities are proposed to occur inside buildings, aside from those driving, walking, or otherwise getting to and from the doors of the building. All uses must be in compliance with the Environmental Performance Standards in Chapter 12 of the Zoning Ordinance.

PZB Modifications (if any): _____

8. The proposed Conditional Use provides vehicular access to the property designed so that it does not create an interference with traffic on surrounding public thoroughfares:

Comment (school): While the increased enrollment will inherently bring more vehicles to the area, the spikes will be short and should be managed to prevent stacking into Center Street (i.e., a queue that blocks or impedes traffic). Observations reported by the petitioner in their submittal, as well as anecdotal observations by staff, indicate that there is additional capacity on adjacent streets during daytime school hours.

Comment (assembly): The Board may consider asking the petitioner to commit to methods to encouraging carpooling, using non-motorized transportation (walking and parking), or, if driving, utilizing nearby public parking garages (i.e., Library Garage, immediately north on Prairie, or 1425 Ellinwood/Welkin garage approximately ½ block to the north on Lee).

PZB Modifications (if any): _____

9. The proposed Conditional Use does not result in the destruction, loss, or damage of natural, scenic, or historic features of major importance:

Comment (school and assembly): The subject property is within an already development building and thus would not result in the loss or damage of natural, scenic, or historic features.

PZB Modifications (if any): _____

10. The proposed Conditional Use complies with all additional regulations in the Zoning Ordinance specific to the Conditional Use requested:

Comment (school and assembly): The proposed uses would comply with all applicable requirements as stated in the Zoning Ordinance.

PZB Modifications (if any): _____

Variation Findings:

Variation requests are subject to the standards set forth in Section 12-3-6(H) of the Zoning Ordinance. Rationale for how the proposal addresses the standards is provided in the attached petitioner responses to standards, with some comments from staff below. The Board may use the provided responses as its rationale, modify, or adopt its own.

1. Hardship: No variation shall be granted pursuant to this subsection H unless the applicant shall establish that carrying out the strict letter of the provisions of this title would create a particular hardship or a practical difficulty.

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

2. Unique Physical Condition: The subject lot is exceptional as compared to other lots subject to the same provision by reason of a unique physical condition, including presence of an existing use, structure, or sign, whether conforming or nonconforming; irregular or substandard shape or size; exceptional topographical features; or other extraordinary physical conditions peculiar to and inherent in the subject lot that amount to more than a mere inconvenience to the owner and that

relate to or arise out of the lot rather than the personal situation of the current owner of the lot.

Comment: The subject property is an irregular shape, having a lot line fronting on three different streets while also being a corner lot. In staff's view, this is truly unique. See petitioner's responses to standards for more.

PZB Modifications (if any): _____

3. **Not Self-Created: The aforesaid unique physical condition is not the result of any action or inaction of the owner or its predecessors in title and existed at the time of the enactment of the provisions from which a variance is sought or was created by natural forces or was the result of governmental action, other than the adoption of this title.**

Comment: The petitioners did not create the unique shape and dimensions of the lot. See petitioner's responses to standards for more.

PZB Modifications (if any): _____

4. **Denied Substantial Rights: The carrying out of the strict letter of the provision from which a variance is sought would deprive the owner of the subject lot of substantial rights commonly enjoyed by owners of other lots subject to the same provision.**

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

5. **Not Merely Special Privilege: The alleged hardship or difficulty is neither merely the inability of the owner or occupant to enjoy some special privilege or additional right not available to owners or occupants of other lots subject to the same provision, nor merely the inability of the owner to make more money from the use of the subject lot.**

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

6. **Title And Plan Purposes: The variation would not result in a use or development of the subject lot that would be not in harmony with the general and specific purposes for which this title and the provision from which a variation is sought were enacted or the general purpose and intent of the comprehensive plan.**

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

7. **No Other Remedy: There is no means other than the requested variation by which the alleged hardship or difficulty can be avoided or remedied to a degree sufficient to permit a reasonable use of the subject lot.**

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

8. **Minimum Required: The requested variation is the minimum measure of relief necessary to alleviate the alleged hardship or difficulty presented by the strict application of this title.**

Comment: See petitioner's responses to standards.

PZB Modifications (if any): _____

PZB Procedure and Recommended Conditions: Because of the multiple requests, staff recommends the Board take multiple motions: (i) recommendation on the proposed text amendment; (ii) recommendation on the proposed conditional use for private school/amended conditional use through Z-024-10; (iii) recommendation on the proposed commercially zoned assembly; (iv) a final vote on the standard variation regarding the required side yard; and (v) a recommendation on all other requested variations, which the Board could consider with one motion or individually.

TEXT AMENDMENT

Pursuant to Section 12-3-7(E) of the Zoning Ordinance, the PZB may vote to *recommend* approval, approval with modifications, or denial of the proposed text amendment. The City Council has final authority over the request.

CONDITIONAL USE / AMENDED CONDITIONAL USE FOR PRIVATE SCHOOL

Pursuant to Section 12-3-4(E) of the Zoning Ordinance, the PZB may vote to *recommend* approval, approval with modifications, or denial of the conditional use. The City Council has final authority over the request.

The petitioner suggested conditions in their attached Cover Application Statements. The Board may review them, but staff does not recommend their verbatim use, with particular concerns about (i) the reference to 36 parking spaces, when the minimum requirement (with both uses active) is 39, and (ii) a temporary occupancy allowance through 2028 pending hallway-width changes. Instead, should the PZB recommend approval of the conditional use, staff suggests the following conditions:

Recommended Conditions of Approval

1. Notwithstanding the desired maximum number of users, the occupancy load for the building and all rooms utilized by the use shall not exceed the maximum set by the Fire Department and Chief Building Official. This maximum may be increased only through permitted construction and alterations; provided, however, the total attendees shall not exceed the numerical limit set through this conditional use approval. Every room or space that is an assembly occupancy shall have the occupant load of that room or space posted in a conspicuous location, near an exit.
2. The petitioner shall complete the parking lot restriping and landscape project shown on the site plan within 12 months of approval.
3. No on-site food service shall occur unless a code-compliant commercial-grade kitchen were to be installed.
4. Any building or use expansion shall require the Petitioner to obtain a conditional use amendment.

CONDITIONAL USE FOR COMMERCIALLY ZONED ASSEMBLY

Pursuant to Section 12-3-4(E) of the Zoning Ordinance, the PZB may vote to *recommend* approval, approval with modifications, or denial of the conditional use. The City Council has final authority over the request.

However, should the PZB recommend approval of the conditional use, staff suggests the following conditions:

Recommended Conditions of Approval

1. Notwithstanding the desired maximum number of users, the occupancy load for the building and all rooms utilized by the use shall not exceed the maximum set by the Fire Department and Chief Building Official. This maximum may be increased only through permitted construction and alterations; provided, however, the total attendees shall not exceed the numerical limit set through this conditional use approval.
2. Commercially zoned assembly activities, or those worship activities not accessory to the private school, shall occur at different times.
3. The petitioner shall complete the parking lot restriping and landscape project shown on the site plan within 12 months of approval.
4. No on-site food service shall occur unless a code-compliant commercial-grade kitchen were to be installed.
5. Any building or use expansion shall require the Petitioner to obtain a conditional use amendment.
6. The petitioner will publicize on its website and actively distribute to its audience a map of nearby public parking garages, with summary instructions and directions on how to access and any hourly or time restrictions.

VARIATIONS

The petitioner is requesting one standard variation and multiple major variations. Pursuant to Section 12-3-6.F of the Zoning Ordinance, the PZB may vote to approve, approve with modifications, or deny the Standard Variation to reduce the required side yard.

Then the Board may consider pursuant to Section 12-3-6.G a vote to *recommend* approval, approval with modifications, or denial of the Major Variations. The City Council has final authority over the request. Staff does not recommend conditions for the variations.

Attachments:

Attachment 1: Location and Aerial Map
Attachment 2: Site and Context Photos
Attachment 3: Plat of Survey
Attachment 4: Ordinance Z-024-10[2]
Attachment 5: Responses to Standards for Text Amendment
Attachment 6: Responses to Standards for Conditional Use
Attachment 7: Responses to Standards for Variation
Attachment 8: Application Cover Statements, Operational Plan (collectively the Project Narrative)
Attachment 9: Stacking, Circulation, and Pick-Up/Drop-Off Plan (with projections and data)
Attachment 10: Site Plan
Attachment 11: Floor Plans

Chair Szabo swore in Mark Daniel, Attorney for the petitioner, Jose Pareja, Architect for the petitioner and Nayeem Syed, President of the School and Board and petitioner for the project. Mr. Syed gave some background on the school. He stated that they want to expand the building and school. They want to have the Islamic school and academy. Prayer is part of the curriculum. To operate the school and maintain the building, they cannot afford to maintain the building with the existing number of students and need more enrollment. They think there will be more apartments occupied and stores shopped at in this area by the new occupants of the building.

Mark Daniel stated that they are in this process later than they hoped with opening the school. They hope to have PZB recommendation after going through the history. This was an office building that was previously occupied by the Greek American Restaurant Association. All the first floor was used for school services. There were assumptions made prior to the office building being purchased that caused a fire drill with the city to allow a temporary certificate of occupancy. They knew they would have to convert the second floor a bit, but they entered a temporary occupancy with the city to cap the students at 60. He gave a memo for KLOA that were consulted about student drop off and traffic counts. They did this during a busier time of year when more students were in cars. At the end of the year, parents and kids bring more things

[2] 2022 compliance agreement between City and owner/petitioner available upon request to City staff.

home in cars and there is less walking. KLOA had a projected vehicle count the last 2 days of school. There was less in the afternoon because ICCD has a half day program.

He stated that they want to preserve the pole sign. It turns in towards the property, so it does not obstruct the sidewalk. They intend to reface and paint the sign. There is a city improvement adjacent to the sign. There is a landscaping improvement that abuts the parking lot too.

Mr. Daniels stated there is a prior conditional use for a school, but it was for the first floor only. Every variation we are asking for existed in 2010. The parking lot, sign, and property conditions are all existing with these variations. In 2022, there were reductions agreed to. From the petitioner's perspective, it is a reduction. ICCD had a conditional use for only part of the first floor. They are looking to accomplish a few things. The first thing is to get the school entitled for the whole building. It is a two-story school with a worship area in the lower level. On the second floor, there is a large classroom, and they want to create a larger auditorium. Otherwise, it is all classrooms, computer labs, art labs, kitchen/eating area. Those are all generally on the first floor. As far as the auditorium is concerned and how they phase things, in 2022 they didn't have a lot of choices. They didn't want to appeal city staff's decisions, they needed staff's help otherwise the students would have lost their school.

Mr. Daniel stated the conditional use is phrased as either new permit or amending the permit. This is a fallback. They are asking for a text amendment. Schools are only allowed on the block with the Little Bulgarian School. They are hoping the City will add schools to the permitted uses on this block. They anticipate building up over time. All these numbers are dependent on permitting, life safety, etc. These numbers on the screen are permit issues that we are dealing with. Those are estimations. They may not get to 233, but it might be 228. It depends on how permitting goes.

He stated the text amendment is common sense. A lot of schools have a pre-k and a kindergarten program. In the code we propose that you add specifically that language – that if they have an elementary school, they can operate pre-k and K in the same place. Right now, ICCD operates pre-K, K and 1-8. That is the text amendment. They changed "located on" to "frontage". The amendment is consistent with the comprehensive plan. They have reached out to a consultant that showed there is a vacancy rate of 22% for certain office types in this area. This is an office building. This building is Class A Office but once rehabbed it probably falls into the Class B category. The occupancy in Class B are greater and the sublets are less available.

Mr. Daniels said the office use is slow to recover. The petitioner views this case as a way to get folks downtown. You can expect a good number of families to use downtown associated with this school. The C-5 and R-4 districts are focused on multifamily residential. They have townhomes directly to the south and the other side of the street. They have condos and apartments in every direction. It makes sense to have supportive uses in C-5. Some of the kids will want to go to a private school and it makes sense as a supportive use for those residents.

Typically, you try to locate schools on collectors or arterials. In the past in planning, in a subdivision, you would take land for a school. Because all the land is built up, that doesn't happen often, larger schools can be on arterials and smaller schools on collectors. Lee St is an

important arterial in town and Prairie Ave is a collector. As far as the amendment is concerned, the amendment is reflective of the use that has been there since 2010. There is a collection of uses downtown that include a lot of institutional uses. They have a history of schools across the street with St. Mary's. St. Mary's Church is still there. At the bottom of the map [referring to slide] Plato Academy moved. Little Bulgarian School is nearby, as well as the history center and the library. This area is used to this type of traffic during the day. Those big parking lots are for people to park downtown. Some of the surface parking is under private ownership too.

Mr. Daniels stated as far as trends in the area, you have your retail situated along the Metra line, with service uses along Lee St. They are not interrupting a service corridor –Lexington Townhouses and the bank are neighbors (they have been terrific to work with for our applicant). This is a good adaptive re-use of a building, even if it was a new school today. To the extent the students use the library, they have end of the day classes where one class is engaged in library enrichment and that supports the property value. More traffic leads to more service traffic in the area. Those greater ADTs are supportive of retail uses.

Mr. Daniel stated that this text amendment is responsible planning – it is still a conditional use. You evaluate each case on its merits. They are at the end of the block, not technically defined as a through or corner lot, but it looks like both. They fall through some cracks in the definition of code, but they are at the end of the block. It might be a different story if we were not at the end of the block or closer to Little Bulgarian. That is the core responsibility of keeping this use as a conditional use with this text amendment. Schools are one of the most important assets in Des Plaines.

Mr. Daniel said they use the "up to 233 number" for students, but Allen (building official) will have a big say in that. In terms of occupancy, they are aiming for use of the entire building. Parking modifications they are looking at are fairly minimal. The handicap parking is outdated and oversized. They can increase parking to 42 spaces, we have 38 right now. They would re-stripe the lot. The plan in the packet shows a landscape island in the middle of the parking lot between two rows of parking. With respect to the landscape island, we would like to stripe that first. If staff demands landscape on the island, they will do that. We will have phasing of modifications to the building over time. Ultimately, they will have a larger auditorium. The main entrance – there will be a slight change here. They will not be using the entrance at all. The Lee St entrance will be the accessible route to the building; appropriate plans will be made for that. If there is an accessibility challenge, they believe most parents will take them through the opposite side of the building. For the conditional use for the school and assembly – they will not be operating simultaneous. If school is in progress, you will not have commercial district assembly. The assembly use is different from the school and will not operate simultaneously.

He touched on the student loading areas. There are notes in the staff report too. The bank has been a great neighbor, they have used the parking for non-bank hour parking. They confirmed with Old National that they still have the relationship to use it during non-banking hours. The fifth request is asking to waive the collective parking agreement. It is a large property, capable of further development. Their plans show they can load and unload and park in full compliance with the ordinance. With the morning and afternoon loading, we will satisfy the code standards.

The most common use of Old National will be during Ramadan, the 30-day period that gets earlier and earlier every year per the calendar. Iftar is the dinner that breaks fast; these events can occur with the school or outside people. You can have people worship in the basement and people like me who will remain in the auditorium and not pray. That would be the most intensive use. That goes from 6:30 to 10:30. It is later in the summer months and ends earlier in the winter months (it is timed by the sunset).

Mr. Daniels stated as far as the use of Old Second, the school has already had assembly uses where they have used the lot and worked well. However, they meet the parking requirements and do not need the collective parking requirements, but they wanted to put this in just in case we come up shy with the parking requirements. There is a direct route through the bank parking lot to the building. It extends along the dumpster in the plan. As far as the conditional use standards are concerned, there are two bases: the first is the 2010 ordinance, possibly being amended. For more clarity, they think we could have a new conditional use. The other conditional use is the assembly use. They are in the position where they would meet higher density needs downtown. You talk about the importance of institutions in the comprehensive plan. The older churches are all included in the comprehensive plan and all these private schools in the area do contribute too.

He stated there is history of schools here, with Plato in this location and in the last year with us in this building. They did use KLOA to do projections/traffic although they have not had issues. Center Street is either residential or institutional. You do have a rear exit for Old National and a small house that might be used for business on Center Street, but it is similar to streets near Elmhurst, on the right a public school and the left a private school. I asked staff to ask the police department to help with street drop offs. The street is not that busy for drop offs. The police and KLOA agreed that drop off should be done on site instead. They can pull in all the traffic from center and have a wide enough drive aisle and load vehicles into the property and have the students exit the vehicles according to a loading plan. Certainly, they can handle a large amount of traffic with three lanes and capacity on Prairie. Approaching the school is one lane, expanding to two towards the library.

Mr. Daniels said you could have between 60-200 people based on occupancies, but there is a difference between building and zoning. For school assembly, nothing out of the ordinary. He said he is Catholic, he went to a Catholic middle school, we worshipped and prayed in the school. It is no different here, but it is on different floors. He mentioned the ADA route. There is a clothes donation box they would like to keep open for the safety of donations and not enclose with the dumpster. In the top right, they note no use of Prairie (referring to site plan on slide). They have a deferred landscape curb that we will install once staff have told us to do it. They want to first get a handle of student loading before landscaping. For student loading we do want to meet with staff and the police annually, so they know our plan and ebb and flow.

The pole sign was mentioned – down the road, it will be a monument sign. Old National has a monument on its building. They would not want to put it on our driveway. There was a parking space that we eliminated during planning, to aid pedestrian traffic. They have the option for a right in/right out if needed.

Mr. Daniel discussed the hours of the day – Uses will not be simultaneous for the school and worship. The prayer will generally be between 12:30 and 2:30. The school closes for an hour before this prayer happens because they need time for people to get into the building. Classes would end and there would not be an after-school program. He mentioned Iftar during Ramadan. As far as the hours during the day, these are estimated. For the purposes of this hearing, they are showing they can handle student loading without relying on Old National. Our analysis is only based on our property – right in, right out and two lanes with 20 ft vehicles. When preparing this slide, he used what he learned in facility planning. They say you should unload in groups of 3. KLOA says it might be easier to load in 6-7. They can fit 6-7 in the lot, have those pull out, and pull the next 6-7 in. They have 11 cars behind the 6 or 7 actively loading. 6-7 come in, children exit the vehicle, once they are clear, the students pull out. They can be directed to a "reserve space" if needed. Any spaced with a D is s drop space [referring to site plan on screen]

He explained how they stick with the 2-3 minute drop off. If half the kids are released at one time and not another, how do we guarantee parents arrive at the same time? There are apps on your phone where ICCD can at any given moment tell the parent when to pick up their child. The parents then come in at that time. If you have children in the same grade, one is in the later grade, you can load them all in the cars. Right now, they park in the spaces and take the kids out. They will not be doing that with the 200 students. This is handled by teachers and volunteers. Where do they park? The E spaces. A lot of the teachers and volunteers have kids at the school. The table here is an interval for the 6-7 cars [referring to slide]. During the noon period, people may be able to park on site. In the afternoon drop off, it is not a peak hour, and it is 50 minutes in the worst-case scenario.

Mark Daniel said they don't share plans too publicly of schools, they are on file with staff. The auditorium is on this slide [Phased Auditorium Expansion Slide]. The capacity of 233 is based on this whole area being an auditorium and not classroom space. We are setting a cap for the analysis. The other assembly space is in the lower level. There are a few numbers there, 52 and 142 [worship and reflection slide]. The use of the area – there are bookcases along the back wall. We anticipate 145-165 people, even though the building occupancy is higher. There is no food or service in this area. People worshiping would move upstairs, this area downstairs is only for reflection. It is a more passive use. The basic standards for conditional use – there is no disturbance from a school in this area. You might see students walking to the library, but there are crosswalks and sidewalks to this area. No demand on public services. They will not interfere with the PACE bus stop. No offensive activities. This was planned for these uses from a parking perspective. The office use can generate traffic and parking demand. You can see the stacking and movement. They are getting cars off the street where no traffic will be blocked.

He stated they are preserving the building because they are asking for variations for the existing building. The 42 parking spaces is more than the school and assembly uses. He makes the note here that if you are willing to allow us to stripe the landscape island in the parking lot, they will install when the city demands it. They need to re-stripe to get to 42 spaces.

He said for the conditional use for a commercial district assembly, there is not much difference in the styles of assembly. [Reading the Conditional Sue for Commercial District Assembly Slide]. A

lot of the same planning occurs that is discussed with the school. Nothing hazardous. Similar conclusions to the school. For the record – they would like the school conditional use to run with the land. For the commercial district assembly, they are planning and contemplating where it will occur; they are ok with this running with the school because the new use could have a different type of assembly use. The Islamic Community Center is something many people from this school belong to; this is not a replacement for the mosque. Please note the Iftar timeframe towards the end – people start to leave around 9:30. 10:30 is when it ends. The time it is most busy is summer solstice.

KLOA is not here tonight to speak, but they will continue working with the petitioner. If they did not get approval by council, they will get an agreement from Old National to get a collective parking agreement and talk about daytime loading and unloading. KLOA will help with that, and they will help with the student loading plan. They use a lot of care in our student loading. Everyone has a radio. Teachers and students advance based on the time in that app. Teachers check students in and out, it is a very meticulous careful process. You have intervals where you have these cars coming in. These are accounted for by groups of classes. PreK and K come in first.

On the variations sought, it is similar. They ask you to preserve what they have. There is hardship with the existing building. They did not plan the site. Prairie was widened after the building was constructed and that is why they are short on setbacks and landscaping. They have multiple front yards, but the code will not define it as a through lot because it is offset. Existing conditions are what we are dealing with. They are not increasing the non-conformity in any respect.

Jose is the architect and will answer any questions. It is important to note the one issue staff will discuss during permitting is the dumpster location. In this photo [on screen] where the cement pad is to the entrance of the property, that is where the dumpsters are now (unscreened). The dumpster in the plan they are proposing is going to be about midway along the parking spaces [on screen]. The relocation south will not be an issue for any reviewer of the plan for substantial conformity.

He has worked with the applicant continuously since April and in July, August, September. The building is a good building for a school of this sort and capable of interior remodeling. Something to remember about schools – children don't forget the area they went to school; they remember all the locations and when they are older, they go back even if they are in a different location. It puts downtown in the minds of hundreds of students over the years. I am happy to answer questions.

Mr. Syed, Petitioner stated they need to use the entire building and they want to work with the city to have a good relationship and make this happen.

John Carlisle, CED Director, gave the staff report. He explained that the petitioners, ICCDA, is requesting to amend Section 12-7-3.K of the Zoning Ordinance, specifically the Commercial Districts Use Matrix. Currently in the C-5 District, conditional use permits allow private schools only in the 800 block of Lee Street (currently the Little Bulgarian School/Center is in this block).

This limitation was established in June 2018 (Ordinance Z-17-18). The requested text amendment would extend the possibility of private schools to the 700 block of Lee Street, but a conditional use would still be required, which means the PZB would hear, and review and the City Council would have to approve any request for such school. Mr. Carlisle went over the Location and Map including Lot Area, Previous and Existing Owners and the Building Exterior. He explained the Site Photos with her proposed Textament. He explained the Site Plan including trash enclosure, parking plan and landscape island. He explained the Existing Aerial and Parking Requirements. Mr. Carlisle explained Principal and Accessory Uses for the property. There is also a Primary Principal use which is the school and a Secondary Principal Use which is the Assembly and an Accessory Use which is for religious functions related to the school. He discussed Commercially Zoned Assembly, maximum occupancy and parking requirements.

Mr. Carlisle discussed the Four Recommended Conditions of Approval for the CONDITIONAL USE / AMENDED CONDITIONAL USE FOR PRIVATE SCHOOL

1. Notwithstanding the desired maximum number of users, the occupancy load for the building and all rooms utilized by the use shall not exceed the maximum set by the Fire Department and Chief Building Official. This maximum may be increased only through permitted construction and alterations; provided, however, the total attendees shall not exceed the numerical limit set through this conditional use approval. Every room or space that is an assembly occupancy shall have the occupant load of that room or space posted in a conspicuous location, near an exit.
2. The petitioner shall complete the parking lot restriping and landscape project shown on the site plan within 12 months of approval.
3. No on-site food service shall occur unless a code-compliant commercial-grade kitchen were to be installed.
4. Any building or use expansion shall require the Petitioner to obtain a conditional use amendment.

Mr. Carlisle discussed the six Recommended Conditions of Approval for the CONDITIONAL USE FOR COMMERCIALLY ZONED ASSEMBLY

1. Notwithstanding the desired maximum number of users, the occupancy load for the building and all rooms utilized by the use shall not exceed the maximum set by the Fire Department and Chief Building Official. This maximum may be increased only through permitted construction and alterations; provided, however, the total attendees shall not exceed the numerical limit set through this conditional use approval.
2. Commercially zoned assembly activities, or those worship activities not accessory to the private school, shall occur at different times.
3. The petitioner shall complete the parking lot restriping and landscape project shown on the site plan within 12 months of approval.
4. No on-site food service shall occur unless a code-compliant commercial-grade kitchen were to be installed.
5. Any building or use expansion shall require the Petitioner to obtain a conditional use amendment.

6. The petitioner will publicize on its website and actively distribute to its audience a map of nearby public parking garages, with summary instructions and directions on how to access and any hourly or time restrictions.

Chair Szabo asked how many spaces are the Welkin development and the library?

John Carlisle stated he believe the Welkin is 79, but is not certain, and he is not sure recollect about the library. I

Member Saltenik asked the petitioner about the motivation for the landscaping variation. Why not put in the landscape buffer in the parking area?

Mark Daniel stated the history with parking in the property is that parents would park in the spaces and pull through. They have the circulation plan, but it will allow the school to have some flexibility to figure out how the site flows and provide the option to discuss.

Member Saletnik asked if there is still a lack of confidence about the current scheme working, then why do they want to have flexibility to change it? Why the reluctance?

Mark Daniel stated they don't have a problem installing it, that is not the issue. They will not have enough demand for a few years that would require that.

Member Weaver said I am very happy with the plan for the building. I am certainly fine with having the Islamic School there. You put a lot of thought in how to make it work and the growth plan. However, one thing bothers him and maybe this comes from the City. In a number of number of materials there is a discussion about people in this high-density urban development walking places. Some portion of the students will walk to the location. Yet, Member Weaver finds this plan, which he sees over and over again in suburban planning, is really hostile to pedestrians and walking. The only place you can safely walk in this area are the city sidewalks of Center St, Prairie Ave, Lee St, and that one green stripe you have. If you look at the Old National Site, you have to walk through parking and traffic to go into the bank. The whole bank is centered on the parking lot. They have a door on Lee St, but they have blocked the door. You are supposed to walk through this. Adults going to the bank, no big deal and hope we don't get hit. Here, we are dealing with children. The site is devoid of places to walk. There is no connection to Center St. If someone drops their kids off on Center St or Prairie, they have to walk through the vehicular entrance to the parking areas. It seems really hostile to pedestrian movement, not terribly safe, and we think that the problem is that cars are the solution and use a Spot Hero plan for loading/unloading. You are assuming in our suburban downtown that you have to drive. This is not limited to your plan. There is a lot of good thought done with this, he wishes the school well, but we are guaranteeing no one will walk. Member Weaver is disturbed by that and maybe that is the direction the City points people to.

Mark Daniel stated for zoning purposes, they want to show they can take in all the traffic. They don't talk about our 25% walking. In the submittal, you will see the table with far fewer vehicles coming in the morning and afternoon periods. That relies on 50% have multiple children in the family, 25% walking. For the purposes of zoning, they had to show it could handle traffic

without creating a nuisance. I understand the walkability concern. He stated, in our experience, the parents pay attention to the app. I can't tell you it will pour rain one afternoon and everyone needs a car. You have the worst-case scenario presented. They are showing what would happen if they were all driving.

Member Weaver said the accessible path, you have people going through the back door to the school. The entrance is in the back, theoretically, if you had a wheelchair, you would have to go through the front. Over time, the school will find they need to lock the door because they can't monitor it.

Mark Daniel stated that it has to be monitored. It must be open by federal law.

Member Weaver asked - Is that a paid employee or a volunteer?

Mark Daniel said there is a collection of administrative office people and volunteers.

Mr. Syed stated they have an armed security guard on site, and he will monitor the building.

Member Weaver said this is the high price of making people arrive with cars in the back. It is unfortunate. Shopping centers are also very hostile to pedestrians.

Mark Daniel stated they have a walking aisle on two sides of the parking lot.

Member Weaver said I do think the City ordinance drives you to do this. I don't see a way out of this. You are using every sq ft for vehicular circulation. How would the sidewalk at the top connect to Center Street? There is the most minimum space for walking. It solves your required minimums; the result of the required minimums is that you end up with almost no pedestrian space.

Mark Daniel: There is a city improvement along the Center Street lot line that is pretty thick.

Member Weaver said you have a retaining wall there.

John Carlisle stated the petitioner amended their floor plans with the Lee Street to make it the accessible route to public transportation. You may want to ask the petitioner how the walkers are arriving on foot. They might cross Lee Street to get to that door.

Chair Szabo asked where the retaining wall on Center Street is? And asked if they could put a cut in there somewhere and have a stair go up where the residence used to be with the former bike shop.

Mark Daniel stated that if you look at the main entrance and the gym – the gym extends on the east side of the building. If you exit going westbound, there is a doorway going to the sidewalk, door 2 and 3.

Member Weaver stated that it has a huge, sloped step and concrete. And that is definitely not an accessible route.

Mark Daniel said it has to be the shortest route to the bus station.

Member Weaver stated chances are since you don't have high school students, no one is getting off a PACE bus, but some people with limitations to their walking abilities could potentially come through that side. There is a lot of difficulty getting to the back of the building, whether crossing Lee Street, the parking lot, the Old National Bank. There is no way for someone with mobility impairments to get them in.

Mark Daniel stated the requirement would be that it needs to be a level grade. The access issue - we wanted to avoid impact to that bus stop. The standards do avoid having us change Lee Street. As we sit with Staff and the Police Department, we can have a parent monitor the Lee Street entrance. The parents can monitor that doorway. We are trying to show that we can meet the standard.

Member Weaver said I don't see a way to accomplish walkability for this project. I don't want to vote it down for that. I am disappointed in a lot of places approach to walkability. I have no problems with the school. I think the walkability here is poor and a lot of poor walkability in Des Plaines.

Chair Szabo stated I think it is important to voice your concerns in the record. Any other questions from the board? Anyone in the audience with questions or in favor or objecting. Can I see a show of hands for people objecting? [no hands]

Chair Szabo swore in Daniel Cartalucca, neighbor of the property. He said we are the little triangular building on the corner. We are able to get that re-zoned in the past for the residential use. Tom Weaver and Mr. Cartalucca discussed walkability in the area. We live next door to the building and have since 1993. That greyed out corner on the site plan would be a perfect location for a cut in the wall and make stairs to where Prairie meets Center, with the landscape area there. There used to be a bus bench there and people would use that to step into the parking lot. There is already an existing sidewalk along that building to that location. If they did a staircase there, it would allow people to come from the library rather than walk toward the vehicular entrance. It seems like that would be a logical place. We watched the old brick veneer crumble for a few years, that wall could be dodgy, but it would be a good location for the stairs. We are neighbors of this project and the previous Plato Academy and we are in favor.

Mr. Paeja, Architect for the project stated looking at the area, from the paving it leads to the sidewalk. No pedestrian would be crossing vehicular traffic if that was done. We want anyone who needs to use the ramp to not have to go through the building to leave. That is a way to have people access the street without having them transverse traffic, but that is on city property.

Chair Szabo stated that if the owner is in favor, that would be a big plus.

Daniel Cartalucca: Plato was there, the kids would use the library and playground and would climb that wall. It would be safer to have that here.

Chair Szabo swore in Azif Hussain. He stated I am in favor of the school and the mosque, but with a few exceptions. Security is extremely bad. My three kids went to the school last year. I have given $50,000 to the school myself. I am very disappointed. Before they make a plan for the mosque, they must have a good security program. Anyone can go to the basement. Doors are

locked all the time upstairs. There is no security often at the site and it is a dangerous situation. The owner of the building has sent me an email about how this would be unsafe, he offers to send the email to the board. You can go anywhere in the building. I have asked several times for a security officer.

There are many issues with the parking lot besides security. He is in favor of the school and mosque with security improvements, with a separate door from the mosque so no one can enter from school to mosque, mosque to school. Many members of the school agreed it is a safety concern and no one has done anything about it. I can take a camera and show you that you can go anywhere in the building.

Chair Szabo stated a possible solution for security might be some kind of closed-circuit camera system to see who is coming and going even if they are not at their posts. That is something the petitioner can discuss with the City.

Mr. Hussain stated I believe there should be a separate entrance for the mosque and the school. It could be a dangerous situation and it needs to be addressed before the school can be in the same building as the mosque.

Chair Szabo swore in Irfan Mohammed. He stated that he is one of the founders of the school. As a board member and parent, we cannot compromise. We are new and we are not sure how to get into the Des Plaines system. We have security doors and alarms and have cameras. We are still figuring out how to make it one entrance/exit and be reasonable to everyone. He is glad you have opened the Prairie entrance. School is segregated from walkers. We haven't seen anyone come without our permission. The school knows who is coming and going, everyone must have an appointment to come into the building. That is the policy. Door 2 and 3, it is possible to separate entrances/exits to the school and mosque.

Mr. Daniel stated they have a computerized door and have a camera already installed. They have a prayer hall open to the public and for the school. There is always room to improve and they are enforcing security with a security guard. The school is planning to have new security for next year.

Mark Daniel wanted to note for the record that they had no problem with conditions recommend by staff.

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to recommend that the City Council the changes to the Text Amendment that involve the 700 Block of Lee Street as drafted by staff.

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to recommend that the City Council amend the Conditional Use Permit for the Private School Use with the four recommend conditions of approval drafted by staff.

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to recommend that the City Council approves the Conditional Use for the Commercially Zoned Assembly with the six conditions of approval drafted by staff.

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to <u>APPROVE</u> the required minimum side yard on Center Street from five feet to two feet.

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

A motion was made by Board Member Weaver, seconded by Board Member Hofherr to recommend that the City Council approves the five Major Variations involving 12-9-6.d, 12-10-7, 12-10-8.b, 12-11-4.g and 12-11-5.a .

AYES: **Weaver, Hofherr, Saletnik, Szabo**
NAYES: **None**
ABSTAIN: **None**

*****MOTION CARRIES UNANIMOUSLY ****

Member Weaver stated that he left out the major variation for the collective parking agreement. He encourages ICCD to keep working with the Old National Bank. He thinks it would be great if you can make good use of all the extra asphalt that is available after hours.

Mark Daniel asked if they could leave that pending and work something out with Old National Bank, could they avoid a reapplication?

John Carlisle stated that the board has made their motion and City Council can make other recommendations.

Chair Szabo asked that minutes include the recommendation in this meeting to add a walkway off Center Street at the corner of Prairie and Center., so they can utilize the sidewalk that runs behind 1445 Prairie Avenue. Strongly recommended.

ADJOURNMENT

The next scheduled Planning & Zoning Board meeting is Tuesday July 25, 2023.

Chairman Szabo adjourned the meeting by voice vote at 9:10 p.m.

Sincerely,
Margie Mosele, Executive Assistant/Recording Secretary
cc: City Officials, Aldermen, Planning & Zoning Board, Petitioners

COMMUNITY AND ECONOMIC
DEVELOPMENT DEPARTMENT
1420 Miner Street
Des Plaines, IL 60016
P: 847.391.5380
desplaines.org

MEMORANDUM

Date: July 21, 2023

To: Planning and Zoning Board (PZB)

From: Jonathan Stytz, AICP, Senior Planner JS

Cc: John T. Carlisle, AICP, Director of Community and Economic Development JC

Subject: Zoning Text Amendments Regarding Accessory Structures

---

Issue: The petitioner is proposing the following text amendments to the Zoning Ordinance: (i) modify Sections 12-3-11 and 12-8-1.C to create separate allowances for *detached* parking structures based on use, provided that certain larger garages would be subject to building design requirements; (ii) modify Section 12-8-1.C to increase the maximum size for accessory structures that are not detached garages and carports (e.g., sheds, gazebos, pergolas); and (iii) modify Section 12-13-3 to revise the Accessory Structure definition to clarify the types and characteristics of the structures that are included in this definition.

PIN: Citywide

Petitioner: City of Des Plaines, 1420 Miner Street, Des Plaines, IL 60016

Case Number: #23-043-TA

Request Description: The City of Des Plaines is proposing amending the Zoning Ordinance to clarify regulations for detached parking structures based on use, to increase the maximum area for accessory structures except detached garages and carports, and to amend the accessory structure definition.

Background

Chapter 8 of the Zoning Ordinance, "Accessory, Temporary, and Specific Use Regulations," was created to identify and differentiate regulations for both uses and structures that are either: (i) incidental and subordinate to a principal use or structure in the same zoning lot (e.g., detached garages and sheds); (ii) temporary in duration and construction (e.g., tents and yard sales); or (iii) are sensitive uses requiring tailored regulations (e.g., cannabis business establishments and residential care homes). The scope of the proposed amendments focus on the first of these—accessory structures—which are currently defined in Section 12-13-3 as follows:

> ACCESSORY STRUCTURE: A structure which is detached from a principal structure and is located on the same zoning lot and incidental and subordinate to the principal structure. Accessory structures are characterized by having a solid roof, and include, but are not limited to, detached garages, sheds, greenhouses, and gazebos. Accessory structures may not exceed the height of the principal structure.

As identified in the definition, an accessory use is intended to be incidental to the principal use or structure served (i.e., accompanying but not a major part of the property). For example, a detached garage is incidental to a single-family residence (e.g., provides covered parking for the residents) but a garage is smaller in area and height than the residence and not occupied as much. Due to the incidental nature of accessory structures, the Zoning Ordinance does not permit the construction of an accessory structure without the prior construction of a principal use or structure. Zoning also requires that accessory structures are (i) operated and maintained under the same ownership and on the same lot, or adjoining lots, as the principal use or structure and (ii) subordinate in height, area, bulk, and location to the principal use served.

Section 12-8-1.C also identifies the general bulk regulations for accessory structures in all zoning districts with specific height, setback, location, size, and quantity restrictions. There are two main categories of accessory structures identified: (i) detached garages and carports; and (ii) other accessory structures (e.g., sheds, pergolas, gazebos, etc.). These categories share regulations related to height, setbacks/minimum distance from lot lines (with some exceptions), and location, but differ in regard to *quantity of structures* and *size permitted*. In regard to quantity, the Zoning Ordinance allows for up to two accessory structures on any property; however, only one garage (attached or detached) is permitted. In the case of a property with a detached garage or carport, one other accessory structure is permitted. In regard to size, a detached garage or carport can be up to 720 square feet in area—on all residentially zoned lots, regardless of their use—while other accessory structures are limited to 150 square feet in size.

Accessory Structure Definition

The current accessory structure definition describes an accessory structure's incidental and subordinate relation to a principal use, how these uses are characterized (e.g., having a solid roof), and provides a non-exhaustive list of types of accessory structures (e.g., detached garages, sheds, greenhouses, and gazebos). However, the definition does not list many of the most common types of accessory structures—such as pergolas or carports—and does not fully encompass all of the characteristics of accessory structures—especially structures such as pergolas which can have semi-open roofs—even though it is intended. As such, staff is proposing to amend the definition to clarify that both flat and semi-open roofed-structures are all classified as accessory structures. The proposed amendments also add *pergolas* and *carports* to the list of accessory structures specifically identified in the definition. While the list is still non-exhaustive and is intended to remain so, the addition of these two accessory structures helps to further clarify what is classified as an accessory structure, especially commonly-installed accessory structures such as a pergola.

Accessory Structure Bulk Regulations

The current bulk regulations in Section 12-8-1.C appear to contemplate only (i) a single- or two-family dwelling or (ii) a non-residential lot. They do not consider the possibility for detached garages serving townhouses or multifamily. As such, staff is proposing to differentiate regulations for accessory structures based on the principal use of the property. The proposed amendments split subsection C of Section 12-8-1 into three separate portions: (i) Single-Family Residential and Two-Family Residential uses; (ii) Townhouse Residential and Multifamily Residential uses; and (iii) Non-Residential uses. In addition, some regulations are reorganized into table format.

- ***Single-Family Residential and Two-Family Residential Uses:*** Aside from one proposed change, staff intends to retain the existing bulk accessory structure regulations in Section 12-8-1.C for these types of uses given that these regulations are appropriate for lower density residential developments. The proposed change intends to increase the size allowance for accessory structures—excluding detached garages and carports—to 200 square feet. Staff's observance and attached Accessory Structure Research indicates that many pre-fabricated accessory structures like sheds, gazebos, and pergolas are greater than 150 square feet (the current size restriction) but are below 200 square feet (proposed size restriction). As such, the proposed amendments adjust the size allowance for these types of structures.

- ***Townhouse (Single-Family Attached) Residential and Multi-Family Residential Uses:*** Staff proposes to create a new subpoint and table to regulate accessory structures for higher density residential uses. The table splits accessory structures into three separate categories: (i) single-story detached garages and carports; (ii) multiple-story detached parking garages; and (iii) other accessory structures (e.g., sheds). The allowance for both single-story and multi-story garage structures provides flexibility for both existing and proposed residential developments. They also could encourage denser off-street parking designs with a smaller overall footprint than a surface lot.

    - Single-Story Detached Garage or Carport Structures: The proposed height and setback regulations for a single-story detached garage or carport would mirror the existing height and setback regulations for accessory structures in Section 12-8-1.C. However, the amendments would not restrict the number of single-story detached garage and carport structures permitted on a single lot. Instead, it would restrict the collective area of all garage and carport structures on site to 25 percent of the total lot area or less. For detached garage and carport structures that exceed 720 square feet in area, the Building Design Review standards in Section 12-3-11 of the Zoning Ordinance would apply.

    - Multiple-Story Detached Parking Garage Structures: Similar to single-story detached garages and carports, multiple-story detached parking garages would (i) be limited by the collective area of all multiple-story detached parking garage structures—not to exceed 25 percent of the total lot area—instead of by a specific number of structures and (ii) would also be subject to the Building Design Review standards in Section 12-3-11 of the Zoning Ordinance if in excess of 720 square feet in size. However, multiple-story detached parking garage structures would have higher minimum setback requirements than other accessory structures given their greater height allowance of 45 feet (compared to the maximum height of 15 feet for all other accessory structures including single-story-story detached garages and carports). The greater height allowance is necessary to allow a parking garage structure with multiple stories but also appropriate given that the maximum height allowance for principal structures in the R-3 Townhouse Residential district is also 45 feet. Given this height allowance, the proposed amendments would require multiple-story detached parking garages to be located behind the front building line of the principal structure and a minimum of ten feet from all other property lines in order to provide a greater separation between this structure and property lines. The amendments also set a requirement that any such garage would have to be shorter than any principal structures served to retain the spirit of an "accessory" structure.

    - Other Accessory Structures: All other accessory structures—excluding detached garages and carports, so for example, sheds, pergolas, and gazebos—would follow the existing height, setback, and quantity standards in Section 12-8-1.C; the rules would be unchanged except to allow a maximum area of 200 square feet in size.

- ***Non-Residential Uses:*** Staff proposes to create a second new subpoint and table to regulate accessory structures for non-residential uses. The table setup is identical to the proposed table for the townhouse residential and multifamily residential uses with the three separate accessory structure categories—single-story-story detached garages and carports; multiple-story detached parking garages; and other accessory structures—but with two main differences. Section 12-8-1.C of the Zoning Ordinance currently has a separate section devoted to bulk regulations for detached garages and carports on lots in non-residential zoning districts, which allows for a larger detached garage or carport area based on whether the subject lot is less than 20,000 square feet in size or more. In addition, it requires said detached garage or carport structures to be setback a minimum of ten feet from all side and rear property lines. Staff intends to keep these distinctions given the varying sizes of non-residential lots throughout Des Plaines and the varying uses that operate or could operate at these locations.

- Single-Story Detached Garage or Carport Structures: The proposed bulk regulations for a single-story detached garage or carport would match the existing standards in Section 12-8-1.C regarding height (maximum of 15 feet), setbacks (minimum of 10 feet), and size (maximum of 920 square feet on lots 20,000 square feet or more in size and a maximum of 720 square feet on lots less than 20,000 square feet). A maximum of one single-story detached garage or carport structure would be permitted on a lot with a non-residential use to match the existing standards.

- Multiple-Story Detached Parking Garage Structures: The standards for multiple-story detached parking garage structures would match the height (maximum 45 feet), setbacks (minimum 10 feet), and size (25 percent of the total lot area, regardless of the specific lot size)—as proposed for townhouse residential and multi-family residential uses—but with three distinctions. The first distinction deals directly with the location of the subject lot. When located on a lot that abuts a residential zoning lot, the height of multiple-story detached parking garage cannot exceed the maximum height of the abutting residential district. For example, this type of structure located on a lot next to a R-1 Single Family Residential district would be limited to 2½ stories or 35 feet in height, which is the maximum height allowance in that residential district. The second distinction relates to Building Design Review Standards in Section 12-3-11 of the Zoning Ordinance. While the proposed amendments require that all single-story detached garages or carports and multiple-story detached parking garages in excess of 720 square feet must comply with the Building Design Review Standards, this is not a requirement for these types of structures on lots with non-residential uses. The final distinction relates to the maximum quantity allowed. A maximum of one multiple-story detached parking garage structure would be permitted on a lot with a non-residential use to match the existing standards.

- Other Accessory Structures: All other accessory structures—excluding detached garages and carports—would follow the existing height, setback, and quantity standards in Section 12-8-1.C, but would be allowed to be up to 200 square feet in size.

Proposed Amendments

The full proposed amendments are attached and are summarized below:

Section 12-3-11, Building Design Review: Revise the list of activities that trigger the adherence to the Building Design standards to include certain accessory structures mentioned in Section 12-8-1.C.

Section 12-8-1, Accessory Uses and Structures: Split subsection C of this section into three portions with specific regulations in each:

- (i) Single-family Residential and Two-family Residential uses
  - Indent existing bulk regulation standards; and
  - Amend the maximum size allowance for accessory structures—excluding detached garages and carports—to 200 square feet.
- (ii) Townhouse Residential and Multifamily Residential
  - Create new table and specific bulk regulations for three different accessory structure types: (i) single-story detached garages and carports; (ii) multiple-story detached parking garages; and (iii) other accessory structures (e.g., sheds).
- (iii) Non-residential uses
  - Create new table and specific bulk regulations for three different accessory structure types: (i) single-story detached garages and carports; (ii) multiple-story detached parking garages; and (iii) other accessory structures (e.g., sheds).

Section 12-13-3, Definition of Terms: Amend the *Accessory Structure* definition to include structures with semi-open roofs (such as pergolas) and add additional items to the non-exhaustive list of accessory structure examples.

Standards for Zoning Text Amendment:

The following is a discussion of standards for zoning amendments from Section 12-3-7.E of the Zoning Ordinance. The PZB may recommend the City Council approve, approve with modifications, or deny the amendments. The PZB *may* adopt the following rationale for how the proposed amendments would satisfy the standards, or the Board may use its own.

1. **Whether the proposed amendment is consistent with the goals, objectives, and policies of the comprehensive plan, as adopted and amended from time to time by the City Council;**

   These amendments help clarify and expand on the bulk regulations for accessory structures throughout the City by creating separate regulations for all use categories that are tailored to the scale and intention of those uses. They also provide additional options for existing and proposed developments in regard to storage, off-street parking, and overall site design—especially in denser areas of the City—which the Comprehensive Plan intends to capitalize on to achieve better and more sustainable developments.

PZB Modifications (if any): _____

_____.

2. **Whether the proposed amendment is compatible with current conditions and the overall character of existing development;**

   The proposed amendments allow for further flexibility for various accessory structures regardless of the lot size, use, and location. The amendments focus on promoting denser parking structures to reduce impervious coverage on lots with either residential or non-residential uses. However, they also provide additional clarification on the specific standards for accessory structures based on their type and use, which is something that the current zoning ordinance does not fully identify. The amendments are tailored to minimize impacts of storage and parking structures on neighboring properties regardless of their location.

PZB Modifications (if any): _____

_____.

3. **Whether the proposed amendment is appropriate considering the adequacy of public facilities and services available to this subject property;**

   The proposed amendments would allow for additional options for both storage and parking on properties throughout the City that may require additional public facilities and services for an individual site based on their use and design. However, these amendments would still require site plan review and adherence to applicable municipal codes to ensure that any improvements are compliant and are adequately serviced.

PZB Modifications (if any): _____

_____.

4. **Whether the proposed amendment will have an adverse effect on the value of properties throughout the jurisdiction; and**

   It is not anticipated that the proposed amendments will have any adverse effect on surrounding properties. Instead, the flexibility provided with these amendments encourages reinvestment in properties and can lead to new uses or improvements to existing uses that benefits the City and its residents.

PZB Modifications (if any): _____

_____.

5. **Whether the proposed amendment reflects responsible standards for development and growth.**

   The proposed text amendments facilitate a path towards responsible standards for development and growth for all uses and properties by establishing a clear and streamlined permitting path for additional parking and storage options that promote better design of both residential and non-residential developments.

PZB Modifications (if any): _____

_____.

PZB Procedure and Recommendation: Under Section 12-3-7 of the Zoning Ordinance, the PZB has the authority to *recommend* that the City Council approve, approve with modifications, or deny the above-mentioned amendments. The Board should clearly state any modifications so that its recommended language can be incorporated in the approving ordinance passed on to the Council, which has final authority on the proposal.

Attachments:
Attachment 1: Accessory Structure Research[1]
Attachment 2: Photos of Detached Garages Serving Multifamily Development (The Parker, Park Ridge, IL)[2]
Attachment 3: Proposed Amendments

[1] Source: Home Depot and Lowes websites, obtained July 18, 2023.
[2] Source: Google Streetview, obtained July 21, 2023.

Analysis of Average Dimensions of Sheds, Pergolas, and Gazebos

Data Source: Home Depot and Lowes websites, data collected on July 18th, 2023

Sheds			
	Width (ft)	**Depth (ft)**	**Area (sf)**
Average:	11.1	12.9	138.9
Mode:	10	8	120
Range:	7 to 20	7 to 24	49 to 288
Sample #	Width (ft)	Depth (ft)	Area (sf)
1	15.0	8.0	120
2	10.0	10.0	100
3	10.0	12.0	120
4	20.0	8.0	160
5	15.0	8.0	120
6	10.0	16.0	160
7	12.0	20.0	240
8	8.0	20.0	160
9	12.0	16.0	192
10	10.0	12.0	120
11	10.0	8.0	80
12	8.0	12.0	96
13	7.0	7.0	49
14	8.0	16.0	128
15	8.0	14.0	112
16	12.0	10.0	120
17	10.0	10.0	100
18	12.0	12.0	144
19	12.0	24.0	288
20	12.0	14.0	168

Pergolas			
	Width (ft)	**Depth (ft)**	**Area (sf)**
Average:	11.7	13.6	159.2
Mode:	10	12	144
Range:	10 to 18	7.5 to 20	75 to 324
Sample #	Width (ft)	Depth (ft)	Area (sf)
1	16.0	12.0	192
2	10.0	14.0	140
3	14.0	12.0	168
4	10.0	10.0	100
5	12.0	12.0	144
6	10.0	13.0	130
7	13.0	8.5	110.5
8	18.0	18.0	324
9	11.0	13.0	143
10	10.0	20.0	200
11	12.0	12.0	144
12	10.0	14.0	140
13	10.0	13.0	130
14	12.0	12.0	144
15	10.0	7.5	75
16	10.0	20.0	200
17	12.0	16.0	192
18	10.0	10.0	100
19	12.0	14.0	168
20	12.0	20.0	240

Gazebos			
	Width (ft)	**Depth (ft)**	**Area (sf)**
Average:	12.2	11.0	136.0
Mode:	12	10	120
Range:	7.97 to 20	4.99 to 13	39.77 to 240
Sample #	Width (ft)	Depth (ft)	Area (sf)
1	10.0	10.0	100
2	11.0	10.0	110
3	11.0	13.0	143
4	15.0	13.0	195
5	20.0	12.0	240
6	12.0	10.0	120
7	12.0	12.0	144
8	16.0	12.0	192
9	13.0	10.0	130
10	10.0	12.0	120
11	10.0	10.0	100
12	10.8	12.8	138.24
13	11.3	11.3	127.69
14	8.0	5.0	39.7703
15	12.0	10.0	120
16	11.0	13.0	143
17	13.0	10.0	130
18	12.0	12.0	144
19	12.2	9.5	115.9
20	14.0	12.0	168


Google

Google

916
Google


Google

Google

Google

Accessory Structures: Proposed Amendments

Additions are **bold, double-underlined.** Deletions are ~~struck through.~~

"Section 12-3-11: Building Design Rules

C. Applicability: Building design review plans that contain the information set forth in section 12-14-9, "Minimum Submission Requirements For Building Design Review", of this title, and any other information that may be requested by the Zoning Administrator, shall be submitted to the Department of Community and Economic Development with any development review application for the following construction or alteration activities:

1. New construction of a principal structure **or certain accessory structures pursuant to Section 12-8-1**;

* * *"

"Section 12-8-1: Accessory Uses and Structures

* * *

C. The bulk standards for accessory structures shall be as set forth below:

1. Single-family detached and two-family dwelling uses:

a) The maximum height of an accessory structure shall be 15 feet.

b) The minimum front yard setback for an accessory structure shall be the front building line of the principal structure.

c) The minimum side and rear yard setbacks for an accessory structure shall be five feet. However, a detached accessory garage or carport for a residential use in the R-1 and R-2 Residential Districts may be located on the rear lot line where the rear lot line abuts an alley.

d) The maximum number of accessory structures permitted for any single-family or two-family dwelling use shall be two; however, there shall be no more than one garage or carport (attached or detached) per residential dwelling.

e) The maximum area of a detached garage or carport shall be 720 square feet or less. The maximum area of an accessory structure other than a detached garage **or carport** shall be ~~one hundred fifty (150)~~ **200** square feet or less.

Additions are **bold, double-underlined**. Deletions are ~~struck through~~.

2. Townhouse (single-family attached) and multiple-family residential uses:

Type	Single-Story Detached Garages and Carports	Multiple-Story Detached Parking Garages	Other Accessory Structures
Maximum height	15 feet	45 feet; provided, however, the height must be less than all principal structures served	15 feet
Minimum front yard setback	The front building line of the principal structure.	The front building line of the principal structure.	The front building line of the principal structure.
Minimum side yard setback	5 feet	10 feet	5 feet
Minimum rear yard setback	5 feet	10 feet	5 feet
Minimum corner side yard setback	10 feet	10 feet	10 feet
Maximum quantity	N/A	N/A	Two
Maximum size	25% of the total lot area; provided, however, if greater than 720 square feet, Building Design Review regulations will apply	25% of the total lot area; provided, however, if greater than 720 square feet, Building Design Review regulations will apply	200 square feet

Additions are **bold, double-underlined**. Deletions are ~~struck through~~.

3. Non-residential uses on non-residential zoning lots

Type	Single-Story Detached Garages and Carports	Multiple-Story Detached Parking Garages	Other Accessory Structures
Maximum height	15 feet	45 feet; provided, however, where the zoning lot abuts a residential zoning lot, the structure may not exceed the maximum height of the abutting residential district	15 feet
Minimum front yard setback	The front building line of the principal structure.	The front building line of the principal structure.	The front building line of the principal structure.
Minimum side yard setback	10 feet	10 feet	5 feet
Minimum rear yard setback	10 feet	10 feet	5 feet
Maximum quantity	One	One	Two
Maximum size (lots less than 20,000 square feet in area)	720 square feet	25% of the total lot area	200 square feet
Maximum size (lots 20,000 square feet or more in area)	960 square feet	25% of the total lot area	200 square feet

* * *"

Additions are **bold, double-underlined**. Deletions are ~~struck through~~.

"Section 12-13-3: Definition of Terms

* * *

ACCESSORY STRUCTURE: A structure which is detached from a principal structure and is located on the same zoning lot and incidental and subordinate to the principal structure. Accessory structures are characterized by having a solid **or semi-open** roof, and include, but are not limited to, detached garages, **carports, pergolas,** sheds, greenhouses, and gazebos. Accessory structures may not exceed the height of the principal structure.

* * *"

Additions are **bold, double-underlined**. Deletions are ~~struck through~~.

COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT
1420 Miner Street
Des Plaines, IL 60016
P: 847.391.5380
desplaines.org

MEMORANDUM

Date: July 21, 2023

To: Planning and Zoning Board (PZB)

From: Samantha Redman, Planner

Cc: John T. Carlisle, AICP, Director of Community and Economic Development

Subject: Zoning Map Amendment from C-3 to R-4 at Approximately 919 and 921 Graceland Avenue (Former Contour Saws Parking Lot)

PIN: 09-20-203-006-0000

Petitioner: Luz and Associates #1, LLC, 2030 West Wabansia Ave., Chicago, IL 60611

Owner/Property Control: Contour Saws, Inc., 100 Lakeview Parkway, Ste. 100, Vernon Hills, IL 60061

Case Number: #23-040-MAP

Ward Number: #2, Alderman Colt Moylan

Existing Zoning: C-3, General Commercial

Surrounding Zoning:
North: R-4, Central Core Residential
South: Railroad and C-3, General Commercial
East: C-3, General Commercial
West: M-2, General Manufacturing

Surrounding Land Uses:
North: Multi-family residential building
South: Railroad and commercial office buildings
East: Commercial buildings
West: Former Contour Saws manufacturing building

Street Classification: Graceland Avenue is classified as a minor arterial road.

Comprehensive Plan: Industrial is the recommended use for this property.

Property/Zoning History: The property was formerly the parking lot associated with the Contour Saws manufacturing facility located to the northwest. The Contour Saws building was built in the 1960s and operated in this location until 2020. Historic aerials indicate the site has been developed as a parking lot since the early 1960s, and

the use has never changed.[1] Between 1938 and 1960, zoning for the property changed from commercial to light industrial and back to the current commercial zoning. However, no commercial use has ever been associated with this property. The property is currently owned by Contour Saws and is vacant.

Project Description:

The petitioner is Luz and Associates, which is the contract purchaser of the subject property, along with the main Contour Saws building property on the other side of Graceland. They are proposing a zoning map amendment from C-3, General Commercial to R-4, Central Core Residential. The amendment would allow for a contemplated multifamily residential building at this site, one of two that are proposed for the former Contour Saws facility.

Zoning Map Amendment Overview

The purpose of a zoning map amendment is to determine whether an existing zoning district is suitable for a location and, if not, which zoning district would be more suitable, given the context of the neighborhood, city goals, and local, state, and national development trends.

Although a specific project can be considered alongside any zoning application, zoning change deliberation often looks at a property at a larger scale within the neighborhood and city. However, a Site Plan Review, as required by Section 12-3-2, was performed for the conceptual project at this site. The Site Plan Review contributes to the overall assessment of a zoning map amendment, demonstrating the feasibility of a specific project with this zoning. Refer to the Site Plan Review section of this report and associated attachments.

C-3 Zoning and Suitability of the Site for Proposed R-4 Zoning

The C-3, General Commercial zoning district is intended to accommodate a diversity of businesses. Out of all of the commercial districts, C-3 permits the largest number of different uses, allowing for 37 uses permitted by right (meaning no zoning entitlement process) and 28 conditional uses. A broad variety of uses are allowed, including retail, office, restaurants, and other commercial services.

However, this site has never been developed with a commercial use, despite having the most permissive commercial zoning for decades. Even with the closure of Contour Saws in 2020, the site remains an unoccupied, surface parking lot. The Comprehensive Plan envisions this area for manufacturing uses; however, the plan was written in 2019 prior to the unanticipated closure of Contour Saws in 2020.

Considering this site has never successfully been developed into a commercial use, the zoning map amendment process allows the City to determine if another type of use would be more suitable. This site is uniquely situated near many amenities and services necessary to support residential development. Few available properties exist in Des Plaines with the transit, recreational, and commercial opportunities available within walking distance, making this site an ideal location for additional residential versus commercial or manufacturing development. Within a half-mile of the property (an approximate 8-15 minute

[1] Historic Aerials, 1961 Aerial, historicaerials.com

walk for the average person[2]), the following services are available. Refer to Amenities and Services Map attachment for further details.

Service	
Transit	Des Plaines Metra Station platform; Pace Bus Stops for Lines 226, 230, and 250, and PULSE
Downtown Commercial Area	Restaurants, retail/personal services including dentist, optometrist, urgent care, private gym, and salons
Schools (private and public)	Central Elementary School, Willows Academy, Little Bulgarian School, Islamic City Center of Des Plaines Academy
Parks	Centennial Park, Central Park, Paroubeck Park, Potowatomie Park
Public Buildings	Library, City Hall

A change to the zoning would be necessary to allow residential uses on this property. No new residential uses are permitted within the C-3 zoning district in this location. An analysis of the various options for residential zoning districts is necessary to determine what is best suited for this site. Below is a table of residential zoning districts and the residential uses permitted within them.

Residential Districts Use Matrix				
Use	***R-1***	***R-2***	***R-3***	***R-4***
Single Family Detached	P	C*	C*	C*
Townhouse	Not permitted	Not permitted	P	P
Two-family (duplex)	Not permitted	P	Not permitted	Not permitted
Multi-Family	Not permitted	Not permitted	P	P

*Note: Only applies to single-family detached dwellings that were lawfully constructed prior to August 17, 2020 and are located in a zoning district other than R-1.

The R-1 and R-2 zoning districts would restrict the density of residential units at the property, limiting the development potential. As the name suggests, the R-1, Single Family Residential district limits the number of dwelling units to one dwelling unit per parcel. The R-2, Two-Family Residential district similarly limits the number of dwellings to two units per parcel. To allow for more than one or two residences on this 1.23-acre property, the property would need to be subdivided. If the property were subdivided to meet the R-1 or R-2 bulk standards, it is unlikely the property could produce more than five residential units. The property is also too small to allow for a Planned Unit Development (PUD), which would allow for smaller lots but requires a minimum parcel size of 2 acres (Section 12-3-5.B.3).

[2] Bohannon, R. W. (1997). Comfortable and maximum walking speeds of adults aged 20-79 years: reference values and determinants. *Age and Ageing*, page 17.

The R-3, Townhouse Residential and R-4, Central Core Residential districts provide the option to increase the number of units on this parcel without requiring subdivision. Comparatively, a townhouse or multi-family development would supply a greater number of units in the same amount of space, creating a more efficient and economical option for this location. The main difference between the R-3 and R-4 districts are the bulk standards. The table below provides a comparison.

R-3 Versus R-4 Bulk Standards		
Bulk Controls	***R-3***	***R-4***
Maximum height	45 ft	80 ft
Minimum front yard	25 ft	12 ft
Minimum side yard	Buildings 35 ft. and under: 5 ft. Over 35 ft.: 10 ft.	Buildings 35 ft. and under: 5 ft. Over 35 ft.: 10 ft.
Minimum rear yard	Buildings 35 ft. and under: 25 ft. or 20% of lot depth, whichever is less Buildings over 35 ft.: 30 ft.	Buildings 40 ft. and under: 25 ft. or 20% of lot depth, whichever is less Buildings over 40 ft.: 25 ft., plus 2 ft. for every 10 ft. over 40 ft.
Minimum lot width	45 ft.	45 ft.
Minimum lot area	2800 sq. ft. per dwelling unit	40,700 sq. ft (.93 acres).[1]

1. The minimum lot area for a zoning lot in the "R-4 Central Core Residential District" shall be either 10,000 square feet or shall be determined by the total sum of the required minimum lot area of each dwelling unit on the zoning lot in accordance with the table in Section 12-7-2.J.

R-3 and R-4 zoning districts both allow for multifamily residential development. However, R-3 requires 2,800 square feet of space per dwelling unit, allowing a maximum of 19 units on this 53,731-square-foot (1.23-acre) property. Compared to R-3, the R-4 district allows for a significantly larger number of residential units, requiring smaller lot areas per unit and allowing for a taller building.

Demographic Trends and Accommodating an Aging Population

The existing housing stock throughout the city is predominantly single-family residential and the Comprehensive Plan states it is a goal to maintain this stock of high-quality single family residential property within the city. However, the detached single family housing type is an increasingly unaffordable product for many existing and future residents. In comparison, townhouses and multi-family provide additional housing stock at a more financially attainable scale due to the smaller size and reduced maintenance cost.

An important goal of 2019 Comprehensive Plan is providing avenues to allow residents to age-in-place and improve accessibility. As of 2015, the percentage of Des Plaines residents 50 or older was 40.2%, compared to the regional average of 31.4%.[3] According to the U.S. Census Bureau, this percentage is likely to grow, with one in five Americans at retirement age by 2030.[4] Households approaching retirement are frequently interested in downsizing to limit maintenance costs and reduce monthly housing costs to meet limitations of fixed incomes. Supplying a diverse housing stock in this area provides the option for seniors to continue living within the city. A residential development in this location would be close enough to facilities and services for an aging population to independently complete activities of daily living, with many amenities available within walking or transit distance.

In terms of accessibility, it is relevant to note that multifamily housing developments, either private or public, with four or more units are required to meet accessibility requirements outlined in the Fair Housing Act.[5] This includes provisions requiring certain units to have accessible access, routes, and usable private and common spaces for individuals with disabilities. Note buildings separated by a firewall, such as townhouses, are not subject to these accessibility requirements.[6] Additionally, the International Building Code (IBC) requires buildings of a certain size to have at least one elevator and it must be able to accommodate an ambulance stretcher (IBC 2015 Section 3002.4). Overall, multi-family residential developments over a certain size versus single-family detached or attached residences provide a greater likelihood of providing the accessibility needs of an aging population and provide additional housing opportunities for individuals with disabilities regardless of age.

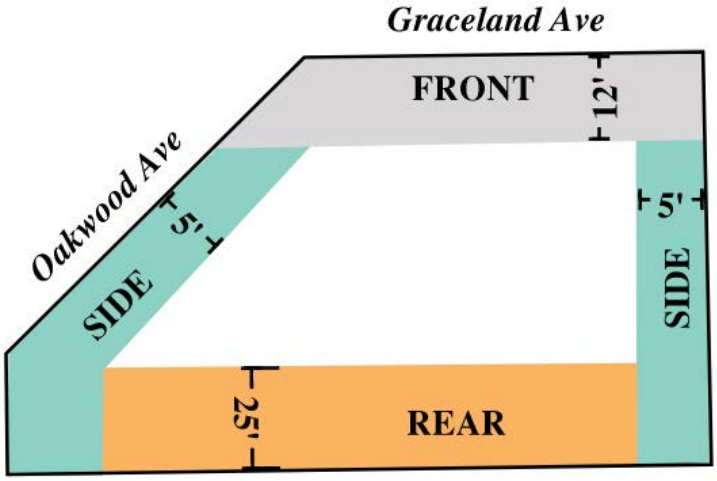
With these considerations regarding the location of the property near other R-4 zoned, multi-family properties, the proximity to numerous private and public services, and the goals of the Comprehensive Plan focused on providing diversity of housing stock and providing accessible options for residents, senior or otherwise, the R-4 zoning district is a suitable fit for this property.

[3] Des Plaines 2019 Comprehensive Plan, Page 32
https://www.desplaines.org/home/showpublisheddocument/162/637612522934400000
[4] U.S. Census Bureau (2018) *Older People Projected to Outnumber Children for First Time in U.S. History,*
https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html
[5] U.S. Department of Housing and Urban Development, *Accessibility Requirements for Buildings*
https://www.hud.gov/program_offices/fair_housing_equal_opp/disabilities/accessibilityR
[6] U.S. Department of Housing and Urban Development, *Fair Housing Act Design Manual,* Page 10
https://www.huduser.gov/portal//Publications/PDF/FAIRHOUSING/fairfull.pdf

Site Plan Review

Proposed Project Overview
The petitioner proposes a four story, 56-unit multi-family residential development and associated parking lot and private park space. Note the proposed development is one of two for the former Contour Saws properties; the site to the north will be reviewed and considered as a separate application.

This type of development is a permitted use in the proposed R-4 Central Core Residential district if it follows all bulk regulations and other standards. The below diagram illustrates staff's interpretation of where the required yards are located for this property, as noted in Section 12-7-2 and defined in Section 12-13-3.



The table on the following page compares the R-4 district regulations with the proposed development on the subject property.

R-4 -Central Core Residential District Bulk Standards		
Bulk Controls	***Required***	***Proposed***
Maximum height	80 ft.[1]	48 ft.
Minimum front yard	12 ft.	15 ft.
Minimum side yard	5 ft.	5 ft.
Minimum rear yard	25 ft.	25 ft.[1]
Minimum lot width	50 ft.	193.86 ft.
Minimum lot area	40,700 sq. ft.[2] (refer to Footnote 2 and associated table below)	53,731.42 sq. ft.

Note:
1. Off-street parking spaces are permitted to be located in any required yard, including the rear yard, per Section 12-9-6.C.

2. The minimum lot area for a zoning lot in the "R-4 Central Core Residential District" shall be either 10,000 square feet or shall be determined by the total sum of the required minimum lot area of each dwelling unit on the zoning lot in accordance with the following table, whichever is greater:

Number Of Bedrooms	Minimum Lot Area (Square Feet)
Efficiency dwelling unit	600
1 bedroom	700 sq. ft. minimum required lot area * 41 units proposed = 28,700 sq. ft. of lot area required
2 bedrooms	800 sq. ft. minimum required lot area * 15 units = 12,000 sq. ft. of lot area required
Total Required Lot Area:	40,700 sq ft

Site Plan Review Standards
Pursuant to Section 12-3-7.D.2 of the Zoning Ordinance, a Site Plan Review is required for all map amendment requests to assess how the request meets the characteristics identified in Section 12-3-2, which are listed below along with staff's assessment of each in relation to the current Site Plan provided by the petitioner, located in the Site Plan attachment.

Note many of the provided plans include an entrance/exit from the alley. However, the developer has chosen to remove this proposed driveway in favor of one entrance entering and exiting. The Site Plan attachment provides the most up to date plan; this plan was used to complete the Site Plan Review below. All other updated plans, including an updated traffic study, will be provided with any future Planning and Zoning Board and City Council packets and will be uploaded onto the desplaines.org/contourplace when available.

Site Plan Review	
Item	***Analysis (based on Proposal)***
The arrangement of structures on the site	• Places the building along the street frontage rather than the parking lot. By placing a building along a street rather than the parking lot, the design presents better cohesion with the buildings surrounding it by placing the building at approximately the same distance from the property line as adjacent multi-family buildings. • A more efficient design would involve the placement of parking in a parking garage underneath the building, rather than surface parking. However, it is unknown the expense and the impact on economic viability for this project if this site design change were required. Taking into consideration the current use (vacant surface parking lot), the proposed development provides a substantially more efficient use of the property.
The arrangement of open space and landscape improvements	• Landscaping is provided around the building in excess of requirements along the front yard and perimeter parking lot landscaping meets zoning requirements. In addition, a private park space is proposed, as noted on the plans. Refer to Landscape Plan attachment. • Staff advises the movement of the shade tree shown on the landscape plan from the corner between Oakwood Avenue and the alley to improve visibility for vehicles and pedestrians entering and exiting the driveway. The tree will need to be located elsewhere on the property and staff will confirm the landscape plan includes the required amount of parking lot landscaping at time of building permit.

The adequacy of the proposed circulation system on the site	• Curb cut closed onto Graceland, pushing traffic to Oakwood Ave. and the alley. The traffic study provided with this application demonstrates that proposed traffic will not have a significant impact on the area roadways. It is important to note the existing parking lot includes over one hundred parking spaces and the Contour Saws facility likely generated a greater amount of traffic for employees and deliveries than proposed with this residential development. *The Board may seek to ask the petitioner if they anticipate any significant changes to traffic with the updated site plan (eliminating the entrance/exit of the parking lot into the alley) not reflected in the traffic impact study.* • The closure of a curb cut along Graceland Ave and replacing with a parkway and walkway improves safety and comfort of pedestrians along this side of Graceland. The proximity of the building to the street also provides better surveillance within the neighborhood, with windows facing the residential neighborhood and providing additional "eyes on the street." • A loading/unloading zone within the development eliminates traffic on the adjacent streets and alley for deliveries, dumpster pickup, and ride sharing for proposed future residents and visitors. • Parking meets the off-street parking requirements of Section 12-9-7, providing sixty-five spaces which is the minimum required amount. It is anticipated, as discussed in the petitioner's response to standards and the provided traffic study, that the proximity of the site to numerous transit options and a bike route along Thacker St, will reduce dependence on automobiles for this project.
The location, design, and screening of proposed off-street parking areas	• Perimeter landscaping, including required shrubs and shade trees, are provided around the proposed parking lot. A private park blocks some view of the parking lot from Oakwood Ave. • Site is situated in such a way that the parking lot has minimum visibility from Graceland Avenue and Oakwood Avenue and minimal conflict with pedestrians along public walkways.

The adequacy of the proposed landscaping design on the site	• All required landscaping in terms of perimeter and interior parking lot landscaping and landscaping of required yards is fulfilled. • Private park space provided in the southwestern area of the property with accessible walking path to the building and from Oakwood Ave.
The design, location, and installation of proposed site illumination	• Photometric plan demonstrates conformance with Section 12-12-10, with no more than 0.2 foot candles spilling over the property line in any location, well within the limits of the zoning ordinance. • The parking lot is properly illuminated, with at least 0.1 footcandles in any parking area, meeting requirements of Section 12-9-6.G.
The correlation of the proposed site plan with adopted land use policies, goals, and objectives of the comp. plan	• Does not fit the manufacturing use illustrated by the Comprehensive Plan; however, the 2019 plan was written on the assumption that the Contour Saw facility will continue operating. • The proposed plan supports the following goals (refer to "Demographic Trends and Accommodating an Aging Population" and "C-3 Zoning and Suitability of the Site for Proposed R-4 Zoning" sections of this report for further details): o Goal 4.1. Ensure the City has several housing options to fit diverse needs. o Goal 4.3 Provide new housing at different price points o Goal 4.5 – Plan for and identify policies and tools that ensure accessibility • In addition to housing goals, the proposed development meets economic goals of the city by providing additional property tax revenue compared to the existing use of the site. Refer to the Tax Projections attachment.

Summary of Public Outreach
In an effort to improve community engagement and transparency surrounding new, large developments within Des Plaines, the City provided numerous opportunities for residents to review the proposal and provide input. To provide regular project updates, a webpage on the city website was created: desplaines.org/contourplace. On June 6, 2023, the Planning and Zoning Board hosted a public workshop to provide the developer, board, and the public an opportunity to review plans and provide input into the proposed development at this location and the former Contour Saws facility to the north of this property. After this meeting, the project webpage was updated to include a public input form to continue gathering community comments on the plans. Refer to Public Comment attachment for all public comments.

Standards for Zoning Map Amendment:
The following is a discussion of standards for zoning map amendments from Section 12-3-7.E of the Zoning Ordinance. Rationale for how well the proposal addresses the standards is provided below and in the attached petitioner responses to standards. The Board may use the provided responses as written as its rationale, modify, or adopt its own.

1. **Whether the proposed amendment is consistent with the goals, objectives, and policies of the comprehensive plan, as adopted and amended from time to time by the City Council;**

The Comprehensive Plan was written in 2019 when the Contour Saws facility was still operating. Due to the manufacturing facility's longstanding operations in Des Plaines, the Comprehensive Plan did not envision this area to be used for anything else. However, the proposed amendment and development would meet several goals from the Housing chapter of the Comprehensive Plan, including: Goal 4.1. Ensure the City has several housing options to fit diverse needs; Goal 4.3 Provide new housing at different price points; and Goal 4.5 Plan for and identify policies and tools that ensure accessibility. Refer to "Demographic Trends and Accommodating an Aging Population" and "C-3 Zoning and Suitability of the Site for Proposed R-4 Zoning" sections of this report for further details. In addition to housing goals, the proposed development meets economic goals of the city by providing additional property tax revenue compared to the existing use of the site. Refer to the Tax Projections attachment.

PZB Modifications (if any): _____

_____.

2. **Whether the proposed amendment is compatible with current conditions and the overall character of existing development;**

The subject property is adjacent to R-4 zoning to the north and is close to several similar multifamily developments. The area is in close proximity to numerous services within walking, biking or transit distance, Refer to Amenities and Services Map attachment. Any proposed development would need to meet all building material and design requirements outlined in Section 12-3-11 – Building Design Review, including requirements for face brick which will be similar in design to the adjacent multi-family residential buildings in this neighborhood.

PZB Modifications (if any): _____

_____.

3. **Whether the proposed amendment is appropriate considering the adequacy of public facilities and services available to this subject property;**

   An engineering and utility plan was prepared with this application. Based on the provided site plan, City engineering staff did not indicate any concerns with the adequacy of public facilities or services being available to meet the needs of this proposed development.

   A traffic impact study was provided with this application to assess impacts of the proposed development (Refer to Traffic Study attachment). The study indicated the traffic generated by this use would not create a significant impact on the surrounding street network. *The Board may seek to ask the petitioner if they anticipate any significant changes to traffic with the updated site plan (eliminating the entrance/exit of the parking lot into the alley) not reflected in the traffic impact study.*

   It is important to note the previous use of this property was an employee parking lot with over one hundred parking spaces, while the proposed residential development provides 65 parking spaces as well as a loading and unloading zone. At minimum, this development brings less potential for vehicles to be travelling in and out of the site at peak hours versus one hundred employees of a manufacturing facility. Parking meets the off-street parking requirements of Section 12-9-7, providing 65 spaces which is in excess of the minimum required amount.

PZB Modifications (if any): _____

_____.

4. **Whether the proposed amendment will have an adverse effect on the value of properties throughout the jurisdiction; and**

   The proposed map amendment would allow for residential uses on a property that has been zoned commercial for decades and, throughout its history, existed as a surface parking lot for employees of a now closed manufacturing facility. A building that provides additional residential options for the area and required to follow the Building Design Standards outlined in the Zoning Ordinance creates a more appealing urban design for the neighborhood versus an unoccupied surface parking lot.

   PZB Modifications (if any): _____

_____.

5. **Whether the proposed amendment reflects responsible standards for development and growth.**

   The current use of this property is a surface parking lot for a manufacturing use that is unlikely to be filled with another similar manufacturing business. Despite the commercial zoning, the property has remained unimproved for several years, and remains vacant and in disrepair. Providing a residential use for the property, particularly a use that capitalizes on the close proximity to downtown Des Plaines and the various amenities associated with the area, would present a more efficient and useful way to use this property. As discussed in the Demographic Trends and Accommodating an Aging Population section, the City needs to promote opportunities that increase housing stock for a diversity of populations in the area, both in the short term and long term. Amending the zoning district for this property, regardless of the proposed project, provides an additional opportunity to construct a multifamily development in an area with similar residences and with the necessary services to support this type of use.

PZB Modifications (if any): _____

_____.

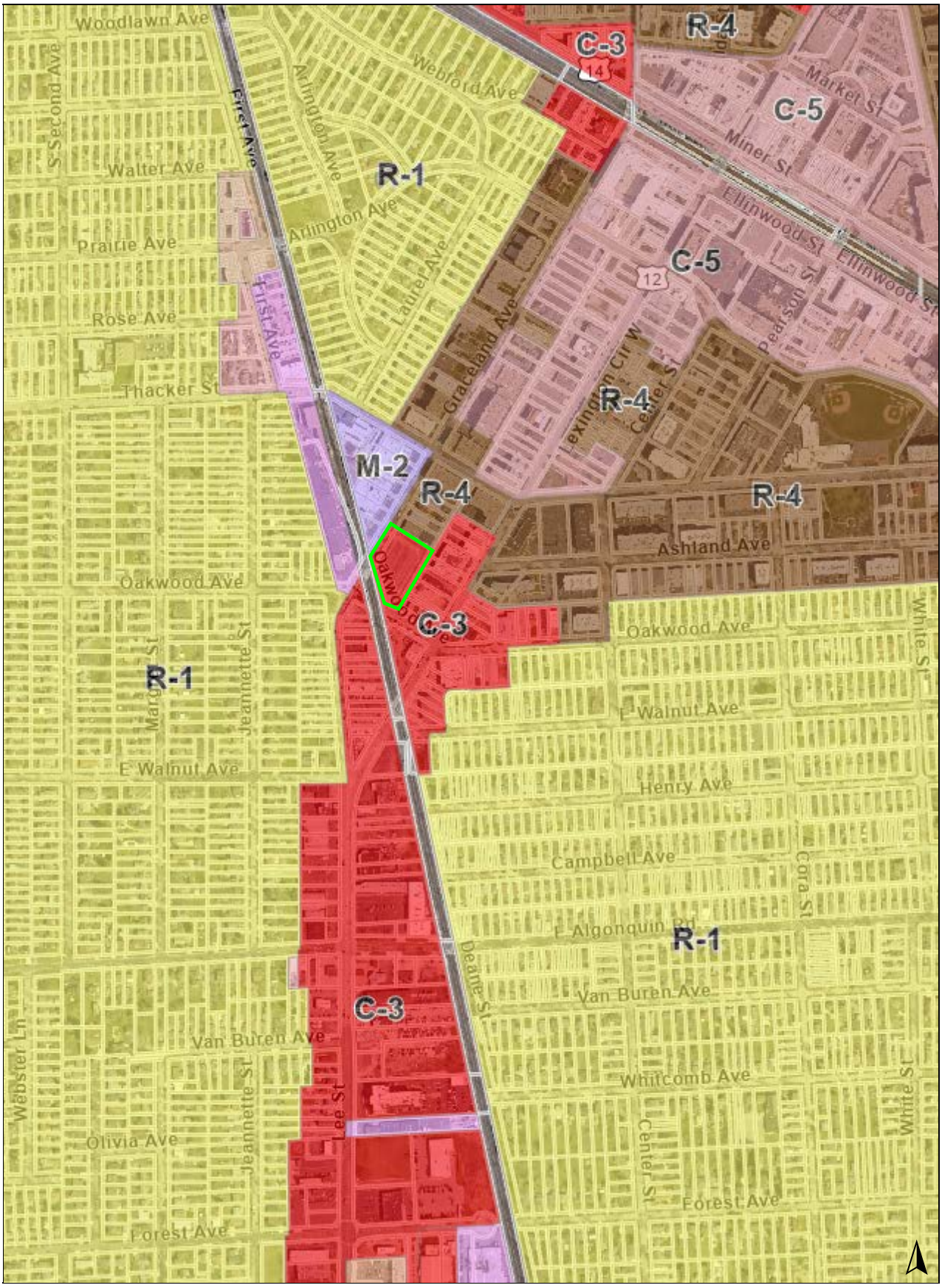
PZB Procedure and Recommended Conditions: Under Section 12-3-7.D (Procedure for Review and Decision for Amendments) of the Zoning Ordinance, the PZB has the authority to *recommend* that the City Council approve, approve subject to conditions, or deny the above-mentioned zoning map amendment. City Council has final authority on the proposal.

Consideration of the request should be based on a review of the information presented by the applicant and the findings made above, as specified in Section 12-3-7.E (Standards for Amendments) of the Zoning Ordinance. If the PZB recommends and City Council ultimately approves the request, staff recommends the following conditions.

Attachments:

Attachment 1: Location Map
Attachment 2: Site and Context Photos
Attachment 3: Project Narrative and Responses to Standards
Attachment 4: Amenities and Services Map
Attachment 5: Plat of Survey
Attachment 6: Site Plan
Attachment 7: Architectural Plans and Site Plan
Attachment 8: Landscape Plans
Attachment 9: Engineering Plans
Attachment 10: Photometric Plan
Attachment 11: Traffic Impact Study
Attachment 12: Property Tax Projections
Attachment 13: Public Comments

GISConsortium



Legend

- Subject Site

Zoning

- C-1: Neighborhood Shopping
- C-3: General Commu
- C-4: Regional Shopp
- C-5: Central Busines
- M-1: Limited Manufacturing
- M-2: General Manufacturing
- R-1: Single Family Residential
- R-3: Townhouse Residential
- R-4: Central Core Residential

0 500 1000 ft

Print Date: 7/20/2023

Notes

Disclaimer: The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law. This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

Public Notice Sign 1, facing property northeast

Public Notice Sign 2, facing property southeast

View of existing parking lot facing alley to northeast; degraded pavement

View of parking lot and adjacement multifamily development as well as existing Contour Saw facility facing northwest

ACOSTA EZGUR, LLC
1030 West Chicago Avenue, Third Floor ■ Chicago, Illinois 60642 ■ 312-327-3350 o ■ 312-327-3315 f

Graceland and Thacker Development
East Side of Graceland Avenue (Site B)

NARRATIVE

The subject property contains approximately 53,472 sq. ft. of land and is improved with a surface parking lot with approximately 145 spaces. The exiting parking lot has no landscaping and was used in connection with Contours Saw, Inc.'s operations at the site across Graceland from the parking lot. The property is currently zoned C-3.

The Applicant for the rezoning proposes to redevelop the property with a four-story building containing 56 residential units, comprised of 41 one-bedroom units and 15 two-bedroom units. Sixty-four surface parking spaces will be located on-site, including three ADA spaces and two EV spaces. The proposed building's height will be 50 feet. Drop-off/Loading Zone will be provided adjacent to the proposed building's front door. The parking lot will be accessed via two driveways, one accessed from the 20 ft. public alley immediately adjacent to the rear of the site and a second from Oakwood Avenue. The façade materials will be primarily face brick, with fiber cement panels used on some sections.

ACOSTA EZGUR, LLC
1030 West Chicago Avenue, Third Floor ■ Chicago, Illinois 60642 ■ 312-327-3350 o ■ 312-327-3315 f

STANDARDS FOR MAP AMENDMENTS

1. The proposed amendment is consistent with the goals, objectives, and policies of the comprehensive plan, as adopted February 2019.

   The proposed rezoning will allow for the construction of multi-family housing near multi-modal facilities and Downtown, as the subject site is approximately five blocks from the Miner St. Metra Station and Downtown. It also will promote the development of multi-family units that would increase the housing diversity and provide housing for individuals and couples, and also aging residents that seek to continue an independent lifestyle while minimizing maintenance and ownership obligations. In addition, the supply of additional housing will assist in decreasing affordability concerns due to increased supply.

2. The proposed amendment is compatible with current conditions and the overall character of existing development in the immediate vicinity of the subject property.

   The subject property is adjacent to an R-4 district to the north that extends north along Graceland and is generally developed with three, four and five-story multi-family buildings.

3. The proposed amendment is appropriate considering the adequacy of public facilities and services available to this subject property.

   There are sufficient public facilities in terms of utilities to accommodate R-4 development, with stormwater detention being required for new developments per the Des Plaines municipal code. The existing streets can accommodate the anticipated traffic, which traffic may also be reduced due to the proximity of public transportation via Metra, the existing bike corridor along Thacker and the proposed bike corridor along Graceland. In terms of public open space, Central Park is located approximately three blocks east.

4. The proposed amendment will not have an adverse effect on the value of properties throughout the jurisdiction.

   Because the proposed amendment will allow for development of multi-family residential of a scale compatible with adjacent properties and in a location where sufficient public facilities exist and resulting traffic can be accommodated, it will not have an adverse impact on property values within the City. In addition, the increase in tax base will help alleviate future tax increases on other properties and the increased

resident population will support existing area businesses, both of which will positively impact the property value of other properties.

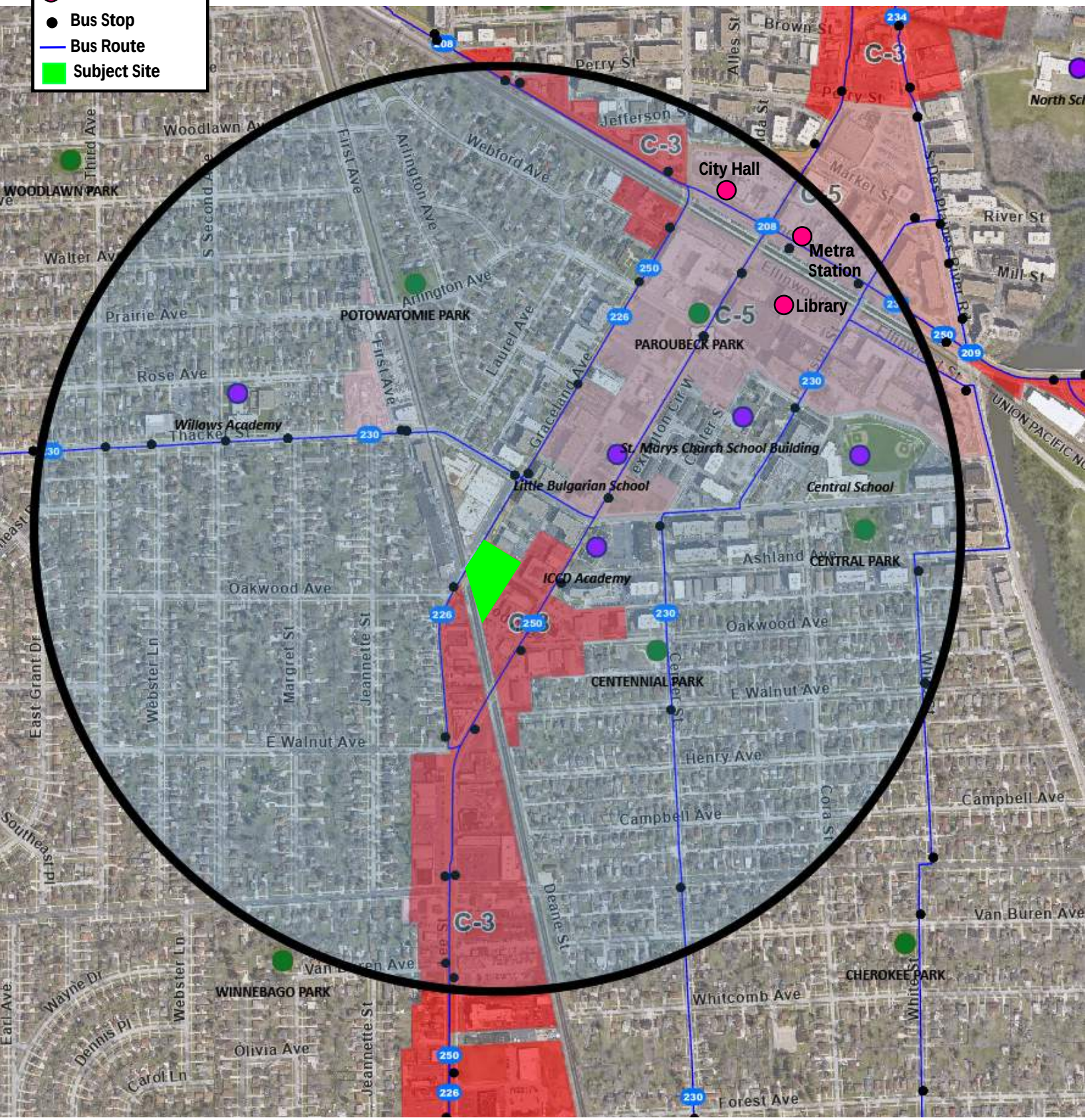
5. The proposed amendment reflects responsible standards for development and growth.

   The proposed amendment is consistent with responsible standard for development and growth by promoting increase density at a location where it can be accommodated that is proximate to public transit and non-vehicular travel paths, such as bike corridors. It increases the utilization of existing municipal infrastructure without taxing such infrastructure and does so while enhancing the municipal tax base.

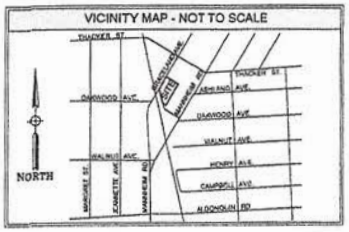
REAL PROPERTY TAX BASE IMPACT

The 2021 real property taxes for the property were $43,958.09. The anticipated real property taxes for the property after completion and occupancy of the proposed development will be $224,000 (2023 dollars).

Services within 0.5 Mile of Subject Site



VICINITY MAP - NOT TO SCALE



ITEMS CORRESPONDING TO SCHEDULE B-II

ITEMS NOT LISTED BELOW ARE NOT MATTERS OF SURVEY.

17. Easement in favor of Commonwealth Edison Company for overhead, conduits and maintenance purposes granted by document 19763313, recorded on April 4, 1956, and the terms and conditions thereof. (Affects – see recorded document for particulars)
EXHIBIT 'A' PLAT OF SURVEY AND LEGAL DESCRIPTIONS OF EASEMENT PARCELS A AND B ARE ILLEGIBLE AND THE EASEMENT IS THEREFORE UNPLOTTABLE.
NOTE: GRANT OF EASEMENT SETS MAXIMUM BUILDING HEIGHT OVER EASEMENT AT 100.00 FEET.

18. Grant of Easement to Wisconsin Central Railway Company for construction, maintenance, and operation of spur tracks reserved as document no. 8278548, and the terms and conditions contained therein. (Affects – see recorded document for particulars)
DOCUMENT WAS NOT PROVIDED AT THE TIME OF SURVEY AND HAS NOT BEEN REVIEWED.
NO EVIDENCE OF SPUR TRACKS ON THE SUBJECT PROPERTY WERE OBSERVED AT TIME OF SURVEY.

19. Rights of the public, State of Illinois and the Municipality in and to the Southwesterly 33 feet of Lots 8 and 9 Lying Northwesterly of and parallel to those parts of Lot 8 and Lot 9 as conveyed to Chicago and Northwestern Railroad Company, as exclusive for road purposes by plat dated April 17, 1947 and recorded May 13, 1947 as document 2013879.
33' RIGHT-OF-WAY PER DOCUMENT IS PARTIALLY ILLEGIBLE AND THEREFORE CAN NOT BE RETRACED.
NOTE: TAKING DOCUMENT 666085 WAS NOT PROVIDED AT TIME OF SURVEY AND HAS NOT BEEN REVIEWED.
33' RIGHT-OF-WAY IS PLOTTED HEREON AS MONUMENTED AND OCCUPIED.

20. Grant of Easement to the City of Des Plaines to construct, operate, repair, maintain, and inspect the pavement, curb, sidewalk and utilities located within the easement recorded as document no. 0020807804, and the terms and conditions contained therein.
(Affects – see recorded document for particulars)
5' EASEMENT PER DOCUMENT IS PLOTTED HEREON.

MISCELLANEOUS NOTES

1. ONLY THOSE BUILDING LINE RESTRICTIONS OR EASEMENTS SHOWN ON A RECORDED SUBDIVISION PLAT ARE SHOWN HEREON UNLESS THE DESCRIPTIONS ORDERED TO BE SURVEYED CONTAINS A PROPER DESCRIPTION OF THE REQUIRED BUILDING LINES OR EASEMENTS.
2. ALL DISTANCES IN FEET AND DECIMAL PARTS THEREOF. NO DIMENSIONS TO BE ASSUMED FROM SCALING.
3. COMPARE YOUR DESCRIPTION AND SITE MARKINGS WITH THIS PLAT AND AT ONCE REPORT ANY DISCREPANCIES WHICH YOU MAY FIND.
4. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, EASEMENTS, SERVITUDES AND POSSIBLE ENCROACHMENTS; ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
5. NO RECORD EVIDENCE OF CEMETERIES, BURIAL GROUNDS OR GRAVESITES WAS PROVIDED TO SURVEYOR, NOR WAS EVIDENCE OBSERVED AT THE TIME OF SURVEY.
6. THE PROPERTY SURVEYED AND SHOWN HEREON IS THE SAME PROPERTY DESCRIBED IN THE REFERENCED TITLE COMMITMENT.
7. BEARING BASIS: STATE PLANE COORDINATE SYSTEM ILLINOIS EAST ZONE: E'LY LINE OF GRACELAND AVENUE N30°29'27"E
8. THE PROPERTY HAS ACCESS TO GRACELAND AVENUE AND OAKWOOD AVENUE, BOTH PUBLIC STREETS.
9. UP TO SIX FEET OF SNOW AND ICE ALONG THE PERIMETER OF THE PROPERTY LINE AT THE TIME OF SURVEY.
10. TABLE A ITEMS:

TABLE A #2: THE ADDRESS OF THE SUBJECT PROPERTY AS FOUND IN PUBLIC RECORDS IS 1217 THACKER STREET, DES PLAINES. NO ADDRESS WAS OBSERVED AT THE TIME OF THIS SURVEY.

TABLE A #4: GROSS LAND AREA: 53,472 SQUARE FEET, OR 1.23 ACRES.

TABLE A #7(A), #7(b)(1), #7(C): THERE ARE NO BUILDINGS ON THE SUBJECT PROPERTY.

TABLE A #8: SNOW COVER AND EXTREMELY FADED STRIPING CONDITIONS AT THE TIME OF SURVEY, STRIPING SHOWN HEREON IS BASED ON PRIOR AERIAL PHOTOGRAPHY, APPROXIMATELY 145 STANDARD STRIPED PARKING SPACES AND 0 HANDICAPPED STRIPED PARKING SPACES.

TABLE A #10: NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WAS OBSERVED AT THE TIME OF THIS SURVEY.

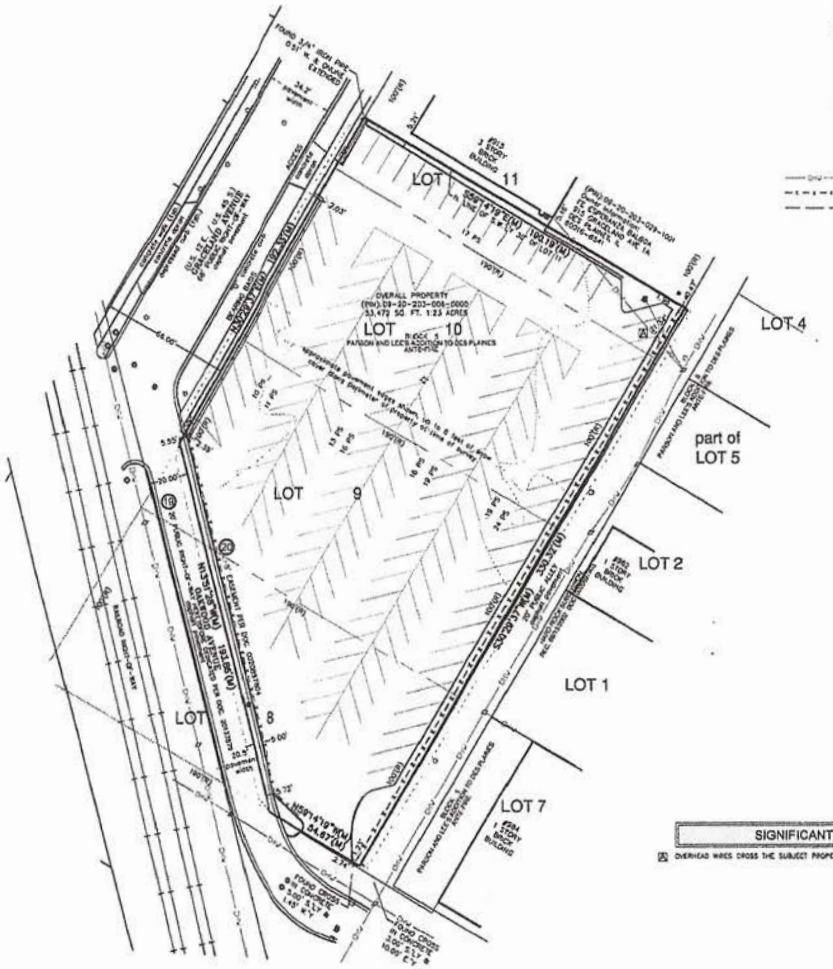
TABLE A #17: NO RECORD EVIDENCE OF PROPOSED CHANGES IN STREET RIGHT OF WAY LINES WAS PROVIDED TO THE SURVEYOR, NOR WAS EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OR OF COMPLETED CHANGES IN STREET RIGHT OF WAY LINES OBSERVED AT THE TIME OF THIS SURVEY.

TABLE A #18: THE SURVEYOR WAS NOT PROVIDED ANY DOCUMENTATION, WAS NOT MADE AWARE OF, AND DID NOT OBSERVE ANY GROUND MARKINGS ON THE SURVEYED PROPERTY WITH REGARDS TO WETLANDS ON THE SURVEYED PROPERTY. NO ENVIRONMENTAL ASSESSMENT OR AUDIT WAS PERFORMED ON THE SUBJECT PARCEL BY O CONSULTING, INC.

ZONING INFORMATION

LEGEND OF SYMBOLS & ABBREVIATIONS

(R) MEASURED
(M) RECORD
BOLLARD / POLE / POST
SIGN POST
GAS METER
ELECTRIC BOX
ELECTRIC MANHOLE
LIGHT POLE
UTILITY POLE
RAILROAD SIGNAL POLE
MANHOLE
INLET
FIRE HYDRANT
OVERHEAD WIRE(S)
FENCE, CHAIN-LINK
EASEMENT LINE



SIGNIFICANT OBSERVATIONS

(A) OVERHEAD WIRES CROSS THE SUBJECT PROPERTY BY UP TO 31.34' ALONG THE NORTHERLY LINE.

FLOOD NOTE

TABLE A #3: BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X-UNSHADED" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 17031C-0217-J, WHICH BEARS AN EFFECTIVE DATE OF 08/19/2008 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

ZONE "X-UNSHADED" DENOTES AREAS OF MINIMAL FLOOD HAZARD THAT ARE DETERMINED TO BE OUTSIDE THE SPECIAL FLOOD HAZARD AREA AND HIGHER THAN THE ELEVATION OF THE 0.2-PERCENT-ANNUAL-CHANCE (OR 500-YEAR) FLOOD.

LEGAL

THE USE OF THIS DOCUMENT'S FORMAT IS STRICTLY LIMITED AND CONTINGENT UPON THE WRITTEN CONSENT AND PERMISSION OF BOCK & CLARK CORPORATION, AN NV5 COMPANY.
©2021 BOCK AND CLARK CORPORATION, AN NV5 COMPANY

THIS SURVEY WAS PREPARED FOR THE PURPOSE OF THIS REAL ESTATE TRANSACTION ONLY AND NO FURTHER PARTIES OTHER THAN THOSE CERTIFIED ABOVE SHALL RELY ON IT FOR ANY OTHER PURPOSE OR TRANSACTION.

RECORD DESCRIPTION

LOTS 8 AND 9 (EXCEPT THAT PART OF SAID LOTS 8 AND 9 CONVEYED TO RAILROAD BY DOCUMENT NO. 666085) AND LOT 10 AND THE SOUTHWESTERLY 33 FEET OF LOT 11 IN BLOCK 5 IN PARSON AND LEE'S ADDITION TO DES PLAINES IN SECTION 17 AND 20, TOWNSHIP 41 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

THE LANDS SURVEYED, SHOWN AND DESCRIBED HEREON ARE THE SAME LANDS AS DESCRIBED IN THE TITLE COMMITMENT PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NO. 3085929, DATED FEBRUARY 19, 2021.

NOTE: DOCUMENT 666085 WAS NOT PROVIDED AT TIME OF SURVEY AND HAS NOT BEEN REVIEWED.

SCALE : 1" = 30'

ALTA/NSPS LAND TITLE SURVEY

Parking Lot Des Plaines, IL
NV5 Project No. 2021007983.001
PIN: 09202033000900, Des Plaines, IL

based upon Title Commitment No. 3085929
of First American Title Insurance Company
bearing an effective date of February 19, 2021

Surveyor's Certification

To: First American Title Insurance Company, and Bock & Clark Corporation, an NV5 Company.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 6b, 7a, 7(c), 7c, 8, 9, 13, 14, 16, 17, 18, and 20 of Table A thereof.
The field work was completed on 02/23/2021.

PRELIMINARY

Kevin C. Lewis
Registered Land Surveyor No. 3581
In the State of Illinois
Date of Plat: 03/09/2021
Date of Last Revision:
Newark Project No.: 2021007983.001

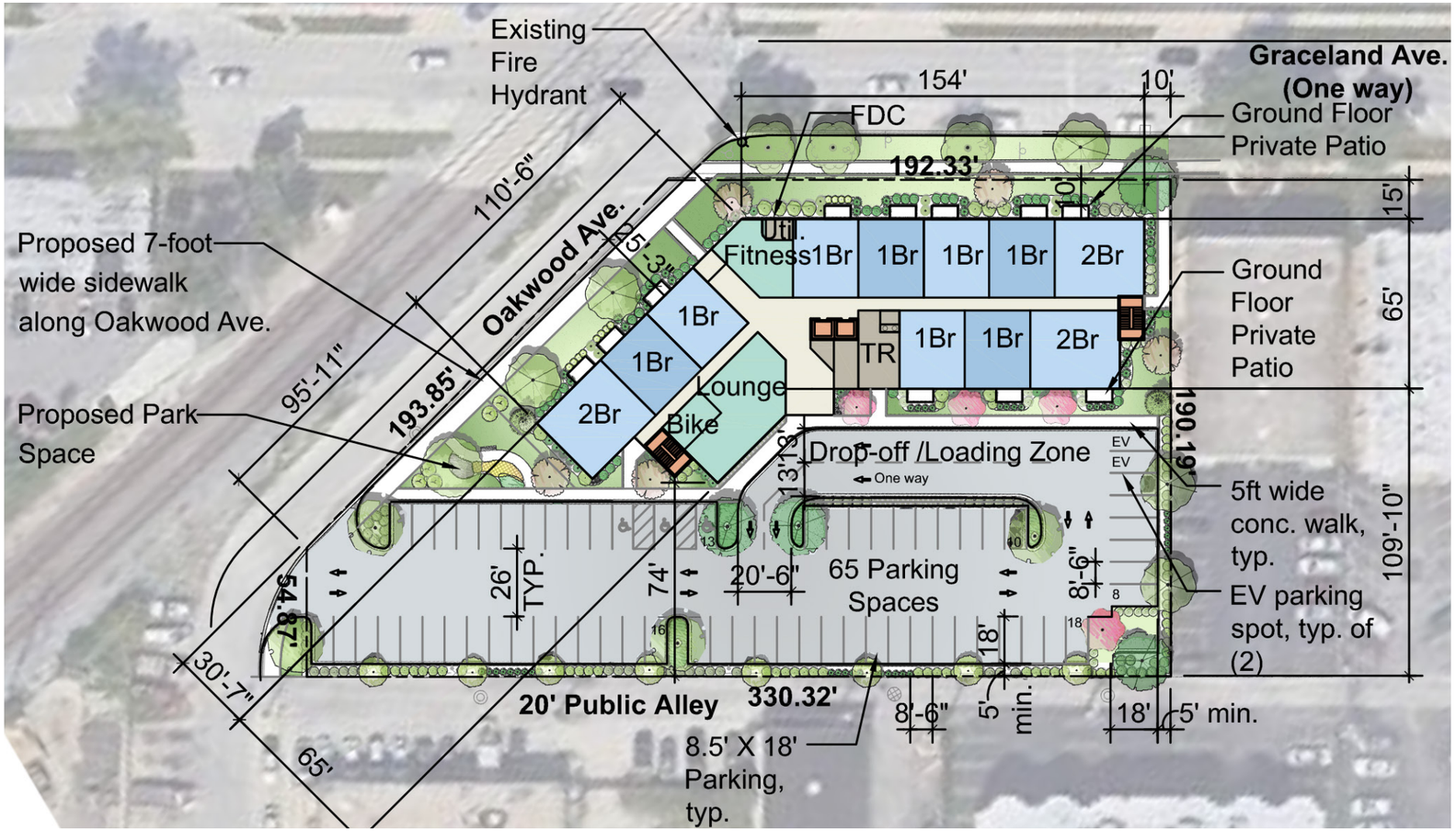
Survey Performed By:
NV5 Consulting, Inc.
200 Marquardt Drive, Suite 101
Wheeling, IL 60090
Phone: 847-215-1133
1129 Main Street
Union Grove, WI 53182
Phone: (262) 878-8320
e-mail: kevin.lewis@nv5.com

C:\NV5 Projects\2021\2021007983.dwg

SHEET 1 OF 1

Bock & Clark Corporation
an NV5 Company
NV5
Transaction Services 1-800-SURVEYS (787-8397)
3550 W. Market Street, Suite 200, Akron, Ohio 44333
www.BockandClark.com maywehelpyou@bockandclark.com www.NV5.com

SURVEY | ZONING | ENVIRONMENTAL | ASSESSMENT



Gross Floor Area	= 14,537 sf per floor	
Dwelling Area	= 9,090 sf per floor	
Per Floor:		
	Resi Ratio	Units Count
2Br	27%	3
1Br	73%	8
Total		**11**

Overall Gross Floor Area	**=**	**57,542 sf**
Total Dwelling Area	**=**	**46,794 sf**
# of stories	**=**	**4**

TOTAL:

	Resi Ratio	Units Count	Resi Ratio	Parking Req'd
2Br	27%	15	1.5	22.5
1Br	73%	41	1	41
Total		**56**		**64 req'd**

Overall: **61 Standard + 3 Accessible Parking**
Total: 65 Parking Provided (64 req'd)

0' 60'

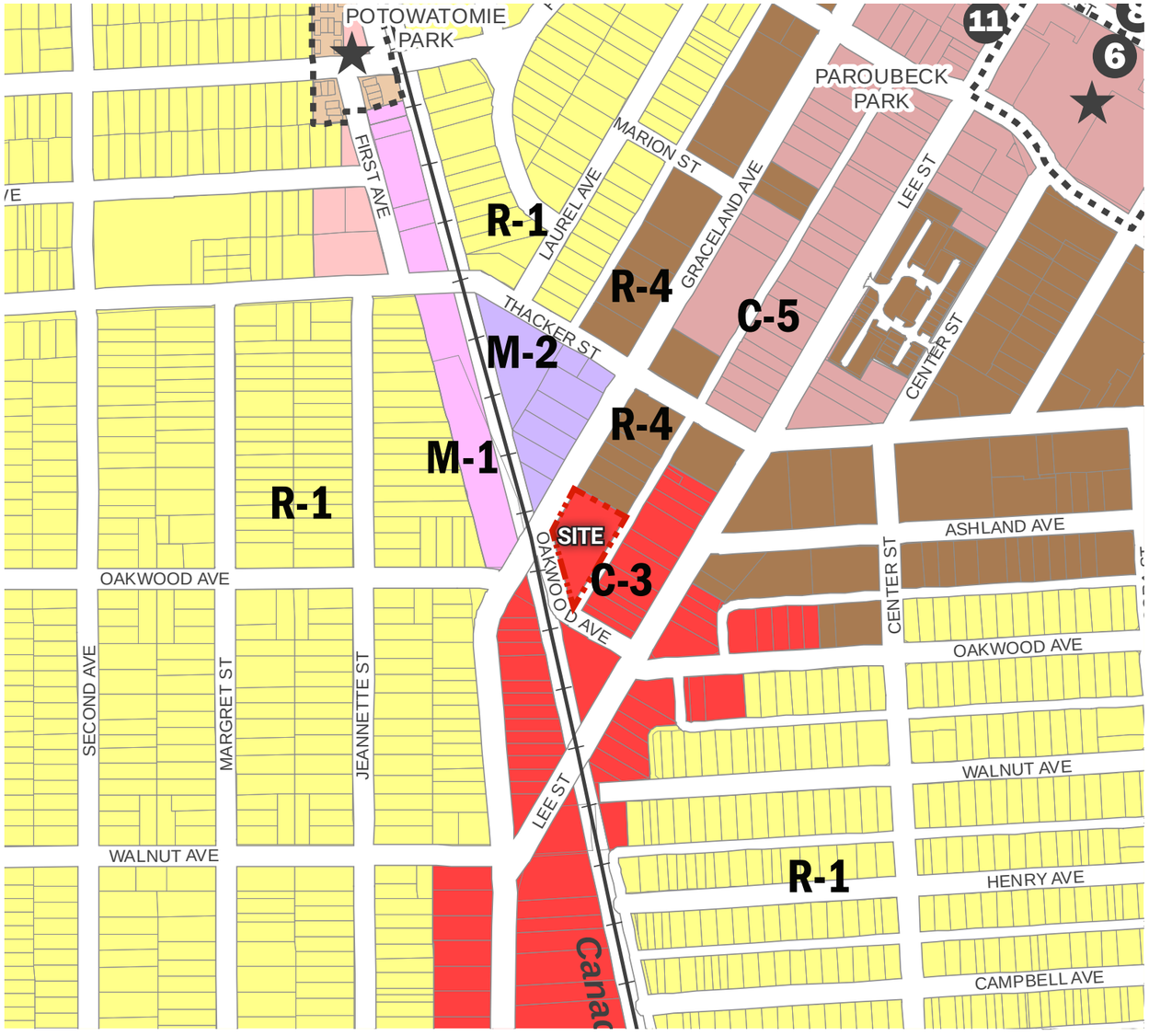
Owner/Developer:
Luz and Associates #1 LLC

Architect:
FitzGerald

Graceland and Oakwood

Des Plaines, Illinois

Issued for PZB Hearing | July 18, 2023



ZONING MAP

Single Family Residential

R-1 Single Family Residential

Multi Family Residential

R-2 Two Family Residential
R-3 Townhouse Residential
R-4 Central Core Residential
M-H Mobile Home

Commercial

C-1 Neighborhood Shopping
C-2 Limited Office Commercial
C-3 General Commercial
C-4 Regional Shopping
C-5 Central Business
C-6 Casino District
C-7 High Density Campus Commercial

Manufacturing

M-1 Limited Manufacturing
M-2 General Manufacturing
M-3 Special Manufacturing

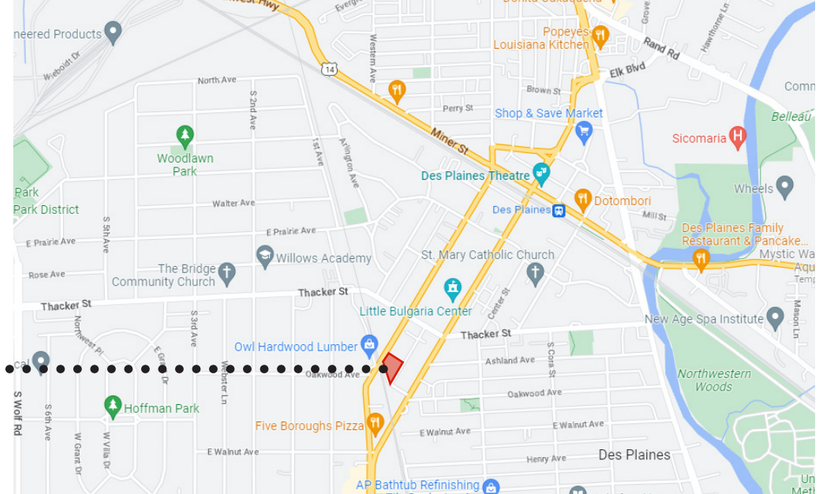
Other

★ Planned Unit Development

Institutional

I-1 Institutional

PROJECT SITE

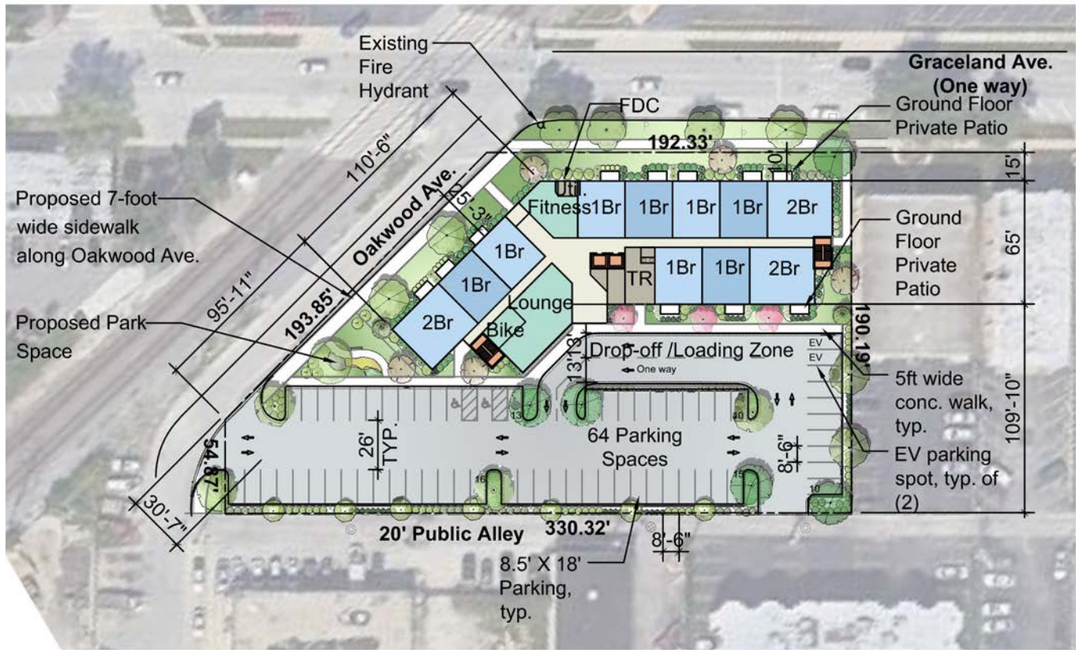


LOCATION MAP

Gross Floor Area = 14,537 sf per floor
Dwelling Area = 9,090 sf per floor

Per Floor:

	Resi Ratio	Units Count
2Br	27%	3
1Br	73%	8
Total		**11**



Level 1 Plan

Gross Floor Area = 14,335 sf per floor
Dwelling Area = 12,568 sf per floor

Per Floor:

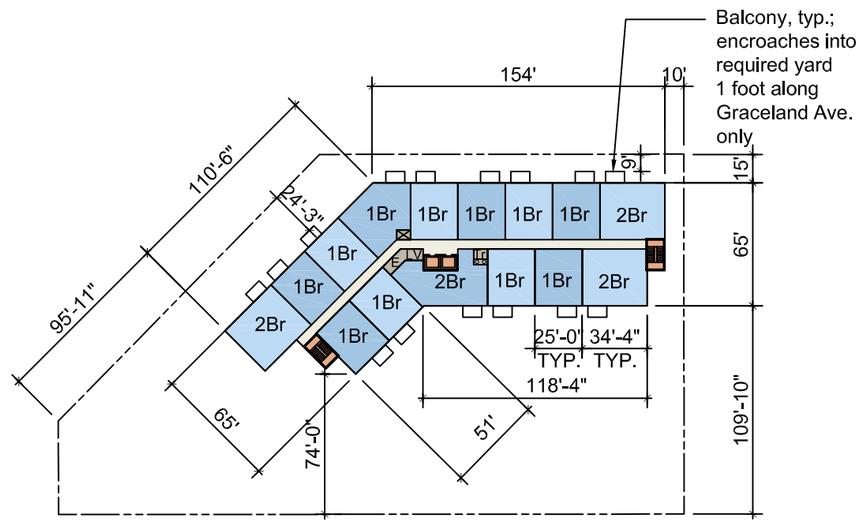
	Resi Ratio	Units Count
2Br	27%	4
1Br	73%	11
Total		**15**

Overall Gross Floor Area = 57,542 sf
Total Dwelling Area = 46,794 sf
# of stories = 4

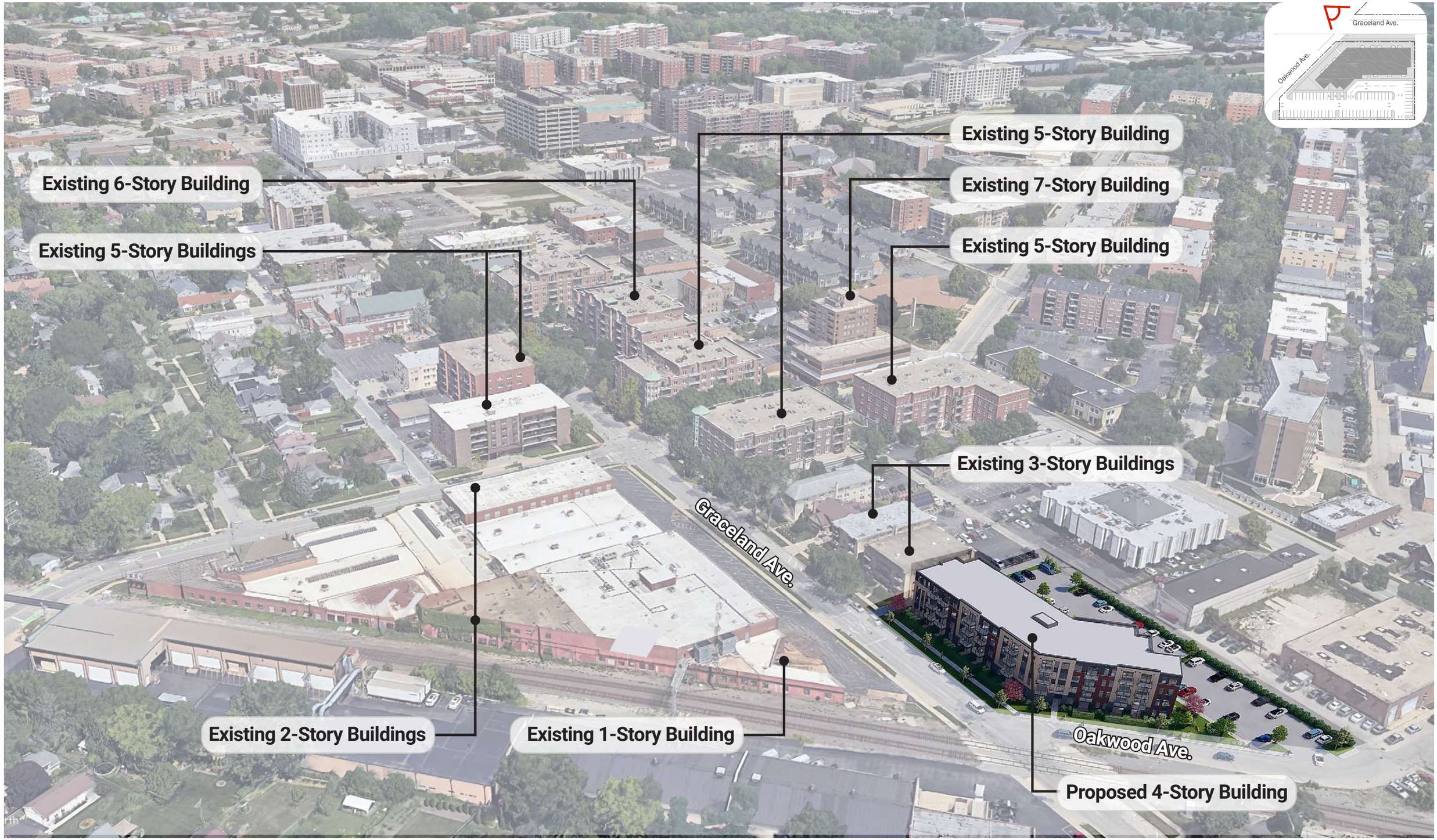
TOTAL:

	Resi Ratio	Units Count	Resi Ratio	Parking Req'd
2Br	27%	15	1.5	22.5
1Br	73%	41	1	41
Total		**56**		**64 req'd**

Overall: 61 Standard + 3 Accessible Parking
Total: 64 Parking Provided (64 req'd)

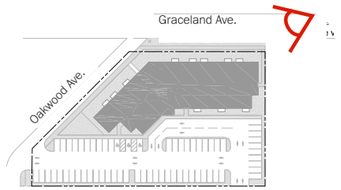


Levels 2-4 Plan



Luz and Associates #1 LLC

Aerial View



Luz and Associates #1 LLC

Site B - Eye Level View along Graceland

SOUTHEAST ELEVATION

NORTHWEST ELEVATION

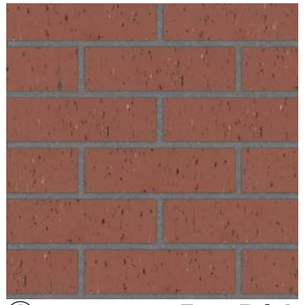
SOUTHWEST ELEVATION

NORTHEAST ELEVATION

Luz and Associates #1 LLC

Proposed Building Elevations - Site B

① **Face Brick**



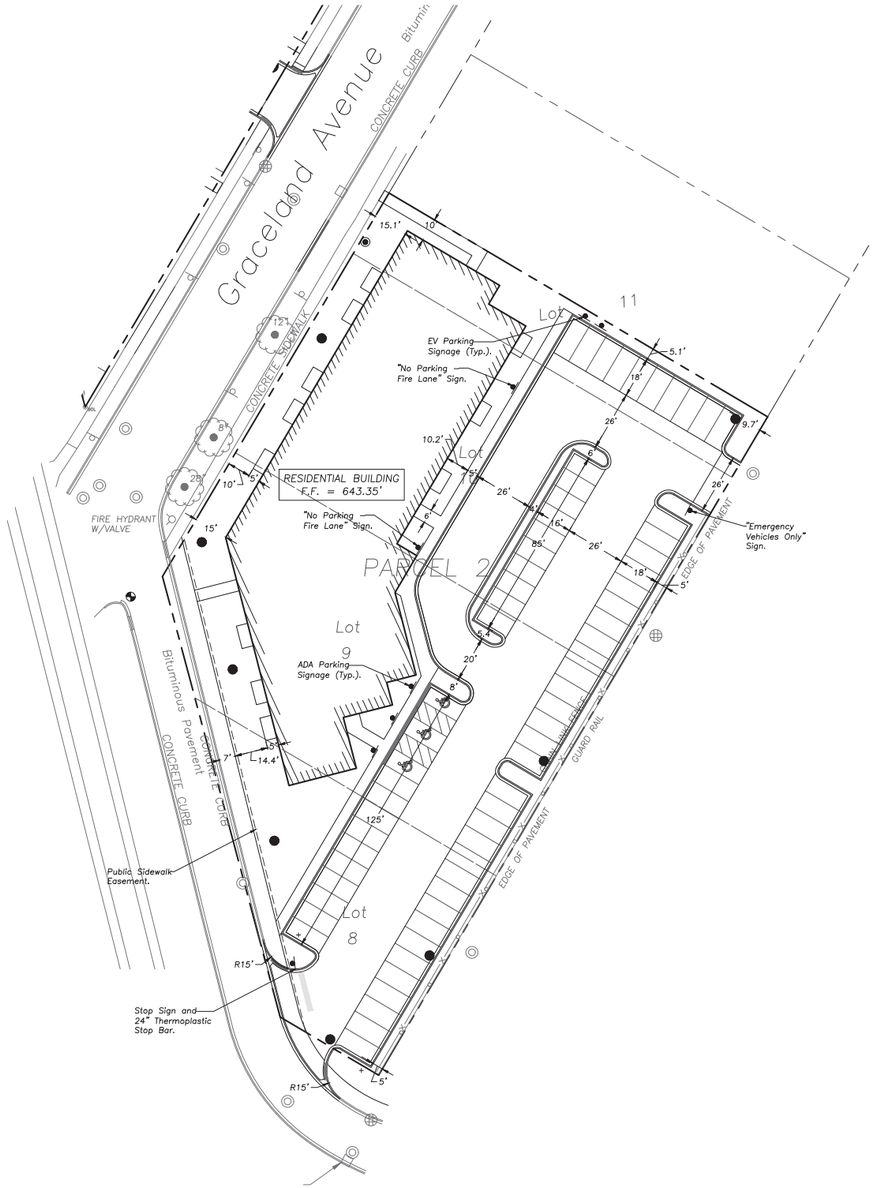
② **Face Brick**

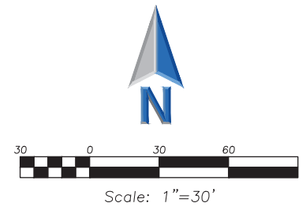
③ **Face Brick**

④ **Cast Stone**

⑤ **Frosted Glass**

⑥ **Fiber Cement**





Scale: 1"=30'

LEGEND

EXISTING		PROPOSED
	Manhole	
	Catch Basin	
	Inlet	
	Area Drain	
$O_{C.O.}$	Clean Out	$O_{C.O.}$
	Flared End Section	
	Storm Sewer	
	Sanitary Sewer	
	Combined Sewer	
W	Water Main	W
G	Gas Line	G
OH	Overhead Wires	OH
E	Electrical Cable (Buried)	E
T	Telephone Line	T
	Fire Hydrant	
	Valve Vault	
V_B	Buffalo Box	V_B
O_{DS}	Downspout	O_{DS}
O_{BOL}	Bollard	O_{BOL}
G_V	Gas Valve	
G_M	Gas Meter	
E_M	Electric Meter	
C_E	ComEd Manhole	
H	Hand Hole	
	Light Pole	
	Light Pole w/ Mast Arm	
	Utility Pole	
T_P	Telephone Pedestal	
T_M	Telephone Manhole	
	Sign	
	Fence	
	Accessible Parking Stall	
	Curb & Gutter	
	Depressed Curb	
x C 782.50	Curb Elevation	C 782.50
x G 782.00	Gutter Elevation	G 782.00
x P 783.25	Pavement Elevation	P 783.25
x W 782.10	Sidewalk Elevation	W 782.10
x 784.0	Ground Elevation	x 784.0
x T/W 785.20	Top of Retaining Wall Elevation	T/W 785.20
	Swale	
781	Contour Line	781
	Deciduous Tree	
	Coniferous Tree	
	Brushline	
	Tree Protection Fencing at Drip Line	

GEOMETRY NOTES

1. All Dimensions Contained Herein Reference Back Of Curb, Face Of Retaining Wall, Edge Of Pavement, Center of Structure And Outside Face Of Building Foundation Unless Otherwise Noted.
2. All Pavement Striping Shall Be 4" Wide Yellow Paint Per Specifications, **Two Coats for Latex Paints**. All Cross Hatch Striping Shall Be 45° At 2'-0" Centers.
3. All Accessible Parking Signs (R7-8) Must Be Placed at the Center of the Space and Within 5 Feet of the Space.
4. Refer to Architectural Drawings for Exact Locations of All Buildings.
5. Refer to Architectural Drawings for Locations and Details of All Permanent Site Fencing.
6. Traffic Sign Posts Shall Be Breakaway Green U-Channel Posts, 2-lb/ft, 11 Gauge Steel, Embedded 42" Minimum Into Ground.

GENERAL NOTES

1. The Location of Existing Underground Utilities, Such As Watermains, Sewers, Gas Lines, Etc., As Shown On The Plans, Has Been Determined From The Best Available Information and Is Given For The Convenience of The Contractor. However, The Owner and The Engineer Do Not Assume Responsibility In The Event That During Construction, Utilities Other Than Those Shown May Be Encountered, and That The Actual Location of Those Which Are Shown May Be Different From The Location As Shown On The Drawings. Contact Engineer Immediately If Surface and/or Subsurface Features Are Different Than Shown On The Drawings.
2. Notify The Engineer Without Delay of Any Discrepancies Between the Drawings and Existing Field Conditions.
3. Contractor Shall Provide Private Utility Locating Services for the Project Area.
4. Notify The Owner, Engineer and The City of Des Plaines A Minimum of 48 Hours In Advance of Performing Any Work.
5. All Areas, On or Off Site, Disturbed During Construction Operations and Not Part of the Work As Shown Hereon Shall Be Restored To Original Condition to the Satisfaction of the Owner at No Additional Cost to the Owner. It is Incumbent Upon Contractor to Show That Damaged Areas Were Not Disturbed By Construction Operations.
6. These Drawings Assume That The Contractor Will Utilize An Electronic Drawing File (DWG) to Stake All Site Improvements Accordingly. Contractor Shall Re-Establish Horizontal Control. Horizontal Control Points Not Provided.
7. No Person May Utilize The Information Contained Within These Drawings Without Written Approval From Eriksson Engineering Associates, Ltd.
8. The Engineer Is Furnishing These Drawings For Construction Purposes As A Convenience To The Owner, Architect, Surveyor, or Contractor. Prior To The Use Of These Drawings For Construction Purposes, The User Of This Media Shall Verify All Dimensions And Locations Of Buildings With The Foundation Drawings And Architectural Site Plan, and Coordinate All Dimensions and Locations of All Site Items. If Conflicts Exist The User Of This Information Shall Contact The Engineer Immediately.
9. Provide An As-built Survey Prepared By A Licensed Professional Land Surveyor In Accordance With The Authorities Having Jurisdiction Which Shall Include As a Minimum All Detention Basins and Best Management Practices, Include All Storm and Sanitary Sewers, Structure Locations, Sizes, Rim and Invert Elevations, Final Detention Volume Calculations For The Basin(s), Watermain and Valve and Appurtenance Locations.
10. The Illinois Department Of Transportation Standard Specifications For Road And Bridge Construction Latest Edition, And All Addenda Thereto, Shall Govern The Earthwork And Paving Work Under This Contract Unless Noted Otherwise.

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER RESIDENTIAL COMMUNITY

GRACELAND & THACKER
DES PLAINES, ILLINOIS

Reserved for Seal:

No.	Date	Description
	05/22/23	ISSUE FOR VILLAGE SUBMITTAL
	06/30/23	ISSUED FOR PZB
	07/18/23	ISSUED FOR PZB

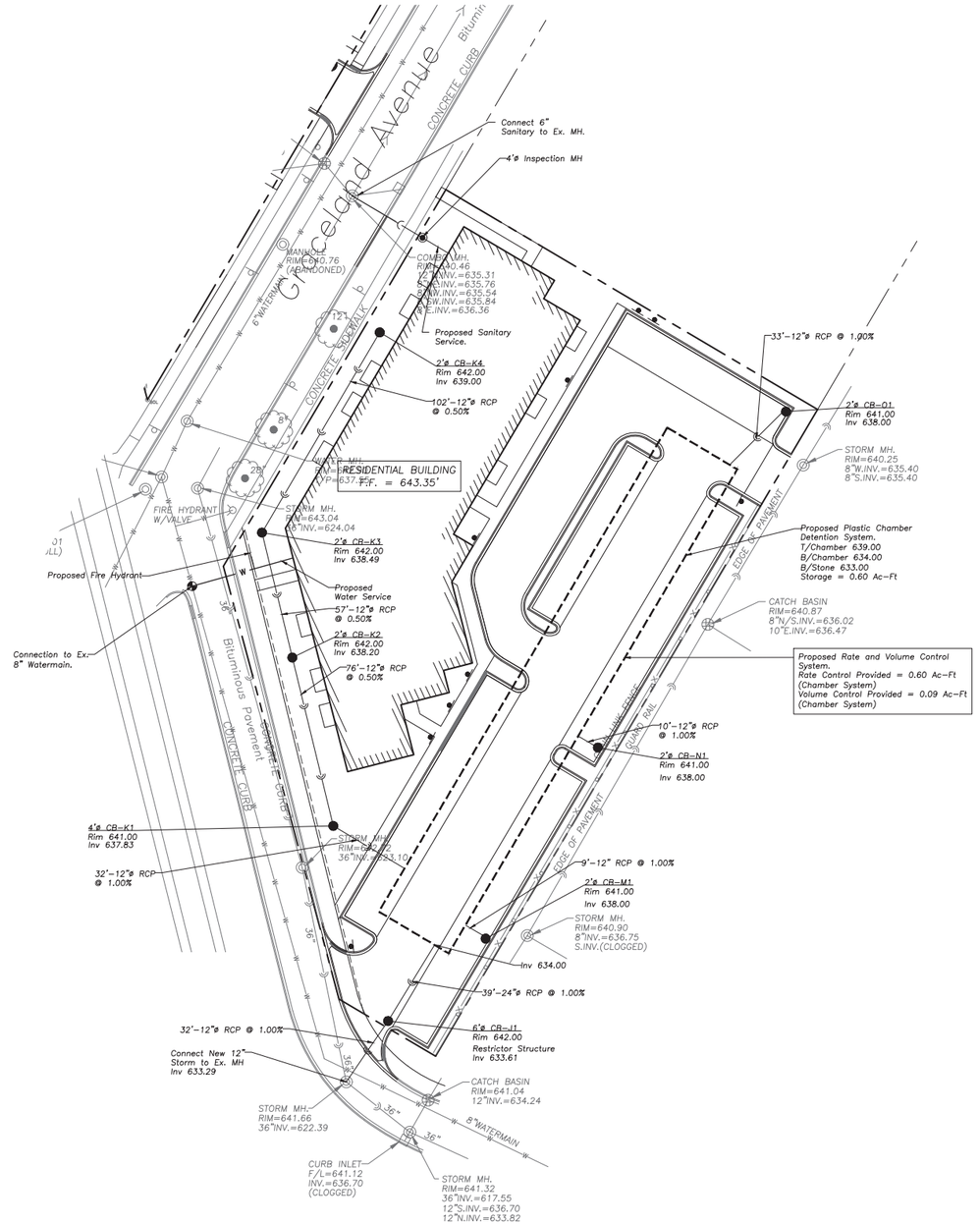
Design By:	Approved By:	Date:
CS	CMF	05/30/23

Sheet Title:

SITE GEOMETRY PLAN - SITE B

Sheet No:

C201



30 0 30 60

Scale: 1"=30'

UTILITY NOTES

1. *Utility Service Lines as Shown Hereon are Approximate. Coordinate The Exact Locations With The Plumbing Drawings. Coordinate The Locations With The Plumbing Contractor and/or the Owner's Construction Representative Prior to Installation of Any New Utilities.*
2. *Refer to Plumbing Drawings for Continuation of All Utilities Within 5 Feet of Building Face.*
3. *Field Verify Invert & Locations of Existing Utility Mains Prior to Installing Any On-Site Utilities or Structures. All Elevations and Inverts Referencing Said Utility Shall Be Field Verified Prior To Installation Of Any New Structures Or Utilities, and Adjustments Shall Be Made as Necessary. Contact Engineer Prior to Installation if Discrepancy Exists With These Drawings.*
4. *Coordinate the Relocation Of Any Utilities Encountered And Replacement Of Any Utilities Damaged Within Influence Zone Of New Construction. Contact Engineer If The Existing Utilities Vary Appreciably From The Plans.*
5. *All Water Main and Services Shall Be Installed at a Minimum Depth of 5.5' From Top of Finished Ground Elevation to Top of Main.*
6. *Protection of water supplies shall be as described in Section 370.350 of the Illinois Recommended Standards for Sewage Works or Section 41-2.01 of the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.*
7. *Clean Out All Existing and Proposed Storm Inlets and Catch Basins at the Completion of Construction.*
8. *Provide Adequate Coupling Device to Accommodate HDPE Storm Sewer.*
9. *The "Standard Specifications for Water and Sewer Main Construction in Illinois", Current Edition Shall Govern Work Where Applicable.*
10. ***Rebuild Existing Structures and Adjust Rim Elevations to Match Proposed Ground Elevations.***

STRUCTURE NOTES

1. *All Catch Basins to Be Installed in Paved Areas Shall Have Neenah R2504-D Frame & Grate or Approved Equal.*
2. *All Catch Basins to Be Installed in Landscaped Areas Shall Have **Neenah R4340-B Frame & Grate** or Approved Equal. For Cone Sections Install a Minimum of 4" Grade Rings For Topsoil Respread. For Flat Slab Tops Install the Following Minimum Height of Grade Rings:*
   4' Diameter Structure- 4"
   5' Diameter Structure- 6"
   6' Diameter Structure- 8"
3. *All Catch Basins to Be Installed Along Curb and Gutter (B-6.12) Shall Have Neenah R3281-A Frame & Grate or Approved Equal.*
4. *All Catch Basins to Be Installed Along Depressed Curb and Gutter (Dep B-6.12) Shall Have East Jordan Iron Works 5120 Catch Basin Inlet Frame and Grate, or Approved Equal.*
5. *Where Structures are Shown Along the Curbline, Unless Specifically Stated Otherwise, It Is Intended That the Frame of the Structure Is To Fall Within the Flowline Of The Gutter or at the Pavement Edge Where No Gutter Exists.*
6. *All Manholes Shall Have Neenah R1713-B Frame & Closed Lid or Approved Equal, with "Storm" or "Sanitary" Imprinted as Appropriate.*
7. *For All Structures Indicated to be Adjusted, Remove and Install Adjusting Rings, Cone Section, Barrel Sections, or Flat Slab Top as Necessary.*
8. *All Sanitary Manholes Shall Include a Chimney Seal.*

LEGEND

EXISTING		PROPOSED
	Manhole	
	Catch Basin	
	Inlet	
	Area Drain	
O_{CO}	Clean Out	O_{CO}
	Flared End Section	
	Storm Sewer	
	Sanitary Sewer	
	Combined Sewer	
W	Water Main	W
G	Gas Line	G
OH	Overhead Wires	OH
E	Electrical Cable (Buried)	E
T	Telephone Line	T
	Fire Hydrant	
	Valve Vault	
V_B	Buffalo Box	V_B
O_{DS}	Downspout	O_{DS}
O_{BOL}	Bollard	O_{BOL}
G_V	Gas Valve	
G_M	Gas Meter	
E_M	Electric Meter	
C_E	ComEd Manhole	
H	Hand Hole	
	Light Pole	
	Light Pole w/ Mast Arm	
	Utility Pole	
T_P	Telephone Pedestal	
T_M	Telephone Manhole	
	Sign	
	Fence	
	Accessible Parking Stall	
	Curb & Gutter	
	Depressed Curb	
x C 782.50	Curb Elevation	C 782.50
x G 782.00	Gutter Elevation	G 782.00
x P 783.25	Pavement Elevation	P 783.25
x W 782.10	Sidewalk Elevation	W 782.10
x 784.0	Ground Elevation	x 784.0
x T/W 785.20	Top of Retaining Wall Elevation	T/W 785.20
	Swale	
781	Contour Line	781
	Deciduous Tree	
	Coniferous Tree	
	Brushline	
	Tree Protection Fencing at Drip Line	

GENERAL NOTES

1. *The Location of Existing Underground Utilities, Such As Watermains, Sewers, Gas Lines, Etc., As Shown On The Plans, Has Been Determined From The Best Available Information and Is Given For The Convenience of The Contractor. However, The Owner and The Engineer Do Not Assume Responsibility In The Event That During Construction, Utilities Other Than Those Shown May Be Encountered, and That The Actual Location of Those Which Are Shown May Be Different From The Location As Shown On The Drawings. Contact Engineer Immediately If Surface and/or Subsurface Features Are Different Than Shown On The Drawings.*
2. *Notify The Engineer Without Delay of Any Discrepancies Between the Drawings and Existing Field Conditions.*
3. *Contractor Shall Provide Private Utility Locating Services for the Project Area.*
4. *Notify The Owner, Engineer and The City of Des Plaines A Minimum of 48 Hours In Advance of Performing Any Work.*
5. *All Areas, On or Off Site, Disturbed During Construction Operations and Not Part of the Work As Shown Hereon Shall Be Restored To Original Condition to the Satisfaction of the Owner at No Additional Cost to the Owner. It is Incumbent Upon Contractor to Show That Damaged Areas Were Not Disturbed By Construction Operations.*
6. *These Drawings Assume That The Contractor Will Utilize An Electronic Drawing File (DWG) to Stake All Site Improvements Accordingly. Contractor Shall Re-Establish Horizontal Control. Horizontal Control Points Not Provided.*
7. *No Person May Utilize The Information Contained Within These Drawings Without Written Approval From Eriksson Engineering Associates, Ltd.*
8. *The Engineer Is Furnishing These Drawings For Construction Purposes As A Convenience To The Owner, Architect, Surveyor, or Contractor. Prior To The Use Of These Drawings For Construction Purposes, The User Of This Media Shall Verify All Dimensions And Locations Of Buildings With The Foundation Drawings And Architectural Site Plan, and Coordinate All Dimensions and Locations of All Site Items. If Conflicts Exist The User Of This Information Shall Contact The Engineer Immediately.*
9. *Provide An As-built Survey Prepared By A Licensed Professional Land Surveyor In Accordance With The Authorities Having Jurisdiction Which Shall Include As a Minimum All Detention Basins and Best Management Practices, Include All Storm and Sanitary Sewers, Structure Locations, Sizes, Rim and Invert Elevations, Final Detention Volume Calculations For The Basin(s), Watermain and Valve and Appurtenance Locations.*
10. *The Illinois Department Of Transportation Standard Specifications For Road And Bridge Construction Latest Edition, And All Addenda Thereto, Shall Govern The Earthwork And Paving Work Under This Contract Unless Noted Otherwise.*

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEALTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER RESIDENTIAL COMMUNITY

GRACELAND & THACKER
DES PLAINES, ILLINOIS

Reserved for Seal:

No.	Date	Description
	05/22/23	ISSUE FOR VILLAGE SUBMITTAL
	06/30/23	ISSUED FOR PZB
	07/18/23	ISSUED FOR PZB

Design By:	Approved By:	Date:
CS	CMF	05/30/23

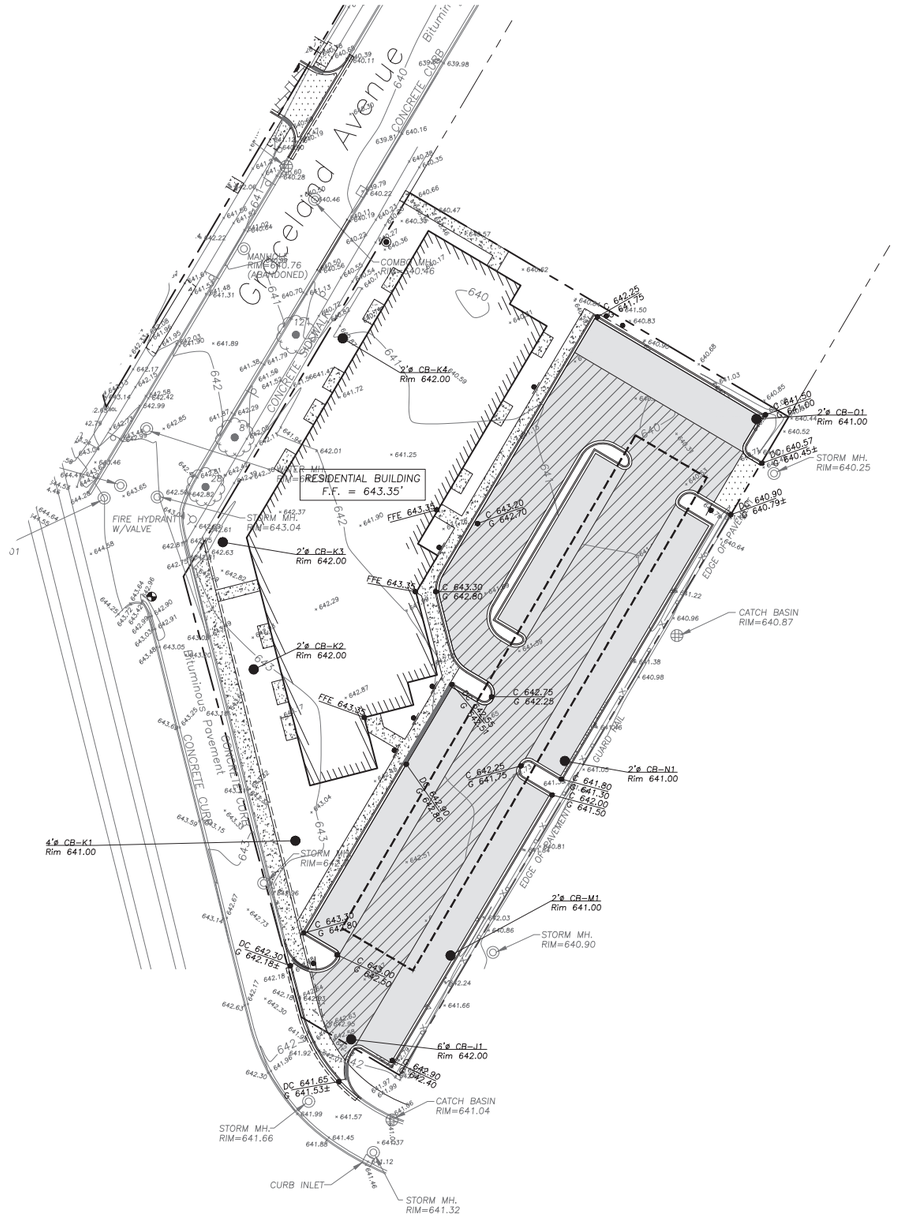
Sheet Title:

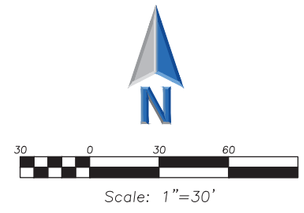
SITE UTILITY PLAN - SITE B

Sheet No:

C301

EEA - P:\23116 - Luz Associates - Graceland & Thacker\Drawings\Graceland Thacker - Site Plan.dwg
Plotted: 7/18/23 @ 4:21pm By: cfish





GRADING NOTES

1. *The Grading and Construction of Proposed Improvements Shall Be Done In A Manner Which Will Allow For Positive Drainage, and Not Cause Ponding of Stormwater on the Surface of Proposed Improvements.*
2. *All Landscaped Areas Disturbed By Construction Shall Be Respread With 6 Inches (Min.) to 12 Inches (Max.) Topsoil and **seeded** Unless Noted Otherwise On The Landscape Drawings.*
3. *Refer to Architectural Drawings for Locations and Patterns of Expansion and Control Joints in Concrete Pavement and Sidewalks.*
4. *Accessible Parking Spaces and Loading Spaces Shall Be Sloped at Maximum 2.0% in Any Direction. Maximum Sidewalk Cross Slopes Shall be 2.0%. Maximum Longitudinal Sidewalk Slope Shall Be 4.9%. Contact Engineer if Conflicts Exist.*
5. ***Rebuild Existing Structures and Adjust Rim Elevations to Match Proposed Ground Elevations.***

PAVING & SURFACE LEGEND

- ***Asphalt Pavement Section***
  1 1/2" Hot Mix Asphalt,Mix D, IL-9.5, N50
  2 1/2" Hot Mix Asphalt, IL-19.0, N50
  Prime Coat (0.25 gal/sq yd)
  8" Aggregate Base Course, Type B, Crushed, CA-6
  Non-Woven Geotextile Fabric, 5 oz/sy
- ***Heavy-Duty Asphalt Pavement Section***
  1 1/2" Hot Mix Asphalt,Mix D, IL-9.5, N50
  3 1/2" Hot Mix Asphalt, IL-19.0, N50
  Prime Coat (0.25 gal/sq yd)
  10" Aggregate Base Course, Type B, Crushed, CA-6
  Non-Woven Geotextile Fabric, 8 oz
- ***Concrete Driveway Section***
  8" Portland Cement Concrete
  6"x6" W2.9xW2.9 Welded Wire Fabric
  6" Aggregate Base Course, Type B, Crushed
- ***Concrete Sidewalk Section***
  5" Portland Cement Concrete
  6"x6" W1.4xW1.4 Welded Wire Fabric
  2" Aggregate Base Course, Type B, Crushed
- *Stormwater Overland Flow Path*
- *Ridge Line/High Point*

LEGEND

EXISTING		PROPOSED
	Manhole	
	Catch Basin	
	Inlet	
	Area Drain	
O_{CO}	Clean Out	O_{CO}
	Flared End Section	
	Storm Sewer	
	Sanitary Sewer	
	Combined Sewer	
W	Water Main	W
G	Gas Line	G
OH	Overhead Wires	OH
E	Electrical Cable (Buried)	E
T	Telephone Line	T
	Fire Hydrant	
	Valve Vault	
V_B	Buffalo Box	V_B
DS	Downspout	DS
BOL	Bollard	BOL
V_G	Gas Valve	
M_G	Gas Meter	
M_E	Electric Meter	
E	ComEd Manhole	
H	Hand Hole	
	Light Pole	
	Light Pole w/ Mast Arm	
	Utility Pole	
P_T	Telephone Pedestal	
T	Telephone Manhole	
	Sign	
	Fence	
	Accessible Parking Stall	
	Curb & Gutter	
	Depressed Curb	
x C 782.50	Curb Elevation	C 782.50
x G 782.00	Gutter Elevation	G 782.00
x P 783.25	Pavement Elevation	P 783.25
x W 782.10	Sidewalk Elevation	W 782.10
x 784.0	Ground Elevation	x 784.0
x T/W 785.20	Top of Retaining Wall Elevation	T/W 785.20
	Swale	
781	Contour Line	781
	Deciduous Tree	
	Coniferous Tree	
	Brushline	
	Tree Protection Fencing at Drip Line	

GENERAL NOTES

1. *The Location of Existing Underground Utilities, Such As Watermains, Sewers, Gas Lines, Etc., As Shown On The Plans, Has Been Determined From The Best Available Information and Is Given For The Convenience of The Contractor. However, The Owner and The Engineer Do Not Assume Responsibility In The Event That During Construction, Utilities Other Than Those Shown May Be Encountered, and That The Actual Location of Those Which Are Shown May Be Different From The Location As Shown On The Drawings. Contact Engineer Immediately If Surface and/or Subsurface Features Are Different Than Shown On The Drawings.*
2. *Notify The Engineer Without Delay of Any Discrepancies Between the Drawings and Existing Field Conditions.*
3. *Contractor Shall Provide Private Utility Locating Services for the Project Area.*
4. *Notify The Owner, Engineer and The City of Des Plaines A Minimum of 48 Hours In Advance of Performing Any Work.*
5. *All Areas, On or Off Site, Disturbed During Construction Operations and Not Part of the Work As Shown Hereon Shall Be Restored To Original Condition to the Satisfaction of the Owner at No Additional Cost to the Owner. It is Incumbent Upon Contractor to Show That Damaged Areas Were Not Disturbed By Construction Operations.*
6. *These Drawings Assume That The Contractor Will Utilize An Electronic Drawing File (DWG) to Stake All Site Improvements Accordingly. Contractor Shall Re-Establish Horizontal Control. Horizontal Control Points Not Provided.*
7. *No Person May Utilize The Information Contained Within These Drawings Without Written Approval From Eriksson Engineering Associates, Ltd.*
8. *The Engineer Is Furnishing These Drawings For Construction Purposes As A Convenience To The Owner, Architect, Surveyor, or Contractor. Prior To The Use Of These Drawings For Construction Purposes, The User Of This Media Shall Verify All Dimensions And Locations Of Buildings With The Foundation Drawings And Architectural Site Plan, and Coordinate All Dimensions and Locations of All Site Items. If Conflicts Exist The User Of This Information Shall Contact The Engineer Immediately.*
9. *Provide An As-built Survey Prepared By A Licensed Professional Land Surveyor In Accordance With The Authorities Having Jurisdiction Which Shall Include As a Minimum All Detention Basins and Best Management Practices, Include All Storm and Sanitary Sewers, Structure Locations, Sizes, Rim and Invert Elevations, Final Detention Volume Calculations For The Basin(s), Watermain and Valve and Appurtenance Locations.*
10. *The Illinois Department Of Transportation Standard Specifications For Road And Bridge Construction Latest Edition, And All Addenda Thereto, Shall Govern The Earthwork And Paving Work Under This Contract Unless Noted Otherwise.*

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER RESIDENTIAL COMMUNITY

GRACELAND & THACKER
DES PLAINES, ILLINOIS

Reserved for Seal:

No.	Date	Description
	05/22/23	*ISSUE FOR VILLAGE SUBMITTAL*
	06/30/23	*ISSUED FOR PZB*
	07/18/23	*ISSUED FOR PZB*

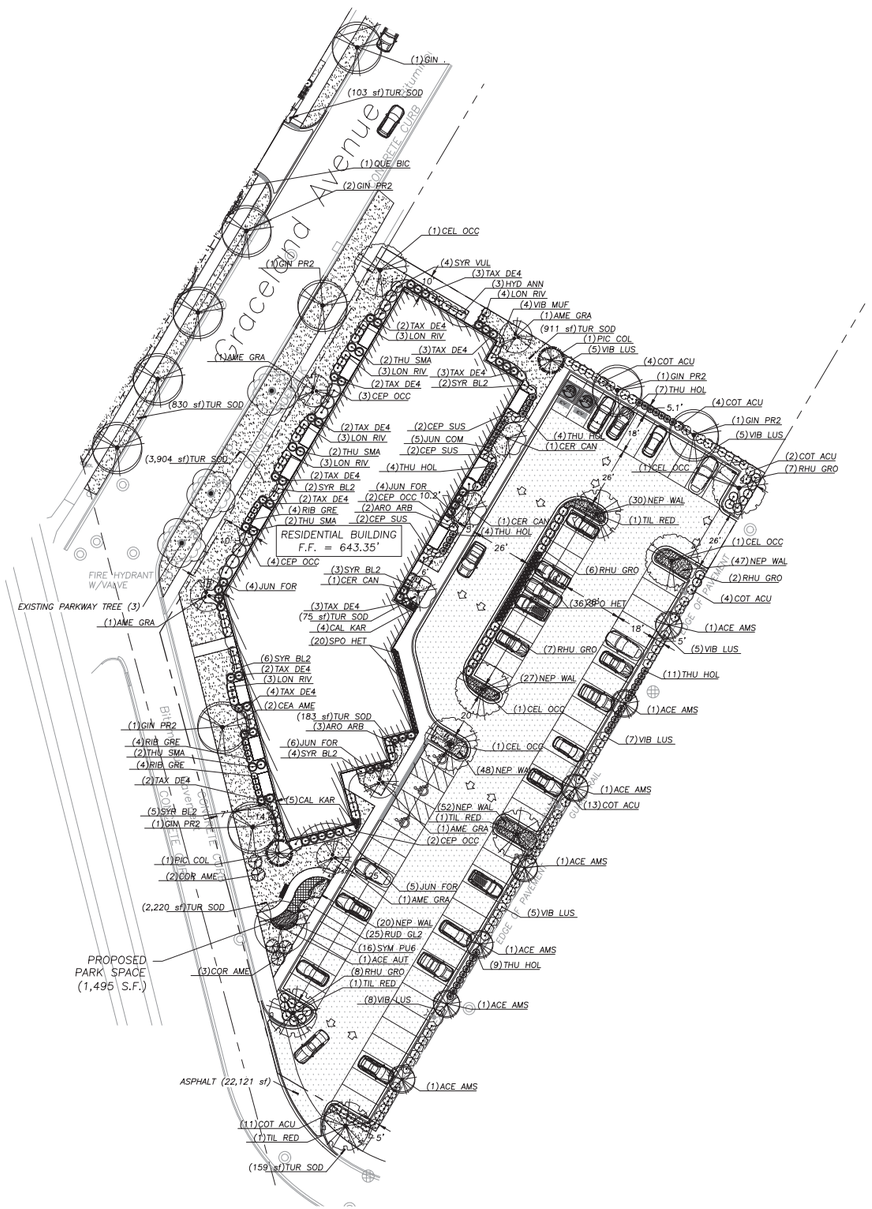
Design By:	Approved By:	Date:
CS	CMF	05/30/23

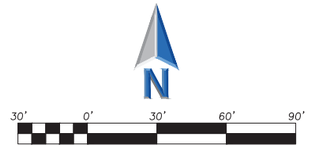
Sheet Title:

GRADING AND PAVING PLAN - SITE B

Sheet No:

C401





Scale: 1"= 30'

PLANT SCHEDULE SITE B

CANOPY TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
ACE AUT	ACER RUBRUM 'AUTUMN FLAME' / AUTUMN FLAME MAPLE	B & B	2.5" CAL.	1
ACE AMS	ACER X FREEMANII 'ARMSTRONG' / ARMSTRONG FREEMAN MAPLE	B & B	2.5" CAL.	7
CEL OCC	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	2.5" CAL.	5
GIN PR2	GINKGO BILOBA 'PRINCETON SENTRY' / PRINCETON SENTRY GINKGO	B & B	2.5" CAL.	5
TIL RED	TILIA AMERICANA 'REDMOND' / REDMOND AMERICAN LINDEN	B & B	2.5" CAL.	4
EVERGREEN TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
PIC COL	PICEA PUNGENS 'COLORADO GREEN' / BLUE SPRUCE	B & B	6' – 8' HT.	2
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
AME GRA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE APPLE SERVICEBERRY	B & B	8" CLUMP	5
CER CAN	CERCIS CANADENSIS / EASTERN REDBUD	B & B	2.5" CAL.	3
DECIDUOUS SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
ARO ARB	ARONIA ARBUTIFOLIA / RED CHOKEBERRY	B & B	30" HT.	5
CEA AME	CEANOTHUS AMERICANUS / NEW JERSEY TEA	B & B	30" HT.	2
CEP OCC	CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH	B & B	36" HT.	11
CEP SUS	CEPHALANTHUS OCCIDENTALIS 'SMCOSS' / SUGAR SHACK® BUTTONBUSH	B & B	24" HT.	6
COR AME	CORYLUS AMERICANA / AMERICAN HAZELNUT	CONT.	36" HT.	5
COT ACU	COTONEASTER ACUTIFOLIUS / PEKING COTONEASTER	B & B	36" HT.	38
LON RIV	DIERVILLA X 'G2X88544' / KODIAK® ORANGE DIERVILLA	CONT.	30" HT.	19
HYD ANN	HYDRANGEA ARBORESCENS 'ANNABELLE' / ANNABELLE SMOOTH HYDRANGEA	B & B	36" HT.	3
RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	CONT.	24" HT.	30
RIB GRE	RIBES ALPINUM 'GREEN MOUND' / GREEN MOUND ALPINE CURRANT	CONT.	24" HT.	12
SYR VUL	SYRINGA VULGARIS / COMMON LILAC	B & B	30" HT.	4
SYR BL2	SYRINGA X 'BLOOMERANG' / BLOOMERANG LILAC	B & B	30" HT.	22
VIB MUF	VIBURNUM DENTATUM 'BLUE MUFFIN' / SOUTHERN ARROWWOOD	B & B	30" HT.	4
VIB LUS	VIBURNUM DENTATUM 'CHICAGO LUSTER' / CHICAGO LUSTER ARROWWOOD	B & B	36" HT.	35
EVERGREEN SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
JUN COM	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA' / COMPACTA PFITZER	B & B	24" HT.	5
JUN FOR	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	B & B	24" SPREAD	19
TAX DE4	TAXUS X MEDIA / DENSE YEW	B & B	30" HT.	30
THU HOL	THUJA OCCIDENTALIS 'HOLMSTRUP' / HOLMSTRUP ARBORVITAE	B & B	36" HT.	39
THU SMA	THUJA OCCIDENTALIS 'SMARAGD' / EMERALD GREEN ARBORVITAE	B & B	48" HT.	8
GRASSES	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
CAL KAR	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	CONT.	#1	9
SPO HET	SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED	CONT.	#1	56
PERENNIALS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
NEP WAL	NEPETA X FAASSENII 'WALKERS LOW' / WALKERS LOW CATMINT	CONT.	#1	224
RUD GL2	RUDBECKIA FULGIDA 'GLODSTRUM' / BLACK-EYED SUSAN	CONT.	#1	25
SYM PU6	SYMPHYOTRICHUM NOVAE-ANGLIAE 'PURPLE DOME' / NEW ENGLAND ASTER	CONT.	#1	16
TURF GRASS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
TUR SOD	TURF SOD / DROUGHT TOLERANT FESCUE BLEND	SOD	S.F.	7,452 SF

LANDSCAPE NOTES:

1. PLANT QUANTITIES SHOWN IN THE PLANT SCHEDULE ARE FOR CONVENIENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIALS SHOWN ON THE PLAN AND SHOULD NOT RELY ON THE PLANT SCHEDULE FOR DETERMINING QUANTITIES.
2. ALL PLANT MATERIALS SHALL BE NURSERY GROWN STOCK AND SHALL BE FREE FROM ANY DEFORMITIES, DISEASES OR INSECT DAMAGE. ANY MATERIALS WITH DAMAGED OR CROOKED/DISFIGURED LEADERS, BARK ABRASION, SUNSCALD, INSECT DAMAGE, ETC. ARE NOT ACCEPTABLE AND WILL BE REJECTED. TREES WITH MULTIPLE LEADERS WILL BE REJECTED UNLESS CALLED OUT IN THE PLANT SCHEDULE AS MULTI-STEM. NO PRUNING TO BE DONE AT THE TIME OF INSTALLATION EXCEPT FOR DEAD OR BROKEN LIMBS.
3. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS AND GUIDELINES, WHICH SHALL BE VERIFIED BY MUNICIPAL AUTHORITIES.
4. ALL PLANTING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, PROPER PLANTING BED AND TREE PIT PREPARATION, PLANTING MIX, PRUNING, STAKING AND GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE OF MATERIALS DURING CONSTRUCTION ACTIVITIES.
5. ALL PLANT MATERIALS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ANY MATERIALS INSTALLED WITHOUT APPROVAL MAY BE REJECTED.
6. THE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. THE CONTRACTOR SHALL OUTLINE PROPER MAINTENANCE PROCEDURES TO THE OWNER AT THE TIME OF ACCEPTANCE. DURING THE GUARANTEE PERIOD, DEAD OR DISEASED MATERIALS SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE GUARANTEE PERIOD THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
7. ANY EXISTING TREES TO BE RETAINED SHALL BE PROTECTED FROM SOIL COMPACTION AND OTHER DAMAGES THAT MAY OCCUR DURING CONSTRUCTION ACTIVITIES BY ERECTING FENCING AROUND SUCH MATERIALS AT A DISTANCE OF 8.5' FROM THE TRUNK.
8. ALL GRASS, CLUMPS, OTHER VEGETATION, DEBRIS, STONES, ETC.. SHALL BE RAKED OR OTHERWISE REMOVED FROM PLANTING AND LAWN AREAS PRIOR TO INITIATION OF INSTALLATION PROCEDURES.
9. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INITIATING PLANTING OPERATIONS. THE CONTRACTOR SHALL REPAIR/ REPLACE ANY UTILITY, PAVING, CURBING, ETC.. WHICH IS DAMAGED DURING PLANTING OPERATIONS.
10. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF ANSI Z60.1, AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
11. REFER TO PLAT OF SURVEY FOR LEGAL DESCRIPTION, BOUNDARY DIMENSIONS AND EXISTING CONDITIONS.
12. ALL PLANT MATERIAL ON THIS PLANTING PLAN REPRESENTS THE INTENTION AND INTENSITY OF THE PROPOSED LANDSCAPE MATERIAL. THE EXACT SPECIES AND LOCATIONS MAY VARY IN THE FIELD DO TO MODIFICATIONS IN THE SITE IMPROVEMENTS AND THE AVAILABILITY OF PLANT MATERIAL AT THE TIME OF INSTALLATION. ANY SUCH CHANGES MUST FIRST BE APPROVED BY THE CITY IN WRITING
13. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF SIX INCHES OF ORGANIC SOIL AND MULCHED WITH A SHREDDED BARK MATERIAL TO A MINIMUM 3" DEPTH.
14. ALL BEDS SHALL BE EDGED, HAVE WEED PREEMERGENTS APPLIED AT THE RECOMMENDED RATE.
15. ALL PARKWAYS SHALL HAVE LAWN ESTABLISHED WITH SEED A GROUNDCOVER, UNLESS OTHERWISE NOTED.
16. ALL LAWN AREAS ON THIS PLAN SHALL BE GRADED SMOOTH AND TOPPED WITH AT LEAST 6" OF TOPSOIL. ALL LAWN AREAS TO BE ESTABLISHED USING SEED BLANKET UNLESS OTHERWISE NOTED. BLANKET TO BE S75 OR APPROVED EQUAL
17. THIS LANDSCAPE PLAN ASSUMES THE SITE WILL BE PREPARED WITH TOP SOIL SUITABLE FOR THE ESTABLISHMENT OF THE LANDSCAPE MATERIAL PRESENTED ON THIS PLAN. IF ADDITIONAL TOP SOIL IS REQUIRED IT IS UP TO THE LANDSCAPE CONTRACTOR ON THE PROJECT TO PROVIDE, SPREAD AND PREPARE THE SITE AS NEEDED FOR THE IMPLEMENTATION OF THIS LANDSCAPE PLAN.
18. CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
19. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE ANY POOR MATERIAL OR WORKMANSHIP.
20. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
21. ALL PLANTINGS SHALL BE SPACED EQUAL DISTANT, BACK FILLED WITH AMENDED SOIL IN A HOLE TWICE THE ROOTBALL DIAMETER, WATERED, FERTILIZED, PRUNED, AND HAVE ALL TAGS AND ROPES REMOVED.
22. LAWN AND BED AREAS SHALL BE ROTOTILLED, RAKED OF CLUMPS AND DEBRIS.
23. REMOVE ALL DEAD AND DISEASED PLANT MATERIAL FROM SITE AND DISPOSE OF PROPERLY.
24. PLANTS TO BE PLANTED SO THAT ROOT FLARE IS AT THE GRADE OF THE AREA WHERE PLANTED. NO PRUNING TO BE DONE AT THE TIME OF INSTALLATION EXCEPT TO REMOVE DEAD OR BROKEN LIMBS.

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER
RESIDENTIAL COMMUNITY
GRACELAND & THATCHER
DES PLAINES, ILLINOIS

Reserved for Seal:

No.	Date	Description
	05/12/2023	PROGRESS PLANS
	05/22/2023	ISSUE FOR VILLAGE SUBMITTAL
	06/30/2023	ISSUED FOR PZB
	07/18/2023	ISSUED FOR PZB

Design By:	Approved By:	Date:
SSG	XXX	05/08/2023

Sheet Title:
LANDSCAPE PLAN SITE B

Sheet No:
L101

EEA – P:\23116 – Luz Associates – Graceland & Thacker\Drawings\Graceland Thacker – Landscape Plan.dwg
Plotted: 7/17/23 @ 4:58pm By: sgregory

PLANT SCHEDULE (SITE B)

CANOPY TREES	BOTANICAL / COMMON NAME	COND	SIZE	QTY
	ACER RUBRUM 'AUTUMN FLAME' / AUTUMN FLAME MAPLE	B & B	2.5" CAL.	1
	ACER X FREEMANII 'ARMSTRONG' / ARMSTRONG FREEMAN MAPLE	B & B	2.5" CAL.	7
	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	2.5" CAL.	5
	GINKGO BILOBA 'PRINCETON SENTRY' / PRINCETON SENTRY GINKGO	B & B	2.5" CAL.	5
	TILIA AMERICANA 'REDMOND' / REDMOND AMERICAN LINDEN	B & B	2.5" CAL.	4
EVERGREEN TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
	PICEA PUNGENS 'COLORADO GREEN' / BLUE SPRUCE	B & B	6' - 8' HT.	2
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE APPLE SERVICEBERRY	B & B	8' CLUMP	5
	CERCIS CANADENSIS / EASTERN REDBUD	B & B	2.5" CAL.	3
DECIDUOUS SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
	ARONIA ARBUTIFOLA / RED CHOKEBERRY	B & B	30" HT.	5
	CEANOTHUS AMERICANUS / NEW JERSEY TEA	B & B	30" HT.	2
	CEPHALANTHUS OCCIDENTALIS / BUTTONBUSH	B & B	36" HT.	11
	CEPHALANTHUS OCCIDENTALIS 'SMCOSS' / SUGAR SHACK® BUTTONBUSH	B & B	24" HT.	6
	CORYLUS AMERICANA / AMERICAN HAZELNUT	CONT.	36" HT.	5
	COTONEASTER ACUTIFOLIUS / PEKING COTONEASTER	B & B	36" HT.	38
	DIERVILLA X 'G2X89544' / KODIAK® ORANGE DIERVILLA	CONT.	30" HT.	19
	HYDRANGEA ARBORESCENS 'ANNABELLE' / ANNABELLE SMOOTH HYDRANGEA	B & B	36" HT.	3
	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	CONT.	24" HT.	30
	RIBES ALPINUM 'GREEN MOUND' / GREEN MOUND ALPINE CURRANT	CONT.	24" HT.	12
	SYRINGA VULGARIS / COMMON LILAC	B & B	30" HT.	4
	SYRINGA X 'BLOOMERANG' / BLOOMERANG LILAC	B & B	30" HT.	22
	VIBURNUM DENTATUM 'BLUE MUFFIN' / SOUTHERN ARROWWOOD	B & B	30" HT.	4
	VIBURNUM DENTATUM 'CHICAGO LUSTER' / CHICAGO LUSTER ARROWWOOD	B & B	36" HT.	35
EVERGREEN SHRUBS	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA' / COMPACTA PFITZER	B & B	24" HT.	5
	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	B & B	24" SPREAD	19
	TAXUS X MEDIA / DENSE YEW	B & B	30" HT.	30
	THUJA OCCIDENTALIS 'HOLMSTRUP' / HOLMSTRUP ARBORVITAE	B & B	36" HT.	39
	THUJA OCCIDENTALIS 'SMARAGD' / EMERALD GREEN ARBORVITAE	B & B	48" HT.	8
GRASSES	**BOTANICAL / COMMON NAME**	**COND.**	**SIZE**	**QTY**
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	CONT.	#1	9
	SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED	CONT.	#1	56
PERENNIALS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
	NEPETA X FAASSENII 'WALKERS LOW' / WALKERS LOW CATMINT	CONT.	#1	224
	RUDBECKIA FULGIDA 'GLODSTRUM' / BLACK-EYED SUSAN	CONT.	#1	25
	SYMPHYOTRICHUM NOVAE-ANGLIAE 'PURPLE DOME' / NEW ENGLAND ASTER	CONT.	#1	16
TURF GRASS	**BOTANICAL / COMMON NAME**	**COND**	**SIZE**	**QTY**
	TURF SOD / DROUGHT TOLERANT FESCUE BLEND	SOD	S.F.	7,452 SF

SITE MATERIALS SCHEDULE (SITE B)

	EXISTING PARKWAY TREE	3
	ASPHALT	22,121 SF

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER RESIDENTIAL COMMUNITY

GRACELAND & THATCHER
DES PLAINES, ILLINOIS

Reserved for Seal

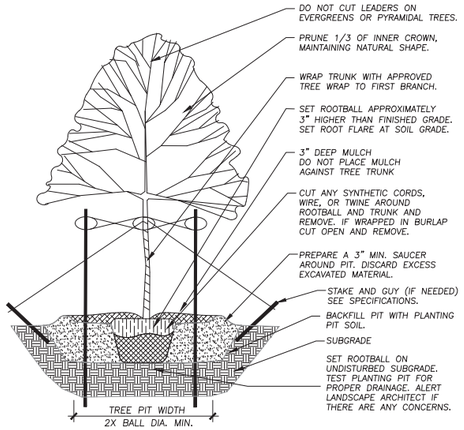
No.	Date	Description
	05/12/2023	PROGRESS PLANS
	05/22/2023	ISSUE FOR VILLAGE SUBMITTAL
	06/30/2023	ISSUED FOR PZB
	07/18/2023	ISSUED FOR PZB

Design By:	Approved By:	Date:
SSG	XXX	05/08/2023

Sheet Title:
LANDSCAPE PLAN SITE B

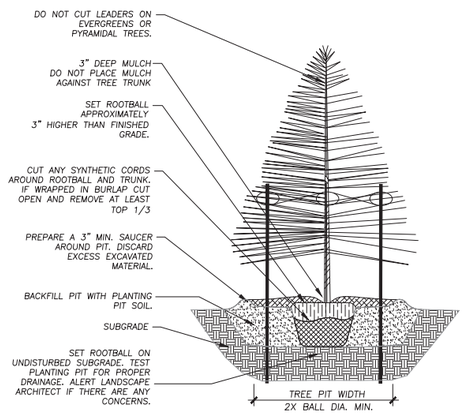
Sheet No:
L101r

EEA - P:\23116 - Luz Associates - Graceland & Thacker\Drawings\Graceland Thacker - Landscape Plan.dwg
Plotted: 7/17/23 @ 5:01pm By: sgregory



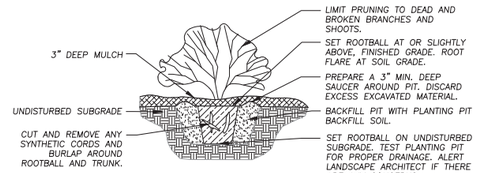
1 TREE PLANTING DETAIL

Not To Scale 329343-01



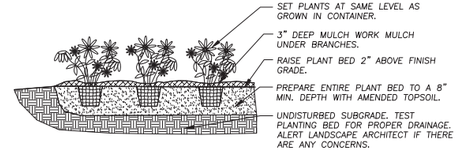
2 EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE 329343-02



3 SHRUB PLANTING DETAIL

Not To Scale 329333-01



4 ANNUAL, PERENNIAL, & GROUNDCOVER DETAIL

Not To Scale 329301-03

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2025

GRACELAND & THACKER RESIDENTIAL COMMUNITY

GRACELAND & THATCHER
DES PLAINES, ILLINOIS

Reserved for Seal:

No.	Date	Description
	05/12/2023	PROGRESS PLANS
	05/22/2023	ISSUE FOR VILLAGE SUBMITTAL
	06/30/2023	ISSUED FOR PZB
	07/18/2023	ISSUED FOR PZB

Design By:	Approved By:	Date:
SSG	XXX	05/08/2023

Sheet Title:

LANDSCAPE DETAILS

Sheet No:

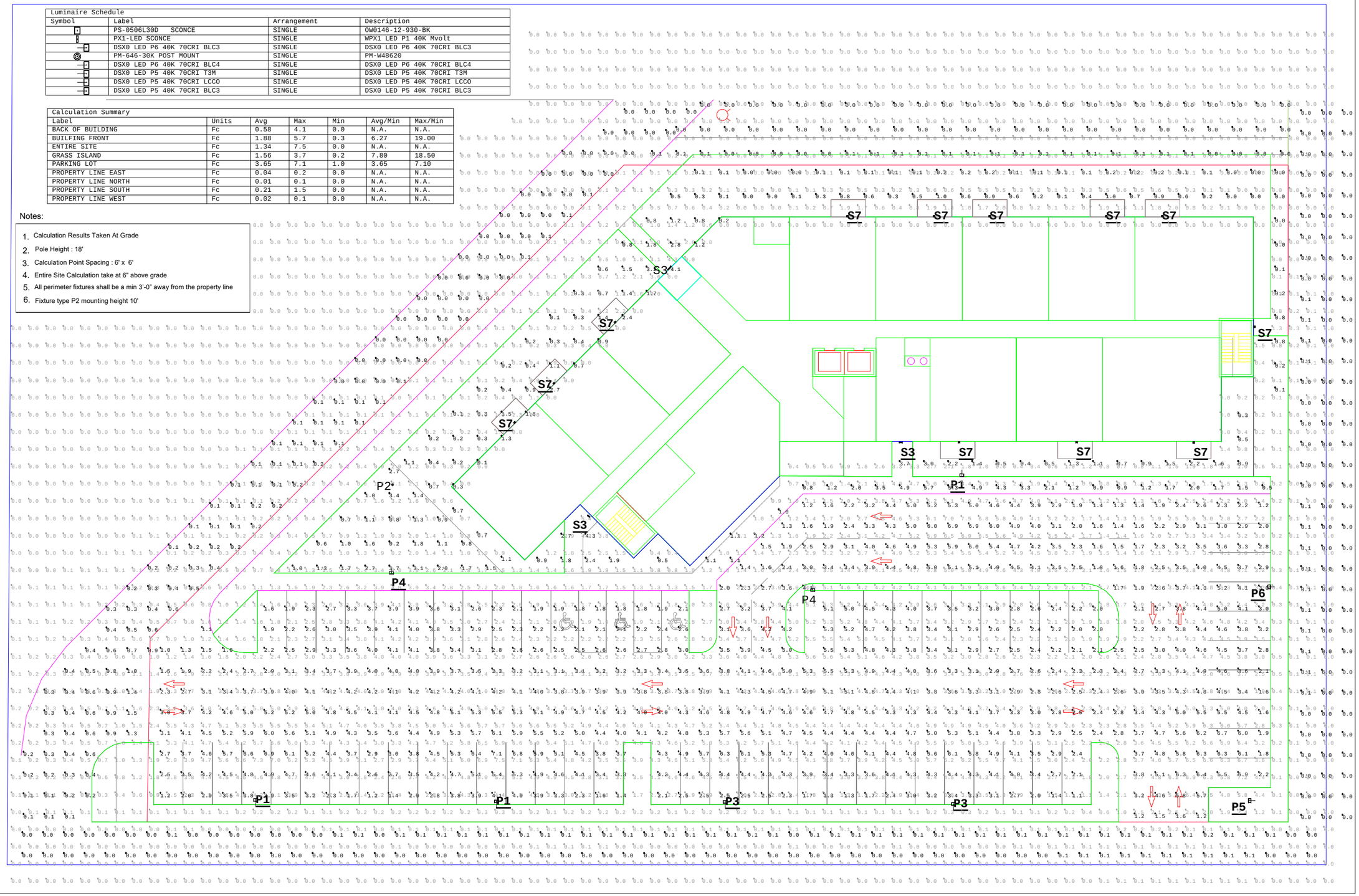
L200

Luminaire Schedule			
Symbol	Label	Arrangement	Description
	PS-0506L30D SCONCE	SINGLE	OW0146-12-930-BK
	PX1-LED SCONCE	SINGLE	WPX1 LED P1 40K Mvolt
	DSX0 LED P6 40K 70CRI BLC3	SINGLE	DSX0 LED P6 40K 70CRI BLC3
	PM-646-30K POST MOUNT	SINGLE	PM-W48620
	DSX0 LED P6 40K 70CRI BLC4	SINGLE	DSX0 LED P6 40K 70CRI BLC4
	DSX0 LED P5 40K 70CRI T3M	SINGLE	DSX0 LED P5 40K 70CRI T3M
	DSX0 LED P5 40K 70CRI LCCO	SINGLE	DSX0 LED P5 40K 70CRI LCCO
	DSX0 LED P5 40K 70CRI BLC3	SINGLE	DSX0 LED P5 40K 70CRI BLC3

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
BACK OF BUILDING	Fc	0.58	4.1	0.0	N.A.	N.A.
BUILFING FRONT	Fc	1.88	5.7	0.3	6.27	19.00
ENTIRE SITE	Fc	1.34	7.5	0.0	N.A.	N.A.
GRASS ISLAND	Fc	1.56	3.7	0.2	7.80	18.50
PARKING LOT	Fc	3.65	7.1	1.0	3.65	7.10
PROPERTY LINE EAST	Fc	0.04	0.2	0.0	N.A.	N.A.
PROPERTY LINE NORTH	Fc	0.01	0.1	0.0	N.A.	N.A.
PROPERTY LINE SOUTH	Fc	0.21	1.5	0.0	N.A.	N.A.
PROPERTY LINE WEST	Fc	0.02	0.1	0.0	N.A.	N.A.

Notes:

1. Calculation Results Taken At Grade
2. Pole Height : 18'
3. Calculation Point Spacing : 6' x 6'
4. Entire Site Calculation take at 6" above grade
5. All perimeter fixtures shall be a min 3'-0" away from the property line
6. Fixture type P2 mounting height 10'



ParamontEO
An Electrical Supply Company

#	Date	Comments

Revisions

Drawn By:
Checked By:
Date:7/18/2023
Scale:

SITE B

Page M of 1

Graceland and Thacker Development – Site B
Tax Estimate*

Ellison Apartments, Des Plaines: $5,300 per unit current taxes. Reduced to $4,240 to reflect differences between the Ellison and the Graceland/Thacker Development.

Monarch Apartments, Des Plaines: $5,144 per unit. Reduced $4,115 per unit for subject site to reflect project differences.

Northgate Apartments, Wheeling: $4,248 per unit, no reduction as fairly comparable.

Subject Site: $4,500 per unit; translating to $252,000 for the site. This would be an increase of $208,000 over the current $43,957 in taxes.

*Source: Integra Realty Resources

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site or Building Design**?

THEY LOOK NICE. TRY NOT TO MIX TOO MANY TEXTURES OR COLORS.

What comments or questions do you have on **Neighborhood Impact** from this project?

I FEEL LIKE THERE SHOULD BE NO MAJOR IMPACT. WILL IMPROVE THE OVERALL AESTHETIC.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☒ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

MAYBE CONDO INSTEAD OF APARTMENTS. PERMANENT RESIDENTS MIGHT TAKE MORE CARE OF THE AREA.

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed Site or Building Design?

No issues. Glad to see attractive development.

What comments or questions do you have on Neighborhood Impact from this project?

Wish there were more options for affordable housing in DP being built but I live nearby and I am supportive

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☒ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

Our family supports this development.

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site or Building Design?**

Looks like just another big box — More Brick, not cementatious siding —

What comments or questions do you have on **Neighborhood Impact** from this project?

Traffic - you cannot just take this bldg as an individual unit. Traffic from Welkin, 622 Graceland, New Units at Thacker and Lee, Little Bulgarian School (200+ Students) and potential development of Prairie t Lee

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☒ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

Cut through traffic on Laurel Ave and Webford, Wood construction Not building long term Community members, Small Apts = transient Too many studio and 1 BDRM not enough 2 BDRM, Exterior looks just like other high rises →

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site or Building Design?**

The latest trend of ugly architecture!

What comments or questions do you have on **Neighborhood Impact** from this project?

Terrible impact!

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☒ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

Des Plaines does not need more rental buildings, cheaply constructed and possibly turned into low-income subsidized properties.

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☐

What comments or questions do you have on proposed **Site or Building Design?**

WHY CANNOT THEY LOOK FOR ANOTHER COMMERICAL BUYER. SUCH AS, RETAIL STORES

What comments or questions do you have on **Neighborhood Impact** from this project?

TOO MANY APPARTMENTS IN A SMALL AREA ALREADY SURROUNDED BY CONDOS

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☑ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

I WOULD NOT WANT TO SEE ~~PHIS~~ THIS PROJECT APPROVED BY THE VILLAGE OF DESPLAINES

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site** or **Building Design**?

I appreciate the size of this bldg for the site. It fits into the neighborhood & is appropriate. The Bndg design is nice as well.

What comments or questions do you have on **Neighborhood Impact** from this project?

I'm concerned about traffic impact & parking on near by neighborhood streets.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☒ Weekly ☐ Monthly ☐ Not Regularly ☐

General Comments/Questions

This meeting was a great idea. I'm glad the City is finally reaching out to the community for input before a project is approved. its a start in the right direction

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☐

What comments or questions do you have on proposed **Site or Building Design?**

WHY MORE APARTMENTS? WHY NOT CONDOS OR TOWNHOMES? WE NEED RESIDENTS WHO ARE INVESTED IN OUR CITY, NOT TRANSIENT TENANTS

What comments or questions do you have on **Neighborhood Impact** from this project?

THIS PROJECT BORDERS UP TO THE NEW BULGARIAN SCHOOL, WHICH EXPECTS ~200 STUDENTS DAILY. WHAT DHS GO LIGHT THROUGH THE NEIGHBORHOOD. THE TRAFFIC IMPACT OF THE WALKING CROSSWALK, THE SCHOOL,

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☐ Weekly ☒ Monthly ☐ Not Regularly ☐

General Comments/Questions

AND NOW THIS WILL BE SIGNIFICANT

THIS WAS A COMPLETELY INADEQUATE WAY TO PRESENT THE PROJECT. THE DEVELOPERS SHOULD HAVE MADE PRESENTATIONS AND TAKEN QUESTIONS SO THAT EVERYONE COULD HEAR.

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A [X] B [ ] Both [ ]

What comments or questions do you have on proposed **Site or Building Design?**

PARKING AREA
Move the garages closer to corners instead of having multiple entrances. Put land parking in the middle

What comments or questions do you have on **Neighborhood Impact** from this project?

Entering & EXISTING
Graceland is one way street don't need to give an option to turn the wrong way.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily [ ] Weekly [X] Monthly [ ] Not Regularly [ ]

General Comments/Questions

Redesign the location of parking garages.
Visitor parking should be in the middle opposite the entrance

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site or Building Design?**

More brick please

What comments or questions do you have on **Neighborhood Impact** from this project?

We have too many apartments currently & Coming Soon. Please consider Condos.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☐ Weekly ☒ Monthly ☐ Not Regularly ☐

General Comments/Questions

Less apartments, we are saturated.

Trends change

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A ☐ B ☐ Both ☒

What comments or questions do you have on proposed **Site or Building Design?**

What comments or questions do you have on **Neighborhood Impact** from this project?

(1) APPEARS TO BE SIMILAR USE TYPE TO OTHER EXISTING PROPERTIES

(2) WHAT IS # OF DWELLINGS UNITS / ACRE FOR THIS SITE AND EXISTING ADJACENT SITE

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily ☐ Weekly ☐ Monthly ☒ Not Regularly ☐

General Comments/Questions

(1) HOW MANY GUEST PARKING SPACES ARE PROVIDED

(2) PERCENT OF IMPERVIOUS COVERAGE; WHERE WILL STORM WATER DETENTION BE PROVIDED

(3) FOR SALE OR RENTAL

DES PLAINES ILLINOIS

Public Comment Card
Contour Place Workshop

Which site concept(s) are you commenting on? *Check one*

A [X] B [X] Both [ ]

What comments or questions do you have on proposed **Site or Building Design?**

Unable to fill apts WILKINS
with residents and
currently the new residential
highrise sits empty and no
retailers.

What comments or questions do you have on **Neighborhood Impact** from this project?

Shifting building from
trucks speeding down
Graceland and vibrates our
Bldg.... walls are cracked.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily [ ] Weekly [ ] Monthly [ ] Not Regularly [ ]

General Comments/Questions

Semi truck traffic
should be routed to
Route 83 instead of Graceland.

New residential bldg.
Restaurant coming not
Retail but traffic

Samantha Redman

From: Maureen Stern
Sent: Friday, June 9, 2023 10:28 AM
To: Samantha Redman; John Carlisle
Subject: FW: Feedback for Des Plaines, IL

This came in through the feedback button on the website.
See below.

From: Media Services <media@desplaines.org>
Sent: Friday, June 9, 2023 10:24 AM
To: Maureen Stern <mstern@desplaines.org>
Subject: FW: Feedback for Des Plaines, IL

From: Des Plaines, IL <media@desplaines.org>
Sent: Friday, June 9, 2023 10:23:44 AM (UTC-06:00) Central Time (US & Canada)
To: Media Services <media@desplaines.org>
Subject: Feedback for Des Plaines, IL

You have received this feedback from [redacted] following page:

https://www.desplaines.org/access-your-government/boards-and-commissions/planning-and-zoning-board

My concern is the development of the saw company at Thacker and Graceland. I attended the meeting on June 6. I don't think the city realizes the total picture. I would like to see another meeting set with more notice given to residents in the area. There are more residents who were not advised in writing who do not have the Des Plaines internet access We don't need more apts especially if they accept vouchers. The complex will be mostly vouchers. . parking is not adequate now. The argument that most potential renters will not have cars is unrealistic. There is nothing close by - a car will be necessary for shopping. Argument that it is close to the train is unrealistic. Most young people work from home and the walk to the train is not that convenient especially in bad weather . I did it for 10 years. There is nothing in Des Plaines close by to entice young people to live here. There were board members that get it. The demeanor of one disappointing- like he didn't care I neglected to get names unfortunately. I remember faces Shame Des Plaines headed in wrong direction with apts

Samantha Redman

From: [redacted]
Sent: Tuesday, June 13, 2023 3:48 PM
To: Andrew Goczkowski; Jessica Mastalski; Mark Lysakowski; Colt Moylan; Sean Oskerka
Cc: Samantha Redman; Dick Sayad; Carla Brookman; mwalster@desplaines.org; Patricia Smith; Mike Charewicz; jcatallano@desplaines.org; rfowler@desplaines.org; Rhoferr@desplaines.org; psaletnik@desplaines.org; Jszabo@desplaines.org; Cveremis@desplaines.org; tweaver@desplaines.org; Joanne Mendoza
Subject: Fw: Graceland and Thacker -- Maybe Someone will respond
Attachments: IMG_6425.PNG

Good Afternoon.....I am writing this for myself, and other residents in the area. I have not gotten one response regarding previous emails. Very disappointing.

I can only hope this development is for reconsideration. There is no parking. Not a good location for apartments, especially since the new downtown apartments are not even rented. Knowing how the drill is, this complex will become low income housing which will destroy Des Plaines. Common sense would tell you this. I'd like to see Des Plaines work harder to build up retail, rather than apartments. All of us would. I take advantage of At7 and the Theatre.

There is not enough retail around to even entice people to live here. I have to drive outside of Des Plaines for most shopping.

Developer's arguments:

Young people want to live near the train. Downtown Des Plaines is different and they can't even rent those apartments close by. This is not Downtown Chicago where everything is in walking distance (restaurants, stores, drug stores, etc.) I traveled over 10 years to the train from this location, and during bad weather - not an easy hike. Even as he says young people don't need cars, there is no shopping convenient here. THEY WILL NEED CARS -- and the parking situation. Parking is limited in this location as it is.

He is never going to get the high rents he thinks he is - very delusional thinking.....So lower the rents and accept vouchers. I'm beginning to think that's the plan

DO NOT APPROVE THEIR BUILDING PLANS

Redraw the plans of the building Push back the building so there is a parking lot in front of the proposed building on Graceland.
Make the building residents 50 years and older -- there are more elderly people who would be interested
Do condos/townhouses - people who would have more of a personal stake in Des Plaines.
But, I'm not hopeful as from experience (I worked for attorneys and a lobbyist), and usually by the time residents are notified - too late. Just like the Journal site (more apartments) I hope Des Plaines wakes up.

I would like information to pass on to the residents in the area.

----- Forwarded Message -----
[redacted]
To: "soskerka@desplaines.org" <soskerka@desplaines.org>
Cc: "dsayad@desplaines.og" <dsayad@desplaines.og>
Sent: Friday, June 9, 2023 at 12:49:13 PM CDT
Subject: Graceland and Thacker

Good Afternoon

I sent the following email. FYI

You can see how upset some of us are about this development and the ramifications that are in the future It's not a good location with the arguments the developer had didn't fly

I'm not sure if you were at the meeting. Missed introductions if there were any.

I don't think residents given enough time to understand I had reached out awhile back to someone in Des Plaines. Never got a reply.

I hope you can do something More rentals Not a good thing for Des Plaines. Hoping city wakes up

Condos/townhomes would be

Mr Sayad - I think you were at this meeting ?

Thank you

Sent from my iPhone

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Tuesday, June 20, 2023 9:58 AM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2513920
IP Address:	149.75.158.58
Submission Date:	06/20/2023 9:57
Survey Time:	3 minutes, 29 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

please ignore the NIMBYs and permit this and all other residential housing projects.

What comments or questions do you have on Neighborhood Impact from this project?

Des Plaines is great am I am excited to share it with more people

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

I encourage displays to approve this and all residential building projects. there are a couple of NIMBYs running around the neighborhood complaining about this and I think you should ignore them. building more housing will help. Des Plaines and make it a more robust and vibrant community. I live very close to the site, and I look forward to new neighbors. Nick Hantel 719 Laurel Ave

Email (optional)

[redacted]

Read-Only Content

Thank you,
Des Plaines, IL

This is an automated message generated by Granicus. Please do not reply directly to this email.

Samantha Redman

From: [redacted]
Sent: Tuesday, June 20, 2023 10:01 AM
To: Andrew Goczkowski; Jessica Mastalski; Mark Lysakowski; Colt Moylan; Sean Oskerka
Cc: Samantha Redman; Dick Sayad; Carla Brookman; mwalster@desplaines.org; Patricia Smith; Mike Charewicz; jcatallano@desplaines.org; rfowler@desplaines.org; Rhoferr@desplaines.org; psaletnik@desplaines.org; Jszabo@desplaines.org; Cveremis@desplaines.org; tweaver@desplaines.org; Joanne Mendoza
Subject: Re: Graceland and Thacker

I was at the city council meeting last night. I didn't expect to be able to speak. I wasn't prepared and left out my main concern about so many rentals in Des Plaines. This email is repetitive to my original email below.

Also I'm speaking for residents in the area. Not just myself

I dread that Des Plaines is going down this path. I think in the long run federal aid (we are not stupid people who don't realize this is behind all this) given to the city for these so called rentals will not be worth it in the end. Build condos or townhouses where people will have a personal and financial stake in their property

I had asked the developer at the June 6 meeting about what happens when these apts cannot be rented. ……asked about vouchers. He then stated they cannot turn away voucher requests. This development will end up be low income housing.

With the huge rental buildings downtown and the Webford project (more apts) Des Plaines will end up being a disaster down the road

I'd like to see more retail. I have a granddaughter who I would love to take downtown and see shops catered to kids…….not high end stores. There are a lot of kids in Des Plaines Choo Choo is one option but shame it's so small. Sometimes you can't get in.

I think you are making a mistake not agreeing to that gentleman's proposal re snack shop whatever. ….even if not a sit down restaurant. Des Plaines is not a high end city. Seems you lost many opportunities with these restaurants going other places. A good hamburger place would have been great

You made a big mistake about the dispensary. If In the right location downtown you lost a lot of money. There are a lot of people who have medical cards and recreation Now Give their money to Niles and Rosemont

Below is my original email sent to as many people I could find. I hope Mr Mendoza forwarded it to the zoning board. No one could give me any contact information for the Board

Could someone confirm date of the next zoning meeting. We were told June 25…..which is a Sunday

Thank you for your consideration

Sent from Yahoo Mail for iPhone

[redacted]

On Tuesday, June 13, 2023, 3:48 PM, MaryChris Scanlon <marychris1224@yahoo.com> wrote:

Good Afternoon.....I am writing this for myself, and other residents in the area. I have not gotten one response regarding previous emails. Very disappointing.

I can only hope this development is for reconsideration. There is no parking. Not a good location for apartments, especially since the new downtown apartments are not even rented. Knowing how the drill is, this complex will become low income housing which will destroy Des Plaines. Common sense would tell you this. I'd like to see Des Plaines work harder to build up retail, rather than apartments. All of us would. I take advantage of At7 and the Theatre.

There is not enough retail around to even entice people to live here. I have to drive outside of Des Plaines for most shopping.

Developer's arguments:

Young people want to live near the train. Downtown Des Plaines is different and they can't even rent those apartments close by. This is not Downtown Chicago where everything is in walking distance (restaurants, stores, drug stores, etc.) I traveled over 10 years to the train from this location, and during bad weather - not an easy hike. Even as he says young people don't need cars, there is no shopping convenient here. THEY WILL NEED CARS -- and the parking situation. Parking is limited in this location as it is.

He is never going to get the high rents he thinks he is - very delusional thinking.....So lower the rents and accept vouchers. I'm beginning to think that's the plan

DO NOT APPROVE THEIR BUILDING PLANS

Redraw the plans of the building Push back the building so there is a parking lot in front of the proposed building on Graceland.
Make the building residents 50 years and older -- there are more elderly people who would be interested
Do condos/townhouses - people who would have more of a personal stake in Des Plaines.
But, I'm not hopeful as from experience (I worked for attorneys and a lobbyist), and usually by the time residents are notified - too late. Just like the Journal site (more apartments) I hope Des Plaines wakes up.

I would like information to pass on to the residents in the area.

---- Forwarded Message ----
[redacted]
Sent: Friday, June 9, 2023 at 12:49:13 PM CDT
Subject: Graceland and Thacker

Good Afternoon

I sent the following email. FYI

You can see how upset some of us are about this development and the ramifications that are in the future It's not a good location with the arguments the developer had didn't fly

I'm not sure if you were at the meeting. Missed introductions if there were any.

I don't think residents given enough time to understand I had reached out awhile back to someone in Des Plaines. Never got a reply.

I hope you can do something More rentals Not a good thing for Des Plaines. Hoping city wakes up

Condos/townhomes would be

Mr Sayad - I think you were at this meeting ?

Thank you

Sent from my iPhone

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Monday, June 26, 2023 4:01 PM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2528158
IP Address:	99.93.196.68
Submission Date:	06/26/2023 4:01
Survey Time:	55 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

not a good option in DP. there are so many vacant rentals already

What comments or questions do you have on Neighborhood Impact from this project?

How often have you been near or by this property (within approx. three blocks) in the past six months?

Weekly

General Comments/Questions

Email (optional)

Read-Only Content

Thank you,
Des Plaines, IL

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Wednesday, July 5, 2023 12:53 PM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2546548
IP Address:	73.208.12.61
Submission Date:	07/05/2023 12:53
Survey Time:	11 minutes, 5 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

Site A - I feel the open land parking lots should be moved to the middle of the area where the garage buildings are. Moving the garage buildings over towards the street is better. We don't need 4 exits from these parking areas with one being so close to the curve in the street on Thacker by the railroad tracks where vision could be blocked. The other exit on Graceland is giving the cars the opportunity to turn left on a one way street.

What comments or questions do you have on Neighborhood Impact from this project?

Parking will become an issue if the residence of the complex have to pay for a parking space. Each unit should already have that built into their rent. Visitor parking should be closer to the main entrance and enough to cover visitors at an equal amount since street parking is very limited.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Weekly

General Comments/Questions

Parking redesign should be investigated as previously noted. For the site A building there are less 2 bedroom units per floor than in the Site B design. Considere making 2 more 2 bedroom units perform at the middle of each floor and eliminate 3 one bedroom units and one studio. Also a more define entrance should be visible at the corner of Graceland and Thacker even though this is not the main entrance. For Site B also a more define entrance should be visible along Graceland. Concerns over at Site B is Oakwood Street capable of handling all this new traffic and parking?

Email (optional)

[redacted]

Read-Only Content

Thank you,
Des Plaines, IL

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Wednesday, July 5, 2023 7:11 PM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2547791
IP Address:	76.136.228.9
Submission Date:	07/05/2023 7:11
Survey Time:	6 minutes, 59 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Site B

What comments or questions do you have on the proposed Site or Building Design

Should redevelop site with Townhome/Condos only with on-site.parking only

What comments or questions do you have on Neighborhood Impact from this project?

Parking is presently severely limited in the neighborhood at the time being! An apartment building would ONLY SERVE TO IMPACT parking and MAKE IT MUCH WORSE!

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

Develop Site B with Condo/Townhouse ONLY with on-site parking

Email (optional)

[redacted]

Read-Only Content

Thank you,
Des Plaines, IL

This is an automated message generated by Granicus. Please do not reply directly to this email.

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Monday, July 10, 2023 4:46 PM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2557607
IP Address:	73.45.169.154
Submission Date:	07/10/2023 4:46
Survey Time:	25 minutes, 22 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

i'm a owner of 915 Graceland ave. I don't agree with new zoning: R-4 Central Core Residential Case number:23-040-MAP.

What comments or questions do you have on Neighborhood Impact from this project?

No more rentals in this neigborhood!! We already have 136 rentals right one block douwn!!Maybe more at Ellison Apartaments. This is a quite and peacefull area!!

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

Take in consideretion our concern about rentals. I would rather see condos/townhomes where people have a personal and financial stake in their property

Email (optional)

[redacted]

Read-Only Content

Thank you,
Des Plaines, IL

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Thursday, July 13, 2023 9:52 AM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2564260
IP Address:	75.58.27.199
Submission Date:	07/13/2023 9:52
Survey Time:	4 minutes, 11 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

Don't build these, too many buildings to close to each other

What comments or questions do you have on Neighborhood Impact from this project?

Do we need extra rentals in Des Planes?

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

Please build your buildings somewhere else

Email (optional)

Read-Only Content

Thank you,
Des Plaines, IL

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Wednesday, July 12, 2023 5:49 PM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2563308
IP Address:	75.58.27.199
Submission Date:	07/12/2023 5:48
Survey Time:	2 minutes, 11 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

We don't need this extra buildings and noises over here. Its nice place to do the park .

What comments or questions do you have on Neighborhood Impact from this project?

will be any voting on this project? Many neighbors don't like this idea.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

Move your project to more open area

Email (optional)

[redacted]

Read-Only Content

Thank you,
Des Plaines, IL

Samantha Redman

From: Des Plaines, IL <media@desplaines.org>
Sent: Tuesday, July 18, 2023 8:11 AM
To: Samantha Redman
Subject: *NEW SUBMISSION* Contour Place Public Input

Contour Place Public Input

Submission #:	2573662
IP Address:	173.15.39.78
Submission Date:	07/18/2023 8:10
Survey Time:	6 minutes, 45 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Read-Only Content

Section Break

Which site concept(s) are you commenting on?

Both

What comments or questions do you have on the proposed Site or Building Design

What comments or questions do you have on Neighborhood Impact from this project?

How will this project affect traffic patterns, parking for all the units and emergency vehicles access.

How often have you been near or by this property (within approx. three blocks) in the past six months?

Daily

General Comments/Questions

How many units are subject to low income tenants

Email (optional)

[redacted]

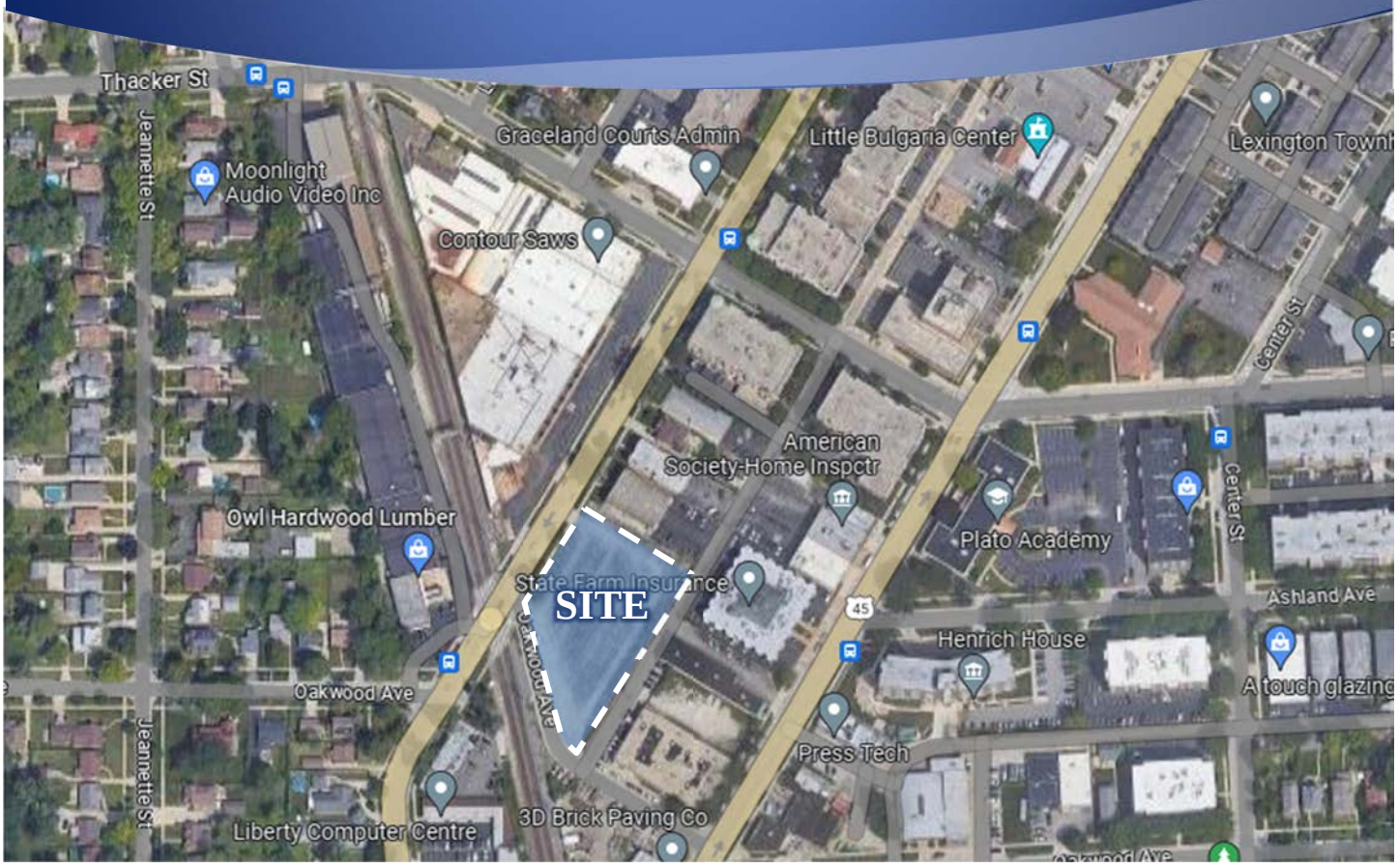
Read-Only Content

Thank you,
Des Plaines, IL

This is an automated message generated by Granicus. Please do not reply directly to this email.

Traffic Impact Study
Proposed Residential Development

Des Plaines, Illinois



Prepared For:

Luz and Associates #1 LLC

Kenig, Lindgren, O'Hara, Aboona, Inc.

June 15, 2023

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed residential development to be located in the northeast corner of the intersection of Graceland Avenue with Oakwood Avenue in Des Plaines, Illinois. The site which is currently utilized as the parking lot for Contour Saws Inc., will be redeveloped to provide 56 apartment units and 64 parking spaces with access off Oakwood Avenue and the existing alley to the east of the site.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

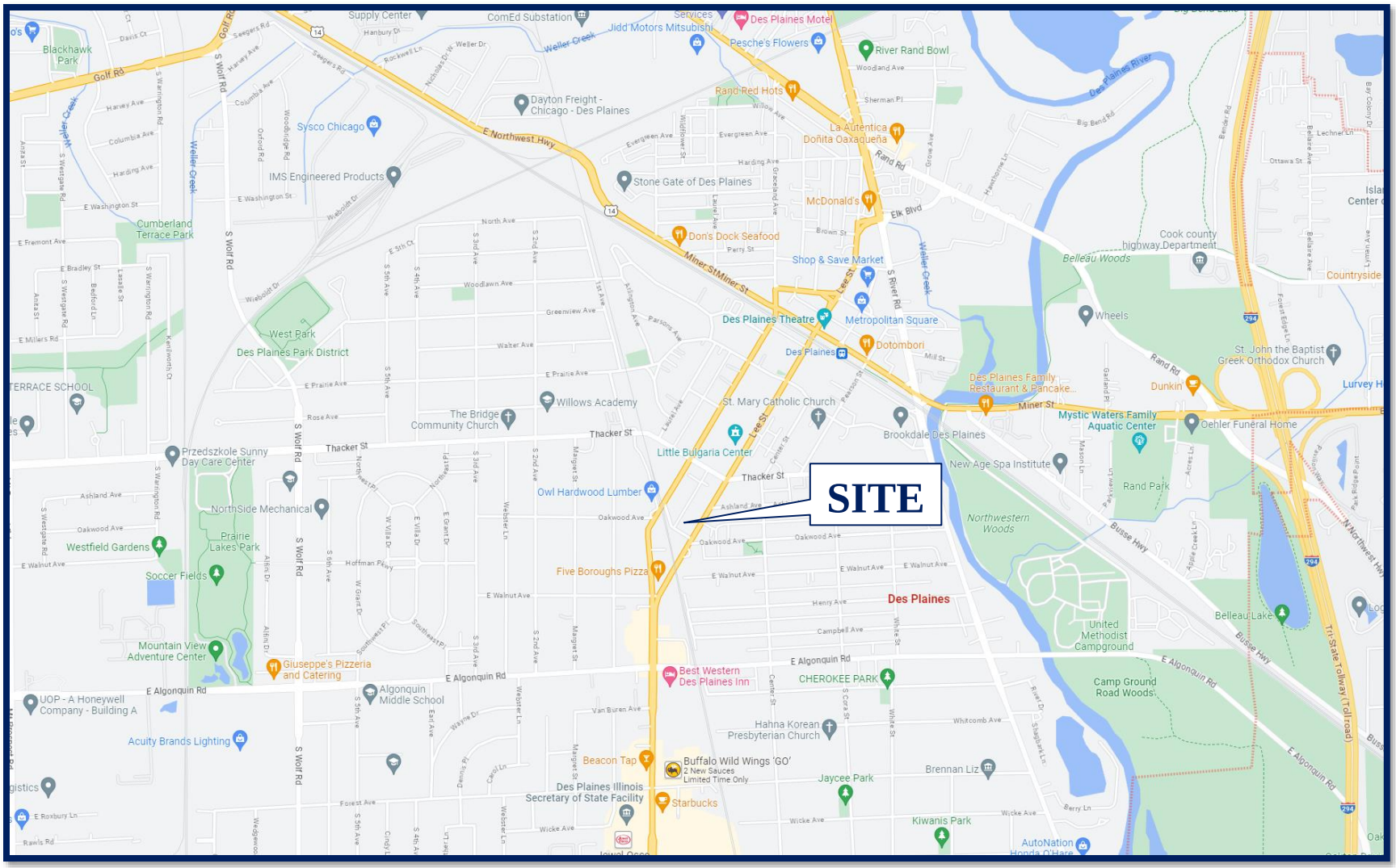
The sections of this report present the following:

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

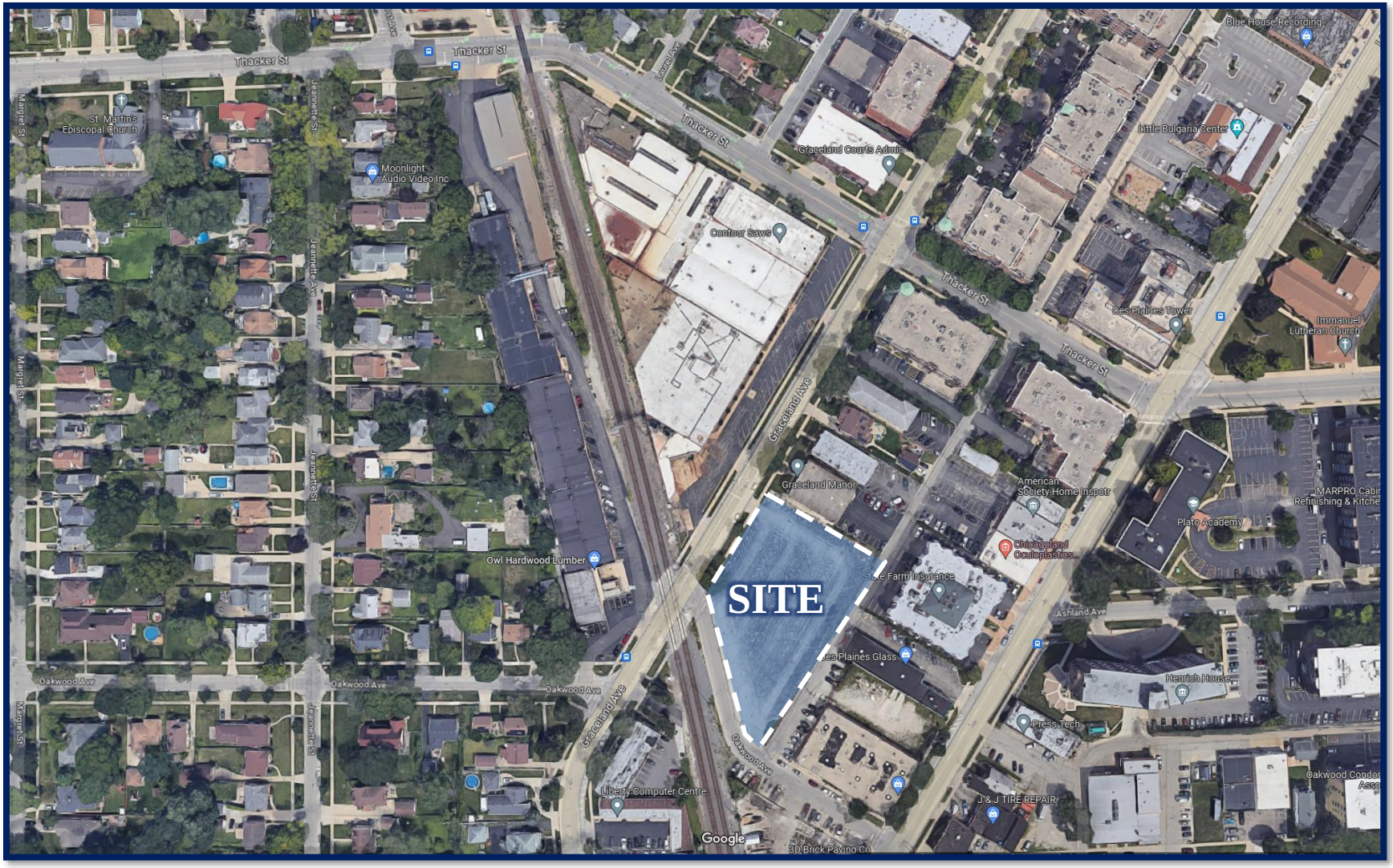
Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

1. Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Projected Conditions – Analyzes the capacity of the future roadway system using the traffic volumes that include the existing traffic volumes increased by an ambient growth factor and the traffic estimated to be generated by the proposed development.



Site Location **Figure 1**



Aerial View of Site **Figure 2**

2. Existing Conditions

The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

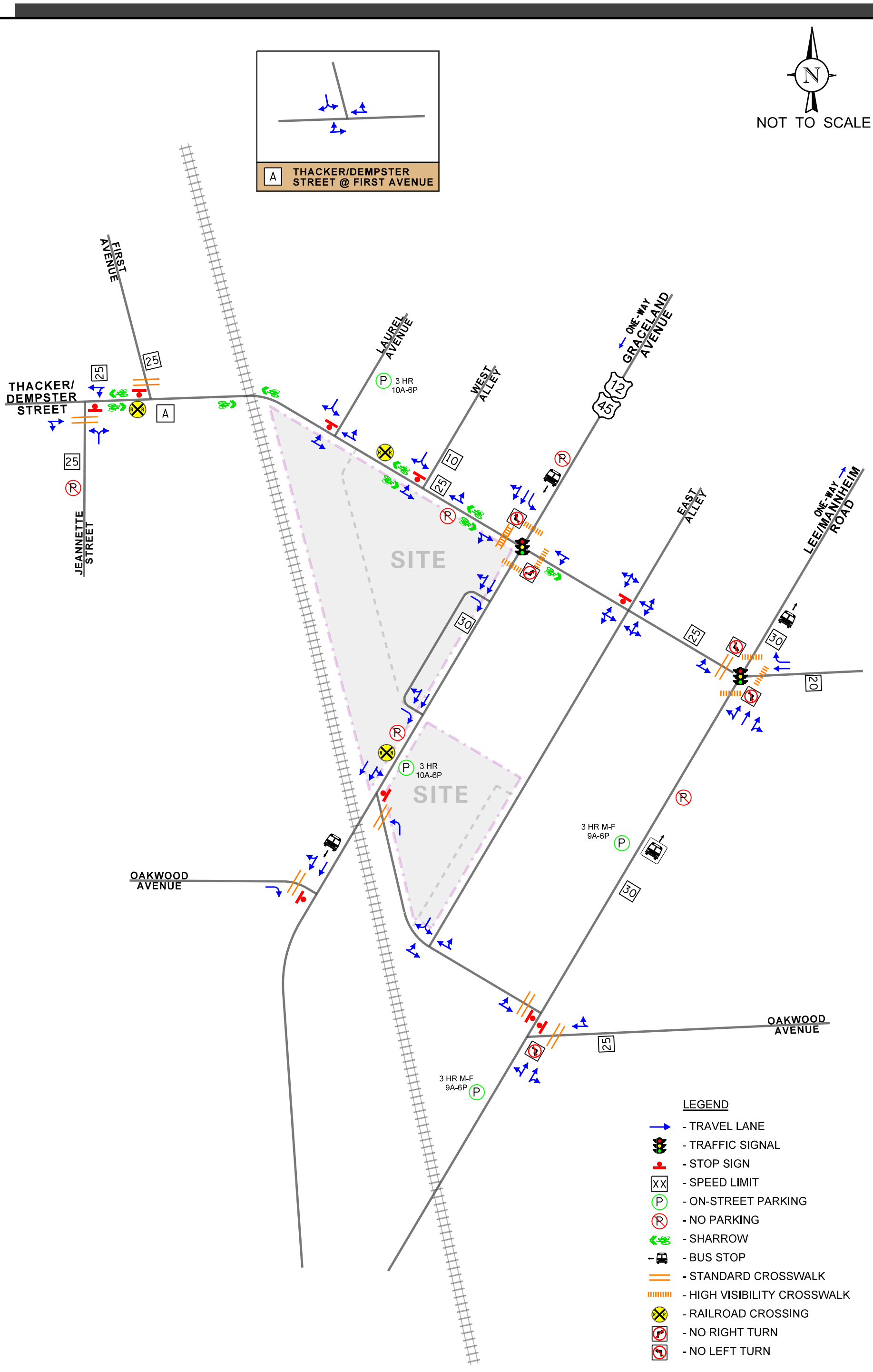
Site Location

The site, which is currently utilized as the parking lot for Contour Saws Inc., is bounded by Graceland Avenue to the west, an alley to the east, Oakwood Avenue to the south, and Graceland Manor apartments to the north. Land uses in the vicinity of the site are primarily residential with commercial land uses along Lee Road.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the proposed development are described below and illustrated in **Figure 3**.

Thacker Street is generally an east-west major collector roadway that provides one travel lane in each direction in the vicinity of the site. At its signalized intersection with Lee Road, Thacker Street provides a shared left-turn/through lane on the eastbound approach and a through lane and an exclusive right-turn lane on the westbound approach. High visibility crosswalks are provided on the east, north, and south legs of this intersection and a standard style crosswalk is provided on the west leg. Pedestrian signals are provided on all four legs of this intersection. At its signalized intersection with Graceland Avenue, Thacker Road provides a shared through/right-turn lane on the eastbound approach and a shared left-turn/through lane on the westbound approach. High visibility crosswalks and pedestrian signals are provided on all four legs of this intersection. At its unsignalized intersections with Jeannette Street, First Avenue, Laurel Avenue, and the two alleys, Thacker Street does not provide any exclusive turn lanes. Thacker Street is under the jurisdiction of the City of Des Plaines, carries an Annual Average Daily Traffic (AADT) volume of approximately 8,900 vehicles (IDOT 2022), and has a posted speed limit of 25 miles per hour.



PROPOSED RESIDENTIAL DEVELOPMENT
DES PLAINES, ILLINOIS

EXISTING ROADWAY CHARACTERISTIS

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 23-102 Figure: 3

Graceland Avenue (U.S. 45) is a northeast-southwest, other principal arterial roadway that is one way in the southbound direction in the vicinity of the site providing two travel lanes. At its signalized intersection with Thacker Street, Graceland Avenue provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the southbound approach. At its unsignalized north intersection with Oakwood Avenue, Graceland Avenue provides a through lane and a shared left-turn/through lane on the southbound approach. At its unsignalized south intersection with Oakwood Avenue, Graceland Avenue provides a through lane and a shared through/right turn lane on the southbound approach. Graceland Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an AADT volume of approximately 17,000 vehicles (IDOT 2021), is not classified as a Strategic Regional Arterial (SRA), and has a posted speed limit of 30 miles per hour.

Lee Road is a northeast-southwest, other principal arterial roadway that is one way in the northbound direction in the vicinity of the site providing two travel lanes. At its signalized intersection with Thacker Street, Lee Road provides a shared left-turn/through lane, a through lane, and a shared through/right-turn lane on the northbound approach. At its unsignalized intersection with Oakwood Avenue, Lee Road provides a shared left-turn/through lane and a shared through/right-turn lane on the northbound approach. Lee Road is under the jurisdiction of IDOT, carries an AADT volume of 5,600 vehicles (IDOT 2021), is not classified as an SRA, and has a posted speed limit of 30 miles per hour.

Oakwood Avenue is an east-west, local roadway that extends from 3rd Avenue to its terminus at River Road providing one travel lane in each direction. At its unsignalized north "T" intersection with Graceland Avenue, Oakwood Avenue provides a left-turn lane on the westbound approach. A standard style crosswalk is provided on the east leg of this intersection. At its unsignalized south "T" intersection with Graceland Avenue, Oakwood Avenue provides a right-turn lane on the eastbound approach. A standard style crosswalk is provided on the west leg of this intersection. At its unsignalized intersections with the alley and Lee Street, Oakwood Avenue provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach. Standard style crosswalks are provided on the east and west legs of the intersection of Oakwood Avenue with Lee Road. Oakwood Avenue is under the jurisdiction of the City of Des Plaines and has a posted speed limit of 25 miles per hour.

Jeannette Street is a north-south local roadway that serves residential houses in the vicinity of the site. Jeannette Street extends south from Thacker Road to its terminus at Algonquin Road providing one travel lane in each direction. At its unsignalized "T" intersection with Thacker Street, Jeannette Street provides a shared left-turn/right-turn lane on the northbound approach. A standard style crosswalk is provided on the south leg of this intersection. Jeannette Street is under the jurisdiction of the City of Des Plaines and has a posted speed limit of 25 miles per hour.

First Avenue is a north-south local roadway that provides one travel lane in each direction. At its unsignalized "T" intersection with Thacker Street, First Avenue provides a shared left-turn/right-turn lane on the southbound approach. A standard style crosswalk is provided on the north leg of this intersection. First Avenue is under the jurisdiction of the City of Des Plaines and has a posted speed limit of 25 miles per hour.

Laurel Avenue is a north-south local roadway that provides one lane in each direction. At its unsignalized "T" intersection with Thacker Street, Laurel Avenue provides a shared left-turn/right-turn lane on the southbound approach. Laurel Avenue is under the jurisdiction of the City of Des Plaines.

The east alley is a north-south local roadway that provides one lane in each direction. At its unsignalized intersection with Thacker Street, the alley provides a shared left-turn/through/right-turn lane on both approaches. At its unsignalized "T" intersection with Oakwood Avenue, the alley provides a shared left-turn/right-turn lane on the southbound approach.

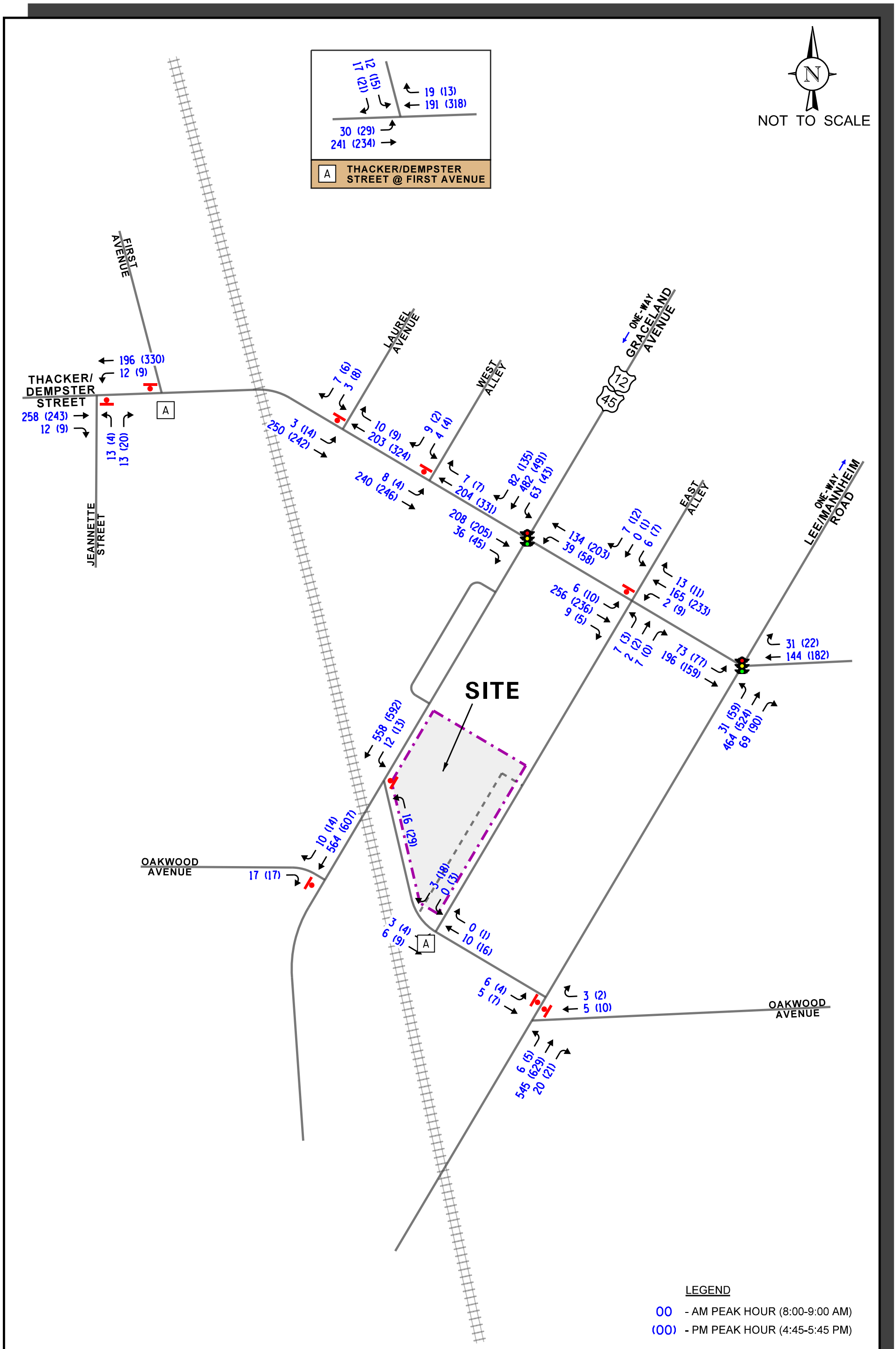
Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA. Inc conducted traffic counts using Miovision Video Scout Collection Units on Tuesday, April 11, 2023 and on Thursday, April 27, 2023 during the weekday morning (7:00 to 9:00 A.M.) and weekday evening (4:00 to 6:00 P.M.) peak periods at the following intersections:

- Thacker Street with Lee Road
- Thacker Street with Graceland Avenue
- Thacker Street with Laurel Avenue
- Thacker Street with First Avenue
- Thacker Street with Jeannette Street
- Thacker Street with the east alley
- Thacker Steet with the west alley
- Oakwood Avenue with Lee Road
- Oakwood Avenue with the east alley
- Oakwood Avenue with Graceland Avenue

Based on the turning movement count data, it was determined that the weekday morning peak hour of traffic generally occurs between 8:00 A.M. and 9:00 A.M. and the weekday evening peak hour of traffic generally occurs between 4:45 P.M. and 5:45 P.M.

Figure 4 illustrates the Year 2023 existing traffic volumes.



PROPOSED RESIDENTIAL DEVELOPMENT
DES PLAINES, ILLINOIS

EXISTING TRAFFIC VOLUMES

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 23-102 Figure: 4

Train Observations

The Union Pacific Metra Northwest crosses Graceland Avenue and Thacker Street in the vicinity of the site. Based on the Illinois Commerce Commission (ICC) data, the tracks carry an average of 22 daily passenger trains only. Furthermore and based on the Metra schedule, the Des Plaines Metra station is served by 69 trains (34 inbound, 35 outbound) on weekdays, 31 trains on Saturdays, and 19 trains on Sundays operating between 5:00 A.M. and 1:00 A.M. Monday through Friday. Field observations conducted during the peak hours for the crossings of Graceland Avenue and Thacker Street indicated the following:

Graceland Avenue Crossing

- During the weekday morning peak hour, three Metra train events were observed. The gates were down for approximately 35 seconds on average. The southbound approach queue at the railroad crossing did not extend to Thacker Street with a maximum queue of approximately 12 vehicles.

- During the weekday evening peak hour, four Metra train events were observed. The gates were down for approximately 51 seconds on average. The southbound approach queue at the railroad crossing did not extend back to Thacker Street with a maximum queue of approximately 12 vehicles.

Thacker Street Crossing

- During the weekday morning peak hour, the queues did not extend past Laurel Avenue.

- During the weekday evening peak hour, the queues extended past Laurel Avenue for approximately 45 seconds and cleared within 30 seconds after the gate was opened.

Crash Data Summary

KLOA, Inc. obtained crash data[1] for the past five years (2018 to 2022) for the intersections of Thacker Street with Lee Road, Thacker Street with Graceland Avenue, Graceland Avenue with Oakwood Avenue, Lee Road with Oakwood Avenue, Thacker Street with Jeannette Street and Laurel Avenue. A review of the crash data indicated that no crashes were reported at the intersection of Thacker Street with Laurel Avenue. It should be noted that no fatalities were reported at any studied intersection between 2018 and 2022. **Tables 1** through **5** summarize the crash data for these intersections.

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. The author is responsible for any data analyses and conclusions drawn.

Table 1
THACKER STREET WITH GRACELAND AVENUE - CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2018	1	0	0	0	1	0	2
2019	3	0	1	1	1	0	6
2020	1	0	1	0	0	0	2
2021	0	0	0	0	0	0	0
2022	1	0	0	0	1	0	2
Total	**6**	**0**	**2**	**1**	**3**	**0**	**12**
Average/Year	**1.2**	**--**	**<1.0**	**<1.0**	**<1.0**	**--**	**2.4**

Table 2
THACKER STREET WITH LEE ROAD - CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2018	1	0	1	0	5	0	7
2019	1	0	1	0	5	0	7
2020	0	0	0	0	6	0	6
2021	0	0	0	0	2	0	2
2022	0	0	0	1	3	0	4
Total	**2**	**0**	**2**	**1**	**21**	**0**	**26**
Average/Year	**<1.0**	**--**	**<1.0**	**<1.0**	**4.2**	**--**	**5.2**

Table 3
GRACELAND AVENUE WITH OAKWOOD AVENUE - CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2018	0	0	0	0	1	0	1
2019	0	0	1	0	0	0	1
2020	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0
Total	**0**	**0**	**1**	**0**	**1**	**0**	**2**
Average/Year	**--**	**--**	**<1.0**	**--**	**<1.0**	**--**	**<1.0**

Table 4
LEE ROAD WITH OAKWOOD AVENUE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2018	1	0	0	0	0	0	1
2019	0	0	0	0	2	0	2
2020	2	0	0	0	1	0	3
2021	0	0	0	0	0	0	0
2022	0	0	0	0	1	0	1
Total	**3**	**0**	**0**	**0**	**4**	**0**	**7**
Average/Year	**<1.0**	**--**	**--**	**--**	**<1.0**	**--**	**1.4**

Table 5
THACKER STREET WITH JEANNETTE STREET – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2018	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0
2022	1	1	0	0	0	0	2
Total	**1**	**1**	**0**	**0**	**0**	**0**	**2**
Average/Year	**<1.0**	**<1.0**	**--**	**--**	**--**	**--**	**<1.0**

3. Traffic Characteristics of the Proposed Development

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

Proposed Site and Development Plan

The site, which is currently utilized as the parking lot for Contour Saws Inc., will be redeveloped to provide 56 apartment units (41 one-bedroom units and 15 two-bedroom units) with 64 parking spaces. Access to the development will be provided via a full-movement access drive off Oakwood Avenue located approximately 260 feet east of Graceland Avenue and a full-movement access drive off the alley located approximately 320 feet north of Oakwood Avenue. Both access drives provide one inbound lane and one outbound lane with the outbound movements under stop sign control. A copy of the preliminary site plan depicting the proposed development is included in the Appendix.

Directional Distribution

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

N

NOT TO SCALE

FIRST AVENUE

THACKER/ DEMPSTER STREET

15%

A

LAUREL AVENUE

WEST ALLEY

35%

ONE-WAY

GRACELAND AVENUE

12

45

JEANNETTE STREET

EAST ALLEY

ONE-WAY

LEE/MANNHEIM ROAD

35%

15%

SITE

430'

320'

260'

45'

OAKWOOD AVENUE

OAKWOOD AVENUE

35%

35%

LEGEND

00% - PERCENT DISTRIBUTION

00' - DISTANCE IN FEET

PROPOSED RESIDENTIAL DEVELOPMENT
DES PLAINES, ILLINOIS

DIRECTIONAL DISTRIBUTION

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 23-102 Figure: 5

Development Traffic Generation

The vehicle trip generation for the overall development was calculated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. The "Multifamily Housing" (ITE Land-Use Code 221) rate was used for the proposed residential units.

It should be noted that due to the location of the site within close proximity of the Des Plaines Metra Station, census data for the area indicates that five percent of the estimated trips to be generated by the proposed development will be via the public transportation, two percent will walk, and one percent will bike. However, in order to provide a conservative analysis, no reductions were applied.

Table 6 shows the estimated vehicle trip generation for the weekday morning and weekday evening peak hours as well as daily traffic. Copies of the ITE trip generation worksheets are included in the Appendix.

Table 6
SITE GENERATED TRIP ESTIMATES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
221	Multifamily Housing (Mid-Rise) 56 units	3	10	13	14	8	22	111	111	222

Trip Generation Comparison

It should be noted that the site is currently occupied by an approximate 107,000 square-foot manufacturing building and parking lot. **Table 7** indicates the trips estimated to be generated by the existing manufacturing site and the trips estimated to be generated by the proposed residential development and the future development of the actual manufacturing building which is located at 900 Graceland Avenue (as discussed later in the report). A comparison between the future development`s generated trips and the manufacturing site shows that the trips estimated to be generated by the existing manufacturing site are approximately 35 percent higher during the weekday morning peak hour and 10 percent higher during the weekday evening peak hour.

Table 7
TRIP COMPARISON

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
221	Multifamily Housing (Mid-Rise) 178 units[1]	13	42	55	43	27	70	379	379	758
140	Manufacturing (~107,000 s.f.)	57	18	75	23	53	76	303	302	605
	Difference	-44	+24	-20	+20	-26	-6	+76	+76	+152

1 – Sum of both sites

4. Projected Traffic Conditions

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

Development Traffic Assignment

The estimated peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution. **Figure 6** illustrates the assignment of the vehicle traffic volumes to be generated by the proposed development.

Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate for six years (one-year buildout plus five years) totaling three percent to represent Year 2029 total projected conditions. Additionally, the Year 2029 no-build traffic volumes include the traffic estimated to be generated by the following other area developments:

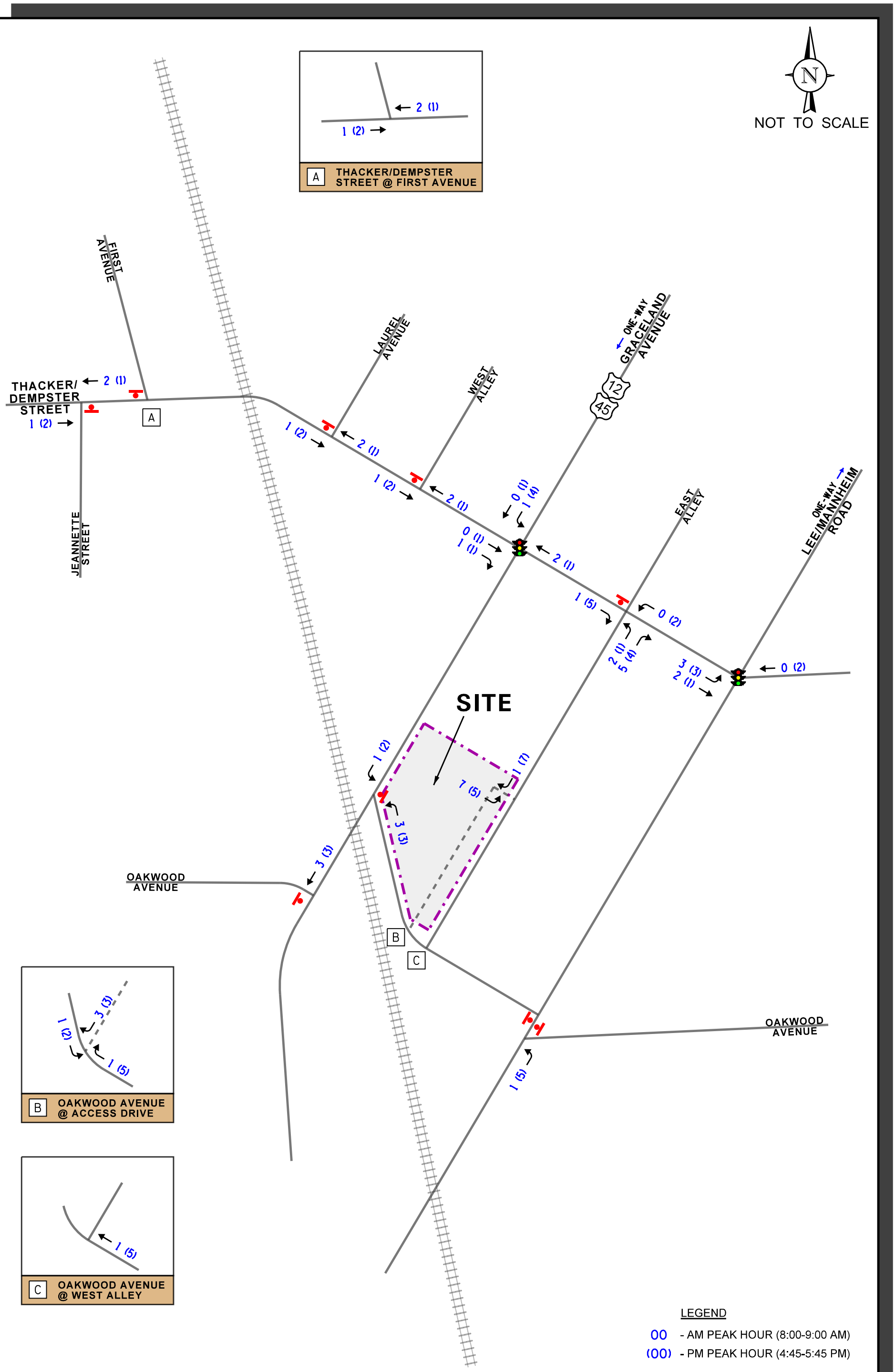
- The generated trips by the Little Bulgaria Center located at 832 Lee Street were estimated and assigned to the roadway system. It should be noted that the pick-up and drop-off activities will take place off the east alley.

- It is our understanding that 96 units of the Welkin Apartments located at 1425 Ellinwood Street are unoccupied. The estimated trip to the vacant units were estimated and assigned to the roadway system.

- Trips estimated to be generated by a proposed residential development with 122 apartment units to be locate at 900 Graceland Avenue which is currently occupied by Contour Saws Inc.

Total Projected Traffic Volumes

The total projected traffic volumes include the Year 2029 no-build traffic volumes and the traffic estimated to be generated by the proposed development (Figure 6). **Figure 7** shows the Year 2029 total projected traffic volumes.

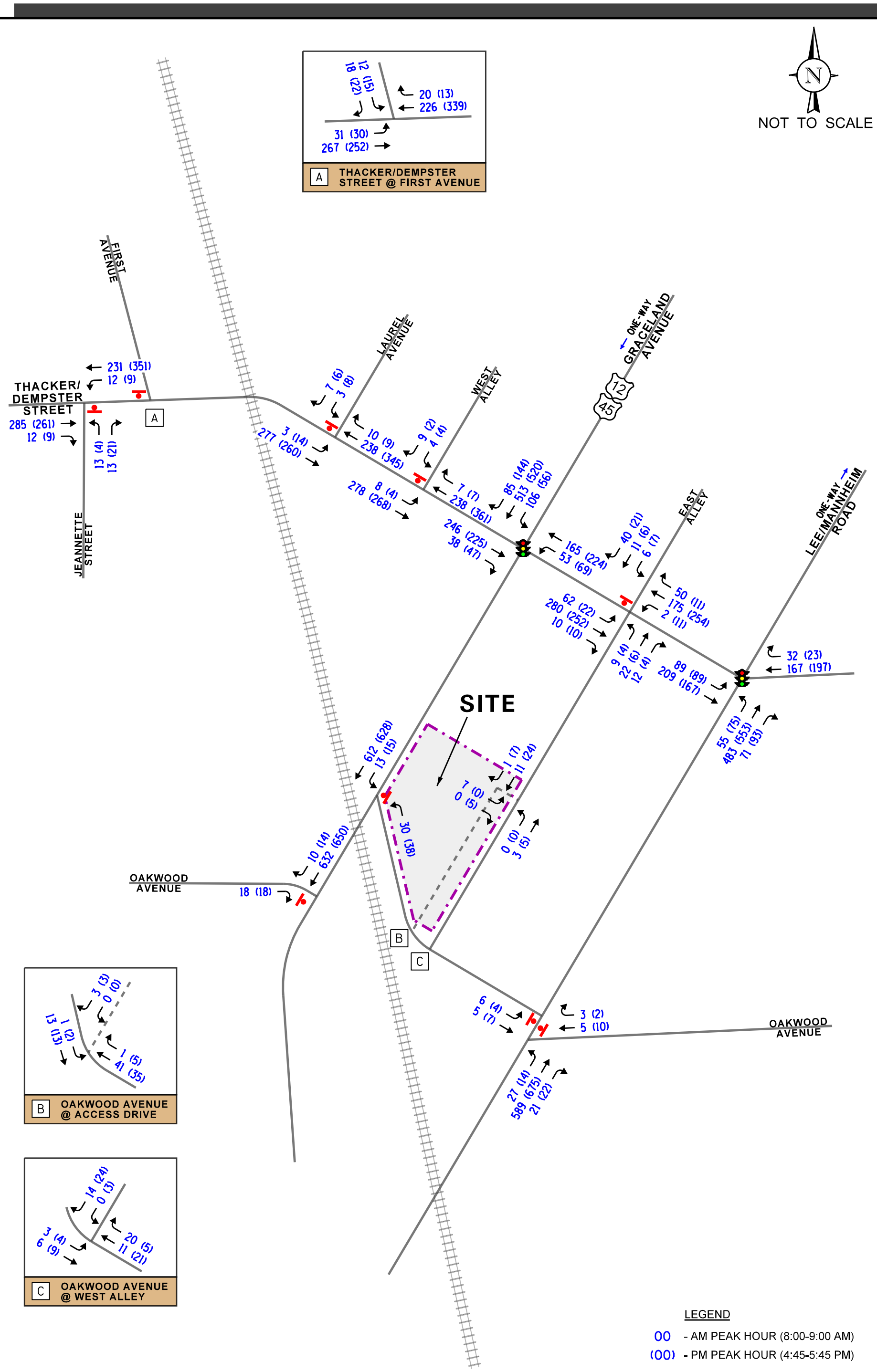


PROPOSED RESIDENTIAL DEVELOPMENT
DES PLAINES, ILLINOIS

SITE-GENERATED TRAFFIC VOLUMES

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 23-102 Figure: 6



PROPOSED RESIDENTIAL DEVELOPMENT
DES PLAINES, ILLINOIS

YEAR 2029 TOTAL TRAFFIC VOLUMES

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

Job No: 23-102 Figure: 7

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing and future projected (Year 2029) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersection was accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

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

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

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2029 total projected conditions are presented in **Tables 8** through **11**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 8
CAPACITY ANALYSIS RESULTS – THACKER STREET WITH GRACELAND AVENUE – SIGNALIZED

	Peak Hour	Eastbound	Westbound	Southbound		Overall
		T/R	L/T	L	T/R	
Existing Conditions	Weekday Morning	E – 59.1	D – 47.8	A 6.3	A 6.5	C 25.7
				A – 6.4		
	Weekday Evening	E – 59.0	E – 55.4	A 6.6	A 6.7	C 28.5
				A – 6.7		
Projected Conditions	Weekday Morning	E – 58.3	D – 46.8	A 7.4	A 7.7	C 26.7
				A – 7.6		
	Weekday Evening	E – 58.6	E – 57.1	A 7.1	A 7.4	C 29.6
				A – 7.4		

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 9
CAPACITY ANALYSIS RESULTS – THACKER STREET WITH LEE ROAD – SIGNALIZED

	Peak Hour	Eastbound	Westbound		Northbound	Overall
		L/T	T	R	L/T/R	
Existing Conditions	Weekday Morning	C – 34.9	E 57.5	A 4.9	A – 9.6	C 22.9
			D – 48.2			
	Weekday Evening	C – 34.9	E 56.7	A 0.7	A – 9.5	C 22.5
			D – 50.7			
Projected Conditions	Weekday Morning	C – 33.8	E 57.8	A 4.9	B – 11.4	C 24.3
			D – 49.3			
	Weekday Evening	C – 34.8	E 56.6	A 0.9	B – 11.0	C 23.4
			D – 50.7			

Letter denotes Level of Service L – Left Turn R – Right Turn
Delay is measured in seconds. T – Through

Table 10
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Graceland Avenue with Oakwood Avenue (North Intersection)[1]				
• Westbound Approach	B	11.0	B	11.0
Graceland Avenue with Oakwood Avenue (South Intersection)[1]				
• Eastbound Approach	B	10.4	B	11.0
Lee Street with Oakwood Avenue[1]				
• Eastbound Approach	B	12.8	B	14.2
• Westbound Approach	B	12.2	B	14.7
Thacker Street with Laurel Avenue[1]				
• Southbound Approach	B	10.2	B	12.3
• Eastbound Left Turn	A	7.7	A	8.1
Thacker Street with First Avenue[1]				
• Southbound Approach	B	11.2	B	12.3
• Eastbound Left Turn	A	7.8	A	8.2
Jeannette Street with Thacker Street[1]				
• Northbound Approach	B	11.3	B	10.5
• Westbound Left Turn	A	8.0	A	7.8
Thacker Street with Alley (West Alley)[1]				
• Southbound Approach	B	10.3	B	12.6
• Eastbound Left Turn	A	7.7	A	8.1
Thacker Street with Alley (East Alley)[1]				
• Northbound Approach	B	11.5	B	14.0
• Southbound Approach	B	10.9	B	11.6
• Eastbound Left Turn	A	7.6	A	7.8
• Westbound Left Turn	A	7.8	A	7.8
Oakwood Avenue with Alley[1]				
• Southbound Approach	A	8.4	A	8.5
• Eastbound Left Turn	A	7.2	A	7.2

LOS = Level of Service
Delay is measured in seconds.

1- All-Way Stop Control.

Table 11
CAPACITY ANALYSIS RESULTS –PROJECTED CONDITIONS - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Graceland Avenue with Oakwood Avenue (North Intersection)[1]				
• Westbound Approach	B	11.5	B	11.3
Graceland Avenue with Oakwood Avenue (South Intersection)[1]				
• Eastbound Approach	B	10.7	B	11.3
Lee Street with Oakwood Avenue[1]				
• Eastbound Approach	B	13.8	C	15.1
• Westbound Approach	B	13.0	C	15.7
Thacker Street with Laurel Avenue[1]				
• Southbound Approach	B	10.5	B	12.7
• Eastbound Left Turn	A	7.8	A	8.2
Thacker Street with First Avenue[1]				
• Southbound Approach	B	11.6	B	12.7
• Eastbound Left Turn	A	7.8	A	8.2
Jeannette Street with Thacker Street[1]				
• Northbound Approach	B	11.8	B	10.7
• Westbound Left Turn	A	8.0	A	7.8
Thacker Street with Alley (West Alley)[1]				
• Southbound Approach	B	10.7	B	13.2
• Eastbound Left Turn	A	7.8	A	8.2
Thacker Street with Alley (East Alley)[1]				
• Northbound Approach	C	15.4	B	14.0
• Southbound Approach	B	12.0	B	12.4
• Eastbound Left Turn	A	7.9	A	7.9
• Westbound Left Turn	A	7.9	A	7.9
Oakwood Avenue with Alley[1]				
• Southbound Approach	A	8.5	A	8.6
• Eastbound Left Turn	A	7.3	A	7.3
Alley with Proposed Access Drive[1]				
• Eastbound Approach	A	8.6	A	8.4
• Northbound Left Turn	A	0.1	A	0.1
Oakwood Avenue with Proposed Access Drive[1]				
• Southbound Approach	A	8.5	A	8.5
• Eastbound Left Turn	A	7.3	A	7.3

LOS = Level of Service
Delay is measured in seconds.

1- All-Way Stop Control.

Discussion and Recommendations

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

Thacker Street with Graceland Avenue

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) C during the weekday morning and weekday evening peak hours. The eastbound approach currently operates at LOS E during both peak hours and the westbound approach operates at LOS D during the weekday morning peak hour and LOS E during the weekday evening peak hour. Additionally, the southbound approach operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, overall this intersection is projected to continue operating at LOS C during the weekday morning and weekday evening peak hours with increases in delay of approximately one second and less than two seconds, respectively. All the approaches are projected to continue operating at the same existing levels of service during the peak hours with increases in delay of less than three seconds. The maximum 95th percentile queue for the eastbound through movement is projected to be approximately 295 feet during the weekday evening peak hour and will extend to the west alley but based on the field observations and the traffic simulation, the queue will clear the intersection during each green phase. The maximum 95th percentile queue for the westbound through movement is projected to be approximately 280 feet during the weekday evening peak hour and will extend to the east alley but based on the field observations and the traffic simulation, the queue will clear the intersection during each green phase. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements and/or traffic control modifications are required.

Thacker Street with Lee Road

The results of the capacity analysis indicate that overall this intersection currently operates at LOS C during the weekday morning and weekday evening peak hours. The eastbound approach operates at LOS C during both peak hours and the westbound approach operates at LOS D during both peak hours. Additionally, the northbound approach operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, overall this intersection is projected to continue operating at LOS C during the weekday morning and weekday evening peak hours with increases in delay of less than two seconds. The eastbound and westbound approaches are projected to operate at the same existing levels of service during both peak hours with increases in delay of less than two seconds. The northbound approach is projected to operate at LOS B during both peak hours with increases in delay of less than two seconds. The maximum 95th percentile queue for the eastbound through movement is projected to be approximately 245 feet during the weekday morning peak hour and will extend to the east alley but based on the field observations and the traffic simulation, the queue will clear the intersection during each green phase. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements and/or traffic control modifications are required.

Graceland Avenue with Oakwood Avenue (North Intersection)

The results of the capacity analysis indicate that the westbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours.

Under Year 2029 total projected conditions, the westbound approach is projected to continue operating at LOS B during both peak hours with increases in delay of less than one second. As such, the traffic that will be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

Graceland Avenue with Oakwood Avenue (South Intersection)

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours.

Under Year 2029 total projected conditions, the eastbound approach is projected to continue operating at LOS B during both peak hours with increases in delay of less than one second. As such, the traffic that will be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

Lee Street with Oakwood Avenue

The results of the capacity analysis indicate that the eastbound and westbound approaches currently operate at LOS B during the weekday morning and weekday evening peak hours.

Under Year 2029 total projected conditions, the eastbound and westbound approaches are projected to operate at LOS B during the weekday morning peak hour and LOS C during the weekday evening peak hour with increases in delay of approximately one second or less. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements and/or traffic control modifications are required.

Thacker Street with Laurel Avenue

The results of the capacity analysis indicate that the southbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours while the eastbound left-turn movement operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, the southbound approach and the eastbound left-turn movement are projected to continue operating at the same existing levels of service during both peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

Thacker Street with First Avenue

The results of the capacity analysis indicate that the southbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours while the eastbound left-turn movement operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, the southbound approach and the eastbound left-turn movement are projected to continue operating at the same existing levels of service during both peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

Thacker Street with Jeannette Street

The results of the capacity analysis indicate that the northbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours while the westbound left-turn movement operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, the northbound approach and the westbound left-turn movement are projected to continue operating at the same existing levels of service during both peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

Thacker Street with West Alley

The results of the capacity analysis indicate that the southbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours and the eastbound left-turn operates at LOS A during both peak hours.

Under Year 2029 total projected conditions, the southbound approach and the eastbound left-turn are projected to continue operating at the existing levels of service during both peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required

Thacker Street with East Alley

The results of the capacity analysis indicate that the northbound and southbound approaches currently operate at LOS B during the weekday morning and weekday evening peak hours. the eastbound and the westbound left-turn movements currently operate at LOS A during both peak hours.

Under Year 2029 total projected conditions, the northbound approach is projected to operate at LOS C during the weekday morning peak hour and LOS B during the weekday evening peak hour with increases in delay of less than four seconds. The southbound approach is projected to continue operating at LOS B during both peak hours with increases in delay of less than two seconds. The eastbound and westbound left-turn movements are projected to continue operating at LOS A during both peak hours with increases in delay of less than one second. As such, this intersection has adequate reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no roadway improvements and/or traffic control modifications are required.

Oakwood Avenue with East Alley

The results of the capacity analysis indicate that the southbound approach and the eastbound left-turn movement currently operate at LOS A during the weekday morning and weekday evening peak hour.

Under Year 2029 total projected conditions, the southbound approach and the eastbound left-turn movement are projected to continue operating at LOS A during both peak hours with increases in delay of less than one second. As such, the traffic estimated to be generated by the proposed development will have a limited impact on the operation of this intersection and no roadway improvements and/or traffic control modifications are required.

East Alley with Proposed Access Drive

The proposed full-movement access drive off the east alley will provide one inbound lane and one outbound lane with the outbound movements under stop sign control.

Under Year 2029 total projected conditions, the eastbound approach and the northbound left-turn movement are projected to operate at LOS A during the weekday morning and weekday evening peak hours. As such, this intersection will be adequate to accommodate the traffic estimated to be generated by the proposed development and will ensure efficient access to the site.

Oakwood Avenue with Proposed Access Drive

The proposed full-movement access drive off Oakwood Avenue will provide one inbound lane and one outbound lane with the outbound movements under stop sign control.

Under Year 2029 total projected conditions, the southbound approach and the eastbound left-turn movement are projected to operate at LOS A during both peak hours. As such, this intersection will be adequate to accommodate the traffic estimated to be generated by the proposed development and will ensure efficient access to the site.

Parking Evaluation

As previously indicated, the proposed development will have approximately 56 apartment units (41 one-bedroom units and 15 two-bedroom units) with 64 parking spaces. In order to determine the projected parking demand of the proposed development, the parking demand was estimated based on the City of Des Plaines Code of Ordinances and parking rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 5th Edition. Based on the two methodologies, the parking demand for the proposed development is as follows:

Parking Requirements of Proposed Development per City Code

- Multifamily Housing (56 Units)
    - 1 parking space per studio or one-bedroom unit
    - 1.5 parking spaces per two-bedroom unit

Based on the above and the requirements of the City of Des Plaines, this translates into 64 parking spaces It is also important to note that this ratio does not take into account the proximity of the site to the Metra train station.

ITE Parking Generation Manual

- Residential Use (Multifamily Housing Mid-Rise – Land Use Code 221)
    - 0.75 space per bedroom

Based on the above and the rates published in the ITE *Parking Generation Manual*, the above translates into 54 parking spaces based on the number of bedrooms which results in a surplus of 10 parking spaces. Therefore, the proposed parking supply of 64 parking spaces meets ITE's requirements of 54 parking spaces.

6. Conclusion

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

- The volume of traffic projected to be generated by the proposed development will be reduced due to the proximity of the development to the Des Plaines Metra train station.

- The results of the capacity analysis indicate that the proposed development traffic will not have a significant impact on the area roadways.

- Access to the development will be provided via a full-movement access drive off Oakwood Avenue located approximately 260 feet east of Graceland Avenue and a full-movement access drive off the alley located approximately 320 feet north of Oakwood Avenue. Both access drives will provide one inbound lane and one outbound lane with the outbound movements under stop sign control.

- The proposed access drives will be adequate in accommodating the traffic projected to be generated by the proposed development and will ensure that a flexible access system is provided.

- The proposed parking supply of 64 spaces will meet the City of Des Plaines and ITE requirements.

Appendix

Traffic Count Summary Sheets
Site Plan
ITE Trip Generation Summary Sheets
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets

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

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

Count Name: Graceland Avenue with North Access Drives TMC
Site Code:
Start Date: 04/26/2023
Page No: 1

Turning Movement Data

Start Time	West Access Drive Eastbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	160	0	0	160	160
4:15 PM	0	0	1	1	1	0	0	0	0	0	0	187	1	0	188	189
4:30 PM	0	0	0	2	0	0	0	0	0	0	0	135	0	0	135	135
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	167	0	0	167	167
Hourly Total	0	0	1	5	1	0	0	0	0	0	0	649	1	0	650	651
5:00 PM	0	0	0	3	0	0	0	1	0	1	0	119	0	0	119	120
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	169	0	0	169	169
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	159	0	0	159	159
5:45 PM	0	0	0	2	0	0	0	1	0	1	0	131	0	0	131	132
Hourly Total	0	0	0	5	0	0	0	2	0	2	0	578	0	0	578	580
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	87	1	0	88	88
7:15 AM	0	0	0	3	0	0	0	0	0	0	0	100	0	1	100	100
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	120	0	0	120	120
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	153	0	0	153	153
Hourly Total	0	0	0	4	0	0	0	0	0	0	0	460	1	1	461	461
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	152	0	0	152	152
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	135	0	0	135	135
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	117	0	0	117	117
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	138	0	0	138	138
Hourly Total	0	0	0	1	0	0	0	0	0	0	0	542	0	0	542	542
Grand Total	0	0	1	15	1	0	0	2	0	2	0	2229	2	1	2231	2234
Approach %	0.0	0.0	100.0	-	-	0.0	0.0	100.0	-	-	0.0	99.9	0.1	-	-	-
Total %	0.0	0.0	0.0	-	0.0	0.0	0.0	0.1	-	0.1	0.0	99.8	0.1	-	99.9	-
Lights	0	0	1	-	1	0	0	0	-	0	0	2153	2	-	2155	2156
% Lights	-	-	100.0	-	100.0	-	-	0.0	-	0.0	-	96.6	100.0	-	96.6	96.5
Buses	0	0	0	-	0	0	0	0	-	0	0	28	0	-	28	28
% Buses	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	1.3	0.0	-	1.3	1.3
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	28	0	-	28	28
% Single-Unit Trucks	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	1.3	0.0	-	1.3	1.3
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	16	0	-	16	16
% Articulated Trucks	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	0.7	0.0	-	0.7	0.7
Bicycles on Road	0	0	0	-	0	0	0	2	-	2	0	4	0	-	4	6
% Bicycles on Road	-	-	0.0	-	0.0	-	-	100.0	-	100.0	-	0.2	0.0	-	0.2	0.3
Pedestrians	-	-	-	15	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Graceland Avenue with North Access Drives TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	West Access Drive Eastbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	167	0	0	167	167
5:00 PM	0	0	0	3	0	0	0	1	0	1	0	119	0	0	119	120
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	169	0	0	169	169
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	159	0	0	159	159
Total	0	0	0	4	0	0	0	1	0	1	0	614	0	0	614	615
Approach %	0.0	0.0	0.0	-	-	0.0	0.0	100.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	-	0.2	0.0	99.8	0.0	-	99.8	-
PHF	0.000	0.000	0.000	-	0.000	0.000	0.000	0.250	-	0.250	0.000	0.908	0.000	-	0.908	0.910
Lights	0	0	0	-	0	0	0	0	-	0	0	604	0	-	604	604
% Lights	-	-	-	-	-	-	-	0.0	-	0.0	-	98.4	-	-	98.4	98.2
Buses	0	0	0	-	0	0	0	0	-	0	0	3	0	-	3	3
% Buses	-	-	-	-	-	-	-	0.0	-	0.0	-	0.5	-	-	0.5	0.5
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	7	0	-	7	7
% Single-Unit Trucks	-	-	-	-	-	-	-	0.0	-	0.0	-	1.1	-	-	1.1	1.1
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
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	0	0	-	0	1
% Bicycles on Road	-	-	-	-	-	-	-	100.0	-	100.0	-	0.0	-	-	0.0	0.2
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: Graceland Avenue with North Access Drives TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	West Access Drive Eastbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	152	0	0	152	152
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	135	0	0	135	135
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	117	0	0	117	117
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	138	0	0	138	138
Total	0	0	0	1	0	0	0	0	0	0	0	542	0	0	542	542
Approach %	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	100.0	0.0	-	100.0	-
PHF	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	-	0.000	0.000	0.891	0.000	-	0.891	0.891
Lights	0	0	0	-	0	0	0	0	-	0	0	522	0	-	522	522
% Lights	-	-	-	-	-	-	-	-	-	-	-	96.3	-	-	96.3	96.3
Buses	0	0	0	-	0	0	0	0	-	0	0	12	0	-	12	12
% Buses	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	2.2	2.2
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	4	0	-	4	4
% Single-Unit Trucks	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.7	0.7
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	4	0	-	4	4
% Articulated Trucks	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	0.7	0.7
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Graceland Avenue with Oakwood Avenue - East TMC
Site Code:
Start Date: 04/27/2023

Turning Movement Data

Start Time	Oakwood Avenue Westbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:00 PM	0	15	0	2	15	0	0	0	0	0	0	1	127	0	128	143
4:15 PM	0	7	0	2	7	0	0	0	0	0	0	10	177	0	187	194
4:30 PM	0	5	0	0	5	0	1	0	0	1	0	3	128	0	131	137
4:45 PM	0	8	0	1	8	0	0	0	0	0	0	8	143	0	151	159
Hourly Total	0	35	0	5	35	0	1	0	0	1	0	22	575	0	597	633
5:00 PM	0	6	0	1	6	0	0	0	0	0	0	2	142	0	144	150
5:15 PM	0	10	0	1	10	0	0	0	0	0	0	1	162	0	163	173
5:30 PM	0	5	0	1	5	0	1	0	0	1	0	2	116	0	118	124
5:45 PM	0	8	0	0	8	0	0	0	0	0	0	3	155	0	158	166
Hourly Total	0	29	0	3	29	0	1	0	0	1	0	8	575	0	583	613
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	5	94	0	99	100
7:15 AM	0	5	0	1	5	0	0	0	0	0	0	2	68	0	70	75
7:30 AM	0	3	0	0	3	0	0	0	0	0	0	4	108	0	112	115
7:45 AM	0	4	0	2	4	0	0	0	0	0	0	4	151	0	155	159
Hourly Total	0	13	0	3	13	0	0	0	0	0	0	15	421	0	436	449
8:00 AM	0	3	0	0	3	0	0	0	0	0	0	4	143	0	147	150
8:15 AM	0	3	0	1	3	0	0	0	0	0	0	2	131	0	133	136
8:30 AM	0	7	0	0	7	0	0	0	0	0	0	4	139	0	143	150
8:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	125	0	127	130
Hourly Total	0	16	0	1	16	0	0	0	0	0	0	12	538	0	550	566
Grand Total	0	93	0	12	93	0	2	0	0	2	0	57	2109	0	2166	2261
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	0.0	2.6	97.4	-	-	-
Total %	0.0	4.1	0.0	-	4.1	0.0	0.1	0.0	-	0.1	0.0	2.5	93.3	-	95.8	-
Lights	0	88	0	-	88	0	1	0	-	1	0	41	2043	-	2084	2173
% Lights	-	94.6	-	-	94.6	-	50.0	-	-	50.0	-	71.9	96.9	-	96.2	96.1
Buses	0	0	0	-	0	0	0	0	-	0	0	1	25	-	26	26
% Buses	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	1.8	1.2	-	1.2	1.1
Single-Unit Trucks	0	5	0	-	5	0	0	0	-	0	0	14	17	-	31	36
% Single-Unit Trucks	-	5.4	-	-	5.4	-	0.0	-	-	0.0	-	24.6	0.8	-	1.4	1.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	1	19	-	20	20
% Articulated Trucks	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	1.8	0.9	-	0.9	0.9
Bicycles on Road	0	0	0	-	0	0	1	0	-	1	0	0	5	-	5	6
% Bicycles on Road	-	0.0	-	-	0.0	-	50.0	-	-	50.0	-	0.0	0.2	-	0.2	0.3
Pedestrians	-	-	-	12	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Graceland Avenue with Oakwood Avenue - East TMC
Site Code:
Start Date: 04/27/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Oakwood Avenue Westbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
4:45 PM	0	8	0	1	8	0	0	0	0	0	0	8	143	0	151	159
5:00 PM	0	6	0	1	6	0	0	0	0	0	0	2	142	0	144	150
5:15 PM	0	10	0	1	10	0	0	0	0	0	0	1	162	0	163	173
5:30 PM	0	5	0	1	5	0	1	0	0	1	0	2	116	0	118	124
Total	0	29	0	4	29	0	1	0	0	1	0	13	563	0	576	606
Approach %	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	0.0	2.3	97.7	-	-	-
Total %	0.0	4.8	0.0	-	4.8	0.0	0.2	0.0	-	0.2	0.0	2.1	92.9	-	95.0	-
PHF	0.000	0.725	0.000	-	0.725	0.000	0.250	0.000	-	0.250	0.000	0.406	0.869	-	0.883	0.876
Lights	0	29	0	-	29	0	0	0	-	0	0	11	556	-	567	596
% Lights	-	100.0	-	-	100.0	-	0.0	-	-	0.0	-	84.6	98.8	-	98.4	98.3
Buses	0	0	0	-	0	0	0	0	-	0	0	0	3	-	3	3
% Buses	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	0.5	-	0.5	0.5
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	2	1	-	3	3
% Single-Unit Trucks	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	15.4	0.2	-	0.5	0.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	3	-	3	3
% Articulated Trucks	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	0.5	-	0.5	0.5
Bicycles on Road	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Bicycles on Road	-	0.0	-	-	0.0	-	100.0	-	-	100.0	-	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Graceland Avenue with Oakwood Avenue - East TMC
Site Code:
Start Date: 04/27/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Oakwood Avenue Westbound					Graceland Avenue Northbound					Graceland Avenue Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Int. Total
8:00 AM	0	3	0	0	3	0	0	0	0	0	0	4	143	0	147	150
8:15 AM	0	3	0	1	3	0	0	0	0	0	0	2	131	0	133	136
8:30 AM	0	7	0	0	7	0	0	0	0	0	0	4	139	0	143	150
8:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	125	0	127	130
Total	0	16	0	1	16	0	0	0	0	0	0	12	538	0	550	566
Approach %	0.0	100.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	2.2	97.8	-	-	-
Total %	0.0	2.8	0.0	-	2.8	0.0	0.0	0.0	-	0.0	0.0	2.1	95.1	-	97.2	-
PHF	0.000	0.571	0.000	-	0.571	0.000	0.000	0.000	-	0.000	0.000	0.750	0.941	-	0.935	0.943
Lights	0	14	0	-	14	0	0	0	-	0	0	8	519	-	527	541
% Lights	-	87.5	-	-	87.5	-	-	-	-	-	-	66.7	96.5	-	95.8	95.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	10	-	10	10
% Buses	-	0.0	-	-	0.0	-	-	-	-	-	-	0.0	1.9	-	1.8	1.8
Single-Unit Trucks	0	2	0	-	2	0	0	0	-	0	0	4	5	-	9	11
% Single-Unit Trucks	-	12.5	-	-	12.5	-	-	-	-	-	-	33.3	0.9	-	1.6	1.9
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	4	-	4	4
% Articulated Trucks	-	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.7	-	0.7	0.7
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: Jeanette Street with Thacker Street TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Data

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Jeanette Street Northbound						Schmika Auto Access Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	30	2	0	32	0	2	31	0	0	33	0	1	0	5	0	6	0	0	0	0	1	0	71
7:15 AM	0	0	47	3	0	50	0	1	38	0	0	39	0	4	0	2	0	6	0	0	0	0	0	0	95
7:30 AM	0	0	51	1	0	52	0	2	46	0	0	48	0	0	0	7	0	7	0	0	0	0	0	0	107
7:45 AM	0	0	82	1	0	83	0	0	44	0	0	44	0	7	0	9	0	16	0	0	0	0	0	0	143
Hourly Total	0	0	210	7	0	217	0	5	159	0	0	164	0	12	0	23	0	35	0	0	0	0	1	0	416
8:00 AM	0	0	65	2	0	67	0	5	45	0	0	50	0	2	0	4	0	6	0	0	0	0	1	0	123
8:15 AM	0	0	65	5	0	70	0	6	54	0	0	60	0	7	0	3	0	10	0	0	0	0	4	0	140
8:30 AM	0	0	55	4	0	59	0	0	46	0	1	46	0	2	0	4	0	6	0	0	0	0	2	0	111
8:45 AM	0	0	73	1	0	74	0	1	51	0	0	52	0	2	0	2	0	4	0	0	0	0	0	0	130
Hourly Total	0	0	258	12	0	270	0	12	196	0	1	208	0	13	0	13	0	26	0	0	0	0	7	0	504
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	60	2	0	62	0	3	69	0	1	72	0	1	0	5	0	6	0	0	0	0	2	0	140
4:15 PM	0	0	53	3	0	56	0	5	71	0	0	76	0	3	0	13	0	16	0	0	0	0	3	0	148
4:30 PM	0	0	69	1	0	70	0	4	57	0	0	61	0	8	0	6	0	14	0	0	0	0	0	0	145
4:45 PM	0	0	52	1	0	53	0	2	74	0	3	76	0	0	0	4	0	4	0	0	0	0	3	0	133
Hourly Total	0	0	234	7	0	241	0	14	271	0	4	285	0	12	0	28	0	40	0	0	0	0	8	0	566
5:00 PM	0	0	62	2	1	64	0	3	94	0	1	97	0	1	0	4	0	5	0	0	0	0	1	0	166
5:15 PM	0	0	71	4	1	75	0	3	83	0	0	86	0	2	0	6	0	8	0	0	0	0	4	0	169
5:30 PM	0	0	57	2	0	59	0	1	79	0	1	80	0	1	0	6	0	7	0	0	0	0	2	0	146
5:45 PM	0	0	47	1	0	48	0	0	74	0	2	74	0	3	0	6	0	9	0	0	0	0	6	0	131
Hourly Total	0	0	237	9	2	246	0	7	330	0	4	337	0	7	0	22	0	29	0	0	0	0	13	0	612
Grand Total	0	0	939	35	2	974	0	38	956	0	9	994	0	44	0	86	0	130	0	0	0	0	29	0	2098
Approach %	0.0	0.0	96.4	3.6	-	-	0.0	3.8	96.2	0.0	-	-	0.0	33.8	0.0	66.2	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	0.0	44.8	1.7	-	46.4	0.0	1.8	45.6	0.0	-	47.4	0.0	2.1	0.0	4.1	-	6.2	0.0	0.0	0.0	0.0	-	0.0	-
Lights	0	0	910	34	-	944	0	37	911	0	-	948	0	42	0	85	-	127	0	0	0	0	-	0	2019
% Lights	-	-	96.9	97.1	-	96.9	-	97.4	95.3	-	-	95.4	-	95.5	-	98.8	-	97.7	-	-	-	-	-	-	96.2
Buses	0	0	12	0	-	12	0	0	21	0	-	21	0	0	0	0	-	0	0	0	0	0	-	0	33
% Buses	-	-	1.3	0.0	-	1.2	-	0.0	2.2	-	-	2.1	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	1.6
Single-Unit Trucks	0	0	11	0	-	11	0	1	13	0	-	14	0	1	0	1	-	2	0	0	0	0	-	0	27
% Single-Unit Trucks	-	-	1.2	0.0	-	1.1	-	2.6	1.4	-	-	1.4	-	2.3	-	1.2	-	1.5	-	-	-	-	-	-	1.3
Articulated Trucks	0	0	2	0	-	2	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	7
% Articulated Trucks	-	-	0.2	0.0	-	0.2	-	0.0	0.5	-	-	0.5	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.3
Bicycles on Road	0	0	4	1	-	5	0	0	6	0	-	6	0	1	0	0	-	1	0	0	0	0	-	0	12

% Bicycles on Road	-	-	0.4	2.9	-	0.5	-	0.0	0.6	-	-	0.6	-	2.3	-	0.0	-	0.8	-	-	-	-	-	-	0.6
Pedestrians	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	29	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Jeanette Street with Thacker Street TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Jeanette Street Northbound						Schmika Auto Access Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	0	0	65	2	0	67	0	5	45	0	0	50	0	2	0	4	0	6	0	0	0	0	1	0	123
8:15 AM	0	0	65	5	0	70	0	6	54	0	0	60	0	7	0	3	0	10	0	0	0	0	4	0	140
8:30 AM	0	0	55	4	0	59	0	0	46	0	1	46	0	2	0	4	0	6	0	0	0	0	2	0	111
8:45 AM	0	0	73	1	0	74	0	1	51	0	0	52	0	2	0	2	0	4	0	0	0	0	0	0	130
Total	0	0	258	12	0	270	0	12	196	0	1	208	0	13	0	13	0	26	0	0	0	0	7	0	504
Approach %	0.0	0.0	95.6	4.4	-	-	0.0	5.8	94.2	0.0	-	-	0.0	50.0	0.0	50.0	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	0.0	51.2	2.4	-	53.6	0.0	2.4	38.9	0.0	-	41.3	0.0	2.6	0.0	2.6	-	5.2	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.000	0.884	0.600	-	0.912	0.000	0.500	0.907	0.000	-	0.867	0.000	0.464	0.000	0.813	-	0.650	0.000	0.000	0.000	0.000	-	0.000	0.900
Lights	0	0	247	12	-	259	0	11	185	0	-	196	0	13	0	13	-	26	0	0	0	0	-	0	481
% Lights	-	-	95.7	100.0	-	95.9	-	91.7	94.4	-	-	94.2	-	100.0	-	100.0	-	100.0	-	-	-	-	-	-	95.4
Buses	0	0	4	0	-	4	0	0	6	0	-	6	0	0	0	0	-	0	0	0	0	0	-	0	10
% Buses	-	-	1.6	0.0	-	1.5	-	0.0	3.1	-	-	2.9	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	2.0
Single-Unit Trucks	0	0	5	0	-	5	0	1	4	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	10
% Single-Unit Trucks	-	-	1.9	0.0	-	1.9	-	8.3	2.0	-	-	2.4	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	2.0
Articulated Trucks	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	-	0.4	0.0	-	0.4	-	0.0	0.5	-	-	0.5	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.4
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	-	0.4	0.0	-	0.4	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Jeanette Street with Thacker Street TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Jeanette Street Northbound						Schmika Auto Access Drive Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	0	52	1	0	53	0	2	74	0	3	76	0	0	0	4	0	4	0	0	0	0	3	0	133
5:00 PM	0	0	62	2	1	64	0	3	94	0	1	97	0	1	0	4	0	5	0	0	0	0	1	0	166
5:15 PM	0	0	71	4	1	75	0	3	83	0	0	86	0	2	0	6	0	8	0	0	0	0	4	0	169
5:30 PM	0	0	57	2	0	59	0	1	79	0	1	80	0	1	0	6	0	7	0	0	0	0	2	0	146
Total	0	0	242	9	2	251	0	9	330	0	5	339	0	4	0	20	0	24	0	0	0	0	10	0	614
Approach %	0.0	0.0	96.4	3.6	-	-	0.0	2.7	97.3	0.0	-	-	0.0	16.7	0.0	83.3	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	0.0	39.4	1.5	-	40.9	0.0	1.5	53.7	0.0	-	55.2	0.0	0.7	0.0	3.3	-	3.9	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.000	0.852	0.563	-	0.837	0.000	0.750	0.878	0.000	-	0.874	0.000	0.500	0.000	0.833	-	0.750	0.000	0.000	0.000	0.000	-	0.000	0.908
Lights	0	0	236	9	-	245	0	9	320	0	-	329	0	4	0	20	-	24	0	0	0	0	-	0	598
% Lights	-	-	97.5	100.0	-	97.6	-	100.0	97.0	-	-	97.1	-	100.0	-	100.0	-	100.0	-	-	-	-	-	-	97.4
Buses	0	0	1	0	-	1	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	4
% Buses	-	-	0.4	0.0	-	0.4	-	0.0	0.9	-	-	0.9	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.7
Single-Unit Trucks	0	0	2	0	-	2	0	0	5	0	-	5	0	0	0	0	-	0	0	0	0	0	-	0	7
% Single-Unit Trucks	-	-	0.8	0.0	-	0.8	-	0.0	1.5	-	-	1.5	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	1.1
Articulated Trucks	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	-	0.4	0.0	-	0.4	-	0.0	0.3	-	-	0.3	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.3
Bicycles on Road	0	0	2	0	-	2	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	3
% Bicycles on Road	-	-	0.8	0.0	-	0.8	-	0.0	0.3	-	-	0.3	-	0.0	-	0.0	-	0.0	-	-	-	-	-	-	0.5
Pedestrians	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	10	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Laurel Avenue with Thacker Street
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Data

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Laurel Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	5	52	0	57	0	48	1	0	49	0	1	2	4	3	109
7:15 AM	0	4	57	0	61	0	52	1	0	53	0	2	1	2	3	117
7:30 AM	0	1	62	0	63	0	46	5	0	51	0	3	2	2	5	119
7:45 AM	0	2	65	0	67	0	49	3	0	52	0	0	1	1	1	120
Hourly Total	0	12	236	0	248	0	195	10	0	205	0	6	6	9	12	465
8:00 AM	0	2	44	1	46	0	39	1	0	40	0	1	3	1	4	90
8:15 AM	0	0	49	0	49	0	39	3	0	42	0	0	1	1	1	92
8:30 AM	0	0	47	0	47	0	38	2	0	40	0	2	2	0	4	91
8:45 AM	0	1	34	0	35	0	30	4	0	34	0	0	1	5	1	70
Hourly Total	0	3	174	1	177	0	146	10	0	156	0	3	7	7	10	343
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	65	0	66	0	104	4	0	108	0	1	0	2	1	175
4:15 PM	0	2	65	0	67	0	69	4	1	73	0	2	1	4	3	143
4:30 PM	0	2	53	0	55	0	59	7	0	66	0	2	2	2	4	125
4:45 PM	0	4	55	0	59	0	75	1	1	76	0	4	0	4	4	139
Hourly Total	0	9	238	0	247	0	307	16	2	323	0	9	3	12	12	582
5:00 PM	0	3	47	0	50	0	55	4	0	59	0	0	2	4	2	111
5:15 PM	0	3	51	0	54	0	67	1	0	68	0	2	1	4	3	125
5:30 PM	0	4	49	0	53	0	62	3	2	65	0	2	3	1	5	123
5:45 PM	0	2	53	2	55	0	43	3	0	46	0	2	1	1	3	104
Hourly Total	0	12	200	2	212	0	227	11	2	238	0	6	7	10	13	463
Grand Total	0	36	848	3	884	0	875	47	4	922	0	24	23	38	47	1853
Approach %	0.0	4.1	95.9	-	-	0.0	94.9	5.1	-	-	0.0	51.1	48.9	-	-	-
Total %	0.0	1.9	45.8	-	47.7	0.0	47.2	2.5	-	49.8	0.0	1.3	1.2	-	2.5	-
Lights	0	34	816	-	850	0	837	46	-	883	0	24	22	-	46	1779
% Lights	-	94.4	96.2	-	96.2	-	95.7	97.9	-	95.8	-	100.0	95.7	-	97.9	96.0
Buses	0	0	9	-	9	0	11	0	-	11	0	0	0	-	0	20
% Buses	-	0.0	1.1	-	1.0	-	1.3	0.0	-	1.2	-	0.0	0.0	-	0.0	1.1
Single-Unit Trucks	0	2	17	-	19	0	16	0	-	16	0	0	1	-	1	36
% Single-Unit Trucks	-	5.6	2.0	-	2.1	-	1.8	0.0	-	1.7	-	0.0	4.3	-	2.1	1.9
Articulated Trucks	0	0	1	-	1	0	5	0	-	5	0	0	0	-	0	6
% Articulated Trucks	-	0.0	0.1	-	0.1	-	0.6	0.0	-	0.5	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	0	5	-	5	0	6	1	-	7	0	0	0	-	0	12
% Bicycles on Road	-	0.0	0.6	-	0.6	-	0.7	2.1	-	0.8	-	0.0	0.0	-	0.0	0.6
Pedestrians	-	-	-	3	-	-	-	-	4	-	-	-	-	38	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

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

Count Name: Laurel Avenue with Thacker Street
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Laurel Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
8:00 AM	0	2	44	1	46	0	39	1	0	40	0	1	3	1	4	90
8:15 AM	0	0	49	0	49	0	39	3	0	42	0	0	1	1	1	92
8:30 AM	0	0	47	0	47	0	38	2	0	40	0	2	2	0	4	91
8:45 AM	0	1	34	0	35	0	30	4	0	34	0	0	1	5	1	70
Total	0	3	174	1	177	0	146	10	0	156	0	3	7	7	10	343
Approach %	0.0	1.7	98.3	-	-	0.0	93.6	6.4	-	-	0.0	30.0	70.0	-	-	-
Total %	0.0	0.9	50.7	-	51.6	0.0	42.6	2.9	-	45.5	0.0	0.9	2.0	-	2.9	-
PHF	0.000	0.375	0.888	-	0.903	0.000	0.936	0.625	-	0.929	0.000	0.375	0.583	-	0.625	0.932
Lights	0	3	169	-	172	0	134	10	-	144	0	3	7	-	10	326
% Lights	-	100.0	97.1	-	97.2	-	91.8	100.0	-	92.3	-	100.0	100.0	-	100.0	95.0
Buses	0	0	1	-	1	0	1	0	-	1	0	0	0	-	0	2
% Buses	-	0.0	0.6	-	0.6	-	0.7	0.0	-	0.6	-	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	0	4	-	4	0	7	0	-	7	0	0	0	-	0	11
% Single-Unit Trucks	-	0.0	2.3	-	2.3	-	4.8	0.0	-	4.5	-	0.0	0.0	-	0.0	3.2
Articulated Trucks	0	0	0	-	0	0	3	0	-	3	0	0	0	-	0	3
% Articulated Trucks	-	0.0	0.0	-	0.0	-	2.1	0.0	-	1.9	-	0.0	0.0	-	0.0	0.9
Bicycles on Road	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.7	0.0	-	0.6	-	0.0	0.0	-	0.0	0.3
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	7	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Laurel Avenue with Thacker Street
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Laurel Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:45 PM	0	4	55	0	59	0	75	1	1	76	0	4	0	4	4	139
5:00 PM	0	3	47	0	50	0	55	4	0	59	0	0	2	4	2	111
5:15 PM	0	3	51	0	54	0	67	1	0	68	0	2	1	4	3	125
5:30 PM	0	4	49	0	53	0	62	3	2	65	0	2	3	1	5	123
Total	0	14	202	0	216	0	259	9	3	268	0	8	6	13	14	498
Approach %	0.0	6.5	93.5	-	-	0.0	96.6	3.4	-	-	0.0	57.1	42.9	-	-	-
Total %	0.0	2.8	40.6	-	43.4	0.0	52.0	1.8	-	53.8	0.0	1.6	1.2	-	2.8	-
PHF	0.000	0.875	0.918	-	0.915	0.000	0.863	0.563	-	0.882	0.000	0.500	0.500	-	0.700	0.896
Lights	0	13	198	-	211	0	252	9	-	261	0	8	5	-	13	485
% Lights	-	92.9	98.0	-	97.7	-	97.3	100.0	-	97.4	-	100.0	83.3	-	92.9	97.4
Buses	0	0	2	-	2	0	2	0	-	2	0	0	0	-	0	4
% Buses	-	0.0	1.0	-	0.9	-	0.8	0.0	-	0.7	-	0.0	0.0	-	0.0	0.8
Single-Unit Trucks	0	1	0	-	1	0	2	0	-	2	0	0	1	-	1	4
% Single-Unit Trucks	-	7.1	0.0	-	0.5	-	0.8	0.0	-	0.7	-	0.0	16.7	-	7.1	0.8
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	2	-	2	0	3	0	-	3	0	0	0	-	0	5
% Bicycles on Road	-	0.0	1.0	-	0.9	-	1.2	0.0	-	1.1	-	0.0	0.0	-	0.0	1.0
Pedestrians	-	-	-	0	-	-	-	-	3	-	-	-	-	13	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lee Street with Oakwood Avenue
TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Data

Start Time	Oakwood Avenue Eastbound						Oakwood Avenue Westbound						Lee Street Northbound						Lee Street Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:00 PM	0	2	1	0	2	3	0	1	2	2	1	5	0	7	145	7	0	159	0	1	0	0	0	1	168
4:15 PM	0	7	2	1	0	10	0	0	4	2	1	6	0	2	152	5	1	159	0	0	0	0	0	0	175
4:30 PM	1	3	1	0	1	5	0	0	2	3	4	5	0	0	151	1	2	152	0	0	0	0	0	0	162
4:45 PM	0	3	2	0	1	5	0	0	1	1	3	2	0	3	143	4	1	150	0	0	0	0	0	0	157
Hourly Total	1	15	6	1	4	23	0	1	9	8	9	18	0	12	591	17	4	620	0	1	0	0	0	1	662
5:00 PM	0	0	3	0	4	3	0	0	6	0	2	6	0	1	147	4	0	152	0	0	0	0	0	0	161
5:15 PM	0	0	2	0	1	2	0	1	0	0	0	1	0	1	163	7	0	171	0	0	0	0	0	0	174
5:30 PM	0	1	0	0	0	1	0	0	3	1	3	4	0	0	176	6	0	182	0	0	0	1	1	1	188
5:45 PM	0	0	1	0	1	1	0	0	6	2	1	8	0	3	141	13	0	157	0	0	0	0	0	0	166
Hourly Total	0	1	6	0	6	7	0	1	15	3	6	19	0	5	627	30	0	662	0	0	0	1	1	1	689
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	3	0	2	6	5	0	0	2	2	1	4	0	6	80	5	1	91	0	0	0	0	2	0	100
7:15 AM	0	7	0	0	1	7	0	0	0	1	1	1	0	6	87	3	0	96	0	0	0	0	2	0	104
7:30 AM	0	5	1	0	0	6	0	0	2	1	0	3	0	4	111	5	0	120	0	0	0	0	0	0	129
7:45 AM	0	3	2	0	2	5	0	0	1	0	2	1	0	3	77	3	0	83	0	0	0	0	0	0	89
Hourly Total	0	18	3	2	9	23	0	0	5	4	4	9	0	19	355	16	1	390	0	0	0	0	4	0	422
8:00 AM	0	0	2	0	0	2	0	0	2	0	1	2	0	1	140	6	0	147	0	0	0	0	0	0	151
8:15 AM	0	4	2	0	1	6	0	0	2	2	1	4	0	0	136	4	1	140	0	0	0	0	0	0	150
8:30 AM	0	2	1	0	0	3	0	0	1	0	1	1	0	2	135	5	0	142	0	0	0	0	0	0	146
8:45 AM	0	0	0	0	2	0	0	0	0	1	0	1	0	3	134	5	0	142	0	0	0	0	2	0	143
Hourly Total	0	6	5	0	3	11	0	0	5	3	3	8	0	6	545	20	1	571	0	0	0	0	2	0	590
Grand Total	1	40	20	3	22	64	0	2	34	18	22	54	0	42	2118	83	6	2243	0	1	0	1	7	2	2363
Approach %	1.6	62.5	31.3	4.7	-	-	0.0	3.7	63.0	33.3	-	-	0.0	1.9	94.4	3.7	-	-	0.0	50.0	0.0	50.0	-	-	-
Total %	0.0	1.7	0.8	0.1	-	2.7	0.0	0.1	1.4	0.8	-	2.3	0.0	1.8	89.6	3.5	-	94.9	0.0	0.0	0.0	0.0	-	0.1	-
Lights	0	30	19	0	-	49	0	2	34	16	-	52	0	34	2058	82	-	2174	0	0	0	0	-	0	2275
% Lights	0.0	75.0	95.0	0.0	-	76.6	-	100.0	100.0	88.9	-	96.3	-	81.0	97.2	98.8	-	96.9	-	0.0	-	0.0	-	0.0	96.3
Buses	0	0	1	0	-	1	0	0	0	1	-	1	0	0	23	1	-	24	0	0	0	0	-	0	26
% Buses	0.0	0.0	5.0	0.0	-	1.6	-	0.0	0.0	5.6	-	1.9	-	0.0	1.1	1.2	-	1.1	-	0.0	-	0.0	-	0.0	1.1
Single-Unit Trucks	0	8	0	1	-	9	0	0	0	1	-	1	0	4	20	0	-	24	0	0	0	0	-	0	34
% Single-Unit Trucks	0.0	20.0	0.0	33.3	-	14.1	-	0.0	0.0	5.6	-	1.9	-	9.5	0.9	0.0	-	1.1	-	0.0	-	0.0	-	0.0	1.4
Articulated Trucks	1	2	0	1	-	4	0	0	0	0	-	0	0	4	16	0	-	20	0	0	0	0	-	0	24
% Articulated Trucks	100.0	5.0	0.0	33.3	-	6.3	-	0.0	0.0	0.0	-	0.0	-	9.5	0.8	0.0	-	0.9	-	0.0	-	0.0	-	0.0	1.0
Bicycles on Road	0	0	0	1	-	1	0	0	0	0	-	0	0	0	1	0	-	1	0	1	0	1	-	2	4

% Bicycles on Road	0.0	0.0	0.0	33.3	-	1.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	100.0	-	100.0	-	100.0	0.2
Pedestrians	-	-	-	-	22	-	-	-	-	-	22	-	-	-	-	-	6	-	-	-	-	-	7	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lee Street with Oakwood Avenue
TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Oakwood Avenue Eastbound						Oakwood Avenue Westbound						Lee Street Northbound						Lee Street Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	3	2	0	1	5	0	0	1	1	3	2	0	3	143	4	1	150	0	0	0	0	0	0	157
5:00 PM	0	0	3	0	4	3	0	0	6	0	2	6	0	1	147	4	0	152	0	0	0	0	0	0	161
5:15 PM	0	0	2	0	1	2	0	1	0	0	0	1	0	1	163	7	0	171	0	0	0	0	0	0	174
5:30 PM	0	1	0	0	0	1	0	0	3	1	3	4	0	0	176	6	0	182	0	0	0	1	1	1	188
Total	0	4	7	0	6	11	0	1	10	2	8	13	0	5	629	21	1	655	0	0	0	1	1	1	680
Approach %	0.0	36.4	63.6	0.0	-	-	0.0	7.7	76.9	15.4	-	-	0.0	0.8	96.0	3.2	-	-	0.0	0.0	0.0	100.0	-	-	-
Total %	0.0	0.6	1.0	0.0	-	1.6	0.0	0.1	1.5	0.3	-	1.9	0.0	0.7	92.5	3.1	-	96.3	0.0	0.0	0.0	0.1	-	0.1	-
PHF	0.000	0.333	0.583	0.000	-	0.550	0.000	0.250	0.417	0.500	-	0.542	0.000	0.417	0.893	0.750	-	0.900	0.000	0.000	0.000	0.250	-	0.250	0.904
Lights	0	4	7	0	-	11	0	1	10	2	-	13	0	5	614	21	-	640	0	0	0	0	-	0	664
% Lights	-	100.0	100.0	-	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	97.6	100.0	-	97.7	-	-	-	0.0	-	0.0	97.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	6	0	-	6	0	0	0	0	-	0	6
% Buses	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	1.0	0.0	-	0.9	-	-	-	0.0	-	0.0	0.9
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	5	0	-	5	0	0	0	0	-	0	5
% Single-Unit Trucks	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.8	0.0	-	0.8	-	-	-	0.0	-	0.0	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	4
% Articulated Trucks	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.6	0.0	-	0.6	-	-	-	0.0	-	0.0	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	1	-	1	1
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-	100.0	-	100.0	0.1
Pedestrians	-	-	-	-	6	-	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lee Street with Oakwood Avenue
TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Oakwood Avenue Eastbound						Oakwood Avenue Westbound						Lee Street Northbound						Lee Street Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
8:00 AM	0	0	2	0	0	2	0	0	2	0	1	2	0	1	140	6	0	147	0	0	0	0	0	0	151
8:15 AM	0	4	2	0	1	6	0	0	2	2	1	4	0	0	136	4	1	140	0	0	0	0	0	0	150
8:30 AM	0	2	1	0	0	3	0	0	1	0	1	1	0	2	135	5	0	142	0	0	0	0	0	0	146
8:45 AM	0	0	0	0	2	0	0	0	0	1	0	1	0	3	134	5	0	142	0	0	0	0	2	0	143
Total	0	6	5	0	3	11	0	0	5	3	3	8	0	6	545	20	1	571	0	0	0	0	2	0	590
Approach %	0.0	54.5	45.5	0.0	-	-	0.0	0.0	62.5	37.5	-	-	0.0	1.1	95.4	3.5	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	1.0	0.8	0.0	-	1.9	0.0	0.0	0.8	0.5	-	1.4	0.0	1.0	92.4	3.4	-	96.8	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.375	0.625	0.000	-	0.458	0.000	0.000	0.625	0.375	-	0.500	0.000	0.500	0.973	0.833	-	0.971	0.000	0.000	0.000	0.000	-	0.000	0.977
Lights	0	3	5	0	-	8	0	0	5	3	-	8	0	6	528	20	-	554	0	0	0	0	-	0	570
% Lights	-	50.0	100.0	-	-	72.7	-	-	100.0	100.0	-	100.0	-	100.0	96.9	100.0	-	97.0	-	-	-	-	-	-	96.6
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	8	0	-	8	0	0	0	0	-	0	8
% Buses	-	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	1.5	0.0	-	1.4	-	-	-	-	-	-	1.4
Single-Unit Trucks	0	2	0	0	-	2	0	0	0	0	-	0	0	0	5	0	-	5	0	0	0	0	-	0	7
% Single-Unit Trucks	-	33.3	0.0	-	-	18.2	-	-	0.0	0.0	-	0.0	-	0.0	0.9	0.0	-	0.9	-	-	-	-	-	-	1.2
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	5
% Articulated Trucks	-	16.7	0.0	-	-	9.1	-	-	0.0	0.0	-	0.0	-	0.0	0.7	0.0	-	0.7	-	-	-	-	-	-	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: Lee Street with Thacker Street
TMC
Site Code:
Start Date: 04/25/2023

Turning Movement Data

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Lee Street Northbound						Lee Street Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	12	21	0	1	33	0	0	21	3	0	24	0	5	65	9	0	79	0	0	0	0	1	0	136
7:15 AM	0	9	34	0	0	43	0	0	22	3	1	25	0	3	79	11	1	93	0	0	0	0	0	0	161
7:30 AM	0	15	39	0	0	54	0	0	36	6	2	42	0	8	77	11	0	96	0	0	0	0	0	0	192
7:45 AM	0	14	39	1	1	54	0	0	51	4	0	55	0	5	60	10	0	75	0	0	0	0	4	0	184
Hourly Total	0	50	133	1	2	184	0	0	130	16	3	146	0	21	281	41	1	343	0	0	0	0	5	0	673
8:00 AM	0	10	50	0	2	60	0	0	33	4	0	37	0	7	122	19	0	148	0	0	0	0	0	0	245
8:15 AM	0	23	50	0	0	73	0	0	47	7	1	54	0	9	105	12	0	126	0	0	0	0	0	0	253
8:30 AM	0	15	30	0	2	45	0	0	20	9	0	29	0	5	124	15	0	144	0	0	0	0	0	0	218
8:45 AM	0	25	66	0	0	91	0	0	44	11	2	55	0	10	113	23	0	146	0	0	0	0	2	0	292
Hourly Total	0	73	196	0	4	269	0	0	144	31	3	175	0	31	464	69	0	564	0	0	0	0	2	0	1008
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	19	43	0	0	62	0	0	29	5	1	34	0	10	115	18	0	143	0	0	0	0	3	0	239
4:15 PM	0	30	39	0	0	69	0	1	49	6	2	56	0	9	104	10	0	123	0	0	0	0	1	0	248
4:30 PM	0	15	43	0	1	58	0	0	34	3	0	37	0	9	122	13	0	144	0	0	0	0	1	0	239
4:45 PM	0	16	41	0	0	57	0	0	62	6	1	68	0	15	134	22	0	171	0	0	0	0	1	0	296
Hourly Total	0	80	166	0	1	246	0	1	174	20	4	195	0	43	475	63	0	581	0	0	0	0	6	0	1022
5:00 PM	0	20	33	0	0	53	0	0	42	7	0	49	0	14	138	22	0	174	0	0	0	0	0	0	276
5:15 PM	0	15	30	0	1	45	0	0	44	2	2	46	0	18	122	23	0	163	0	0	0	0	1	0	254
5:30 PM	0	26	35	0	0	61	0	0	34	7	2	41	0	12	130	23	0	165	0	0	0	0	0	0	267
5:45 PM	0	18	30	0	1	48	0	0	52	4	1	56	0	7	102	29	0	138	0	0	0	0	5	0	242
Hourly Total	0	79	128	0	2	207	0	0	172	20	5	192	0	51	492	97	0	640	0	0	0	0	6	0	1039
Grand Total	0	282	623	1	9	906	0	1	620	87	15	708	0	146	1712	270	1	2128	0	0	0	0	19	0	3742
Approach %	0.0	31.1	68.8	0.1	-	-	0.0	0.1	87.6	12.3	-	-	0.0	6.9	80.5	12.7	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	7.5	16.6	0.0	-	24.2	0.0	0.0	16.6	2.3	-	18.9	0.0	3.9	45.8	7.2	-	56.9	0.0	0.0	0.0	0.0	-	0.0	-
Lights	0	270	609	1	-	880	0	1	607	81	-	689	0	140	1638	262	-	2040	0	0	0	0	-	0	3609
% Lights	-	95.7	97.8	100.0	-	97.1	-	100.0	97.9	93.1	-	97.3	-	95.9	95.7	97.0	-	95.9	-	-	-	-	-	-	96.4
Buses	0	8	6	0	-	14	0	0	8	6	-	14	0	2	25	0	-	27	0	0	0	0	-	0	55
% Buses	-	2.8	1.0	0.0	-	1.5	-	0.0	1.3	6.9	-	2.0	-	1.4	1.5	0.0	-	1.3	-	-	-	-	-	-	1.5
Single-Unit Trucks	0	3	7	0	-	10	0	0	4	0	-	4	0	4	24	5	-	33	0	0	0	0	-	0	47
% Single-Unit Trucks	-	1.1	1.1	0.0	-	1.1	-	0.0	0.6	0.0	-	0.6	-	2.7	1.4	1.9	-	1.6	-	-	-	-	-	-	1.3
Articulated Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	0	25	3	-	28	0	0	0	0	-	0	30
% Articulated Trucks	-	0.4	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	-	0.0	1.5	1.1	-	1.3	-	-	-	-	-	-	0.8
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1

% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.2	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Pedestrians	-	-	-	-	9	-	-	-	-	-	15	-	-	-	-	-	1	-	-	-	-	-	19	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: Lee Street with Thacker Street
TMC
Site Code:
Start Date: 04/25/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Lee Street Northbound						Lee Street Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	0	10	50	0	2	60	0	0	33	4	0	37	0	7	122	19	0	148	0	0	0	0	0	0	245
8:15 AM	0	23	50	0	0	73	0	0	47	7	1	54	0	9	105	12	0	126	0	0	0	0	0	0	253
8:30 AM	0	15	30	0	2	45	0	0	20	9	0	29	0	5	124	15	0	144	0	0	0	0	0	0	218
8:45 AM	0	25	66	0	0	91	0	0	44	11	2	55	0	10	113	23	0	146	0	0	0	0	2	0	292
Total	0	73	196	0	4	269	0	0	144	31	3	175	0	31	464	69	0	564	0	0	0	0	2	0	1008
Approach %	0.0	27.1	72.9	0.0	-	-	0.0	0.0	82.3	17.7	-	-	0.0	5.5	82.3	12.2	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	7.2	19.4	0.0	-	26.7	0.0	0.0	14.3	3.1	-	17.4	0.0	3.1	46.0	6.8	-	56.0	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.730	0.742	0.000	-	0.739	0.000	0.000	0.766	0.705	-	0.795	0.000	0.775	0.935	0.750	-	0.953	0.000	0.000	0.000	0.000	-	0.000	0.863
Lights	0	68	194	0	-	262	0	0	138	30	-	168	0	30	433	69	-	532	0	0	0	0	-	0	962
% Lights	-	93.2	99.0	-	-	97.4	-	-	95.8	96.8	-	96.0	-	96.8	93.3	100.0	-	94.3	-	-	-	-	-	-	95.4
Buses	0	3	1	0	-	4	0	0	3	1	-	4	0	0	8	0	-	8	0	0	0	0	-	0	16
% Buses	-	4.1	0.5	-	-	1.5	-	-	2.1	3.2	-	2.3	-	0.0	1.7	0.0	-	1.4	-	-	-	-	-	-	1.6
Single-Unit Trucks	0	1	1	0	-	2	0	0	3	0	-	3	0	1	11	0	-	12	0	0	0	0	-	0	17
% Single-Unit Trucks	-	1.4	0.5	-	-	0.7	-	-	2.1	0.0	-	1.7	-	3.2	2.4	0.0	-	2.1	-	-	-	-	-	-	1.7
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	12	0	-	12	0	0	0	0	-	0	13
% Articulated Trucks	-	1.4	0.0	-	-	0.4	-	-	0.0	0.0	-	0.0	-	0.0	2.6	0.0	-	2.1	-	-	-	-	-	-	1.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Lee Street with Thacker Street
TMC
Site Code:
Start Date: 04/25/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Lee Street Northbound						Lee Street Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	16	41	0	0	57	0	0	62	6	1	68	0	15	134	22	0	171	0	0	0	0	1	0	296
5:00 PM	0	20	33	0	0	53	0	0	42	7	0	49	0	14	138	22	0	174	0	0	0	0	0	0	276
5:15 PM	0	15	30	0	1	45	0	0	44	2	2	46	0	18	122	23	0	163	0	0	0	0	1	0	254
5:30 PM	0	26	35	0	0	61	0	0	34	7	2	41	0	12	130	23	0	165	0	0	0	0	0	0	267
Total	0	77	139	0	1	216	0	0	182	22	5	204	0	59	524	90	0	673	0	0	0	0	2	0	1093
Approach %	0.0	35.6	64.4	0.0	-	-	0.0	0.0	89.2	10.8	-	-	0.0	8.8	77.9	13.4	-	-	0.0	0.0	0.0	0.0	-	-	-
Total %	0.0	7.0	12.7	0.0	-	19.8	0.0	0.0	16.7	2.0	-	18.7	0.0	5.4	47.9	8.2	-	61.6	0.0	0.0	0.0	0.0	-	0.0	-
PHF	0.000	0.740	0.848	0.000	-	0.885	0.000	0.000	0.734	0.786	-	0.750	0.000	0.819	0.949	0.978	-	0.967	0.000	0.000	0.000	0.000	-	0.000	0.923
Lights	0	75	137	0	-	212	0	0	182	18	-	200	0	58	514	88	-	660	0	0	0	0	-	0	1072
% Lights	-	97.4	98.6	-	-	98.1	-	-	100.0	81.8	-	98.0	-	98.3	98.1	97.8	-	98.1	-	-	-	-	-	-	98.1
Buses	0	1	0	0	-	1	0	0	0	4	-	4	0	0	5	0	-	5	0	0	0	0	-	0	10
% Buses	-	1.3	0.0	-	-	0.5	-	-	0.0	18.2	-	2.0	-	0.0	1.0	0.0	-	0.7	-	-	-	-	-	-	0.9
Single-Unit Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	1	1	2	-	4	0	0	0	0	-	0	6
% Single-Unit Trucks	-	1.3	0.7	-	-	0.9	-	-	0.0	0.0	-	0.0	-	1.7	0.2	2.2	-	0.6	-	-	-	-	-	-	0.5
Articulated Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	5
% Articulated Trucks	-	0.0	0.7	-	-	0.5	-	-	0.0	0.0	-	0.0	-	0.0	0.8	0.0	-	0.6	-	-	-	-	-	-	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Oakland Avenue with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023
Page No: 1

Turning Movement Data

Start Time	Oakwood Avenue Eastbound						East Access Drive Westbound						Graceland Avenue Northbound						Graceland Avenue Southbound					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total
7:00 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	1	67	70
7:15 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	1	95	96
7:30 AM	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	125	1	126	131
7:45 AM	0	0	0	4	1	4	0	0	0	0	2	0	0	0	0	0	0	0	0	1	131	5	137	141
Hourly Total	0	0	0	13	2	13	0	0	0	0	2	0	0	0	0	0	1	0	0	1	416	8	425	438
8:00 AM	0	0	0	2	2	2	0	3	0	0	1	3	0	0	0	0	0	0	0	0	137	2	139	144
8:15 AM	0	0	0	6	0	6	0	3	1	0	0	4	0	0	0	0	0	0	0	0	140	3	143	153
8:30 AM	0	0	0	4	0	4	0	1	0	0	0	1	0	0	0	0	0	0	0	0	138	2	140	145
8:45 AM	0	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	3	152	158
Hourly Total	0	1	0	17	2	18	0	7	1	0	1	8	0	0	0	0	0	0	0	0	564	10	574	600
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	8	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	4	132	140
4:15 PM	0	0	1	4	0	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	156	9	165	170
4:30 PM	0	0	1	6	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136	7	143	150
4:45 PM	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	114	4	118	119
Hourly Total	0	0	2	19	2	21	0	0	0	0	3	0	0	0	0	0	0	0	0	0	534	24	558	579
5:00 PM	0	0	0	5	1	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	155	3	158	163
5:15 PM	0	0	0	5	2	5	0	0	0	0	3	0	0	0	0	0	1	0	0	0	178	5	183	188
5:30 PM	0	0	0	6	0	6	0	2	0	0	0	2	0	0	0	0	0	0	0	0	160	2	162	170
5:45 PM	0	0	1	7	0	8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	123	2	125	133
Hourly Total	0	0	1	23	3	24	0	2	0	0	9	2	0	0	0	0	1	0	0	0	616	12	628	654
Grand Total	0	1	3	72	9	76	0	9	1	0	15	10	0	0	0	0	2	0	0	1	2130	54	2185	2271
Approach %	0.0	1.3	3.9	94.7	-	-	0.0	90.0	10.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	97.5	2.5	-	-
Total %	0.0	0.0	0.1	3.2	-	3.3	0.0	0.4	0.0	0.0	-	0.4	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	93.8	2.4	96.2	-
Lights	0	0	3	67	-	70	0	9	1	0	-	10	0	0	0	0	-	0	0	0	2059	52	2111	2191
% Lights	-	0.0	100.0	93.1	-	92.1	-	100.0	100.0	-	-	100.0	-	-	-	-	-	-	-	0.0	96.7	96.3	96.6	96.5
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	26	0	26	27
% Buses	-	0.0	0.0	1.4	-	1.3	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	0.0	1.2	0.0	1.2	1.2
Single-Unit Trucks	0	0	0	3	-	3	0	0	0	0	-	0	0	0	0	0	-	0	0	1	31	2	34	37
% Single-Unit Trucks	-	0.0	0.0	4.2	-	3.9	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	100.0	1.5	3.7	1.6	1.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	11	0	11	11
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	0.0	0.5	0.0	0.5	0.5
Bicycles on Road	0	1	0	1	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	3	0	3	5
% Bicycles on Road	-	100.0	0.0	1.4	-	2.6	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	0.0	0.1	0.0	0.1	0.2
Pedestrians	-	-	-	-	9	-	-	-	-	-	15	-	-	-	-	-	2	-	-	-	-	-	-	-

% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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

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

Count Name: Oakland Avenue with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Oakwood Avenue Eastbound						East Access Drive Westbound						Graceland Avenue Northbound						Graceland Avenue Southbound					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total
8:00 AM	0	0	0	2	2	2	0	3	0	0	1	3	0	0	0	0	0	0	0	0	137	2	139	144
8:15 AM	0	0	0	6	0	6	0	3	1	0	0	4	0	0	0	0	0	0	0	0	140	3	143	153
8:30 AM	0	0	0	4	0	4	0	1	0	0	0	1	0	0	0	0	0	0	0	0	138	2	140	145
8:45 AM	0	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149	3	152	158
Total	0	1	0	17	2	18	0	7	1	0	1	8	0	0	0	0	0	0	0	0	564	10	574	600
Approach %	0.0	5.6	0.0	94.4	-	-	0.0	87.5	12.5	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	98.3	1.7	-	-
Total %	0.0	0.2	0.0	2.8	-	3.0	0.0	1.2	0.2	0.0	-	1.3	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	94.0	1.7	95.7	-
PHF	0.000	0.250	0.000	0.708	-	0.750	0.000	0.583	0.250	0.000	-	0.500	0.000	0.000	0.000	0.000	-	0.000	0.000	0.000	0.946	0.833	0.944	0.949
Lights	0	0	0	16	-	16	0	7	1	0	-	8	0	0	0	0	-	0	0	0	543	8	551	575
% Lights	-	0.0	-	94.1	-	88.9	-	100.0	100.0	-	-	100.0	-	-	-	-	-	-	-	-	96.3	80.0	96.0	95.8
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	11	0	11	11
% Buses	-	0.0	-	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	-	2.0	0.0	1.9	1.8
Single-Unit Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	5	2	7	8
% Single-Unit Trucks	-	0.0	-	5.9	-	5.6	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	-	0.9	20.0	1.2	1.3
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	4	4
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	-	0.7	0.0	0.7	0.7
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	1	2
% Bicycles on Road	-	100.0	-	0.0	-	5.6	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	-	0.2	0.0	0.2	0.3
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: Oakland Avenue with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Oakwood Avenue Eastbound						East Access Drive Westbound						Graceland Avenue Northbound						Graceland Avenue Southbound					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total
4:45 PM	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	114	4	118	119
5:00 PM	0	0	0	5	1	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	155	3	158	163
5:15 PM	0	0	0	5	2	5	0	0	0	0	3	0	0	0	0	0	1	0	0	0	178	5	183	188
5:30 PM	0	0	0	6	0	6	0	2	0	0	0	2	0	0	0	0	0	0	0	0	160	2	162	170
Total	0	0	0	17	3	17	0	2	0	0	7	2	0	0	0	0	1	0	0	0	607	14	621	640
Approach %	0.0	0.0	0.0	100.0	-	-	0.0	100.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	97.7	2.3	-	-
Total %	0.0	0.0	0.0	2.7	-	2.7	0.0	0.3	0.0	0.0	-	0.3	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	94.8	2.2	97.0	-
PHF	0.000	0.000	0.000	0.708	-	0.708	0.000	0.250	0.000	0.000	-	0.250	0.000	0.000	0.000	0.000	-	0.000	0.000	0.000	0.853	0.700	0.848	0.851
Lights	0	0	0	16	-	16	0	2	0	0	-	2	0	0	0	0	-	0	0	0	595	14	609	627
% Lights	-	-	-	94.1	-	94.1	-	100.0	-	-	-	100.0	-	-	-	-	-	-	-	-	98.0	100.0	98.1	98.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	6	0	6	6
% Buses	-	-	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-	-	-	-	-	-	-	1.0	0.0	1.0	0.9
Single-Unit Trucks	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	4	5
% Single-Unit Trucks	-	-	-	5.9	-	5.9	-	0.0	-	-	-	0.0	-	-	-	-	-	-	-	-	0.7	0.0	0.6	0.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	1	1
% Articulated Trucks	-	-	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-	-	-	-	-	-	-	0.2	0.0	0.2	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	1	1
% Bicycles on Road	-	-	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-	-	-	-	-	-	-	0.2	0.0	0.2	0.2
Pedestrians	-	-	-	-	3	-	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker Street with 1st Avenue
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Data

Start Time	Thacker Street Eastbound					Thacker Street Westbound					1st Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	5	30	0	35	0	30	5	0	35	0	1	3	1	4	74
7:15 AM	0	5	44	0	49	0	34	5	0	39	0	3	5	0	8	96
7:30 AM	0	8	49	0	57	0	46	12	0	58	0	3	3	0	6	121
7:45 AM	0	23	68	0	91	0	42	21	0	63	0	2	1	0	3	157
Hourly Total	0	41	191	0	232	0	152	43	0	195	0	9	12	1	21	448
8:00 AM	0	9	61	0	70	0	44	11	0	55	0	3	6	0	9	134
8:15 AM	0	9	59	0	68	0	52	4	0	56	0	4	7	4	11	135
8:30 AM	0	6	52	1	58	0	44	2	0	46	0	1	2	2	3	107
8:45 AM	0	6	69	0	75	0	50	2	0	52	0	4	2	1	6	133
Hourly Total	0	30	241	1	271	0	190	19	0	209	0	12	17	7	29	509
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	8	57	3	65	0	64	1	1	65	0	2	7	1	9	139
4:15 PM	0	14	51	0	65	0	71	5	0	76	0	2	5	0	7	148
4:30 PM	0	6	70	0	76	0	59	5	0	64	0	6	1	0	7	147
4:45 PM	0	5	51	3	56	0	73	5	0	78	0	3	3	3	6	140
Hourly Total	0	33	229	6	262	0	267	16	1	283	0	13	16	4	29	574
5:00 PM	0	9	59	0	68	0	90	1	0	91	0	4	8	0	12	171
5:15 PM	0	5	72	0	77	0	77	6	0	83	0	4	7	3	11	171
5:30 PM	0	10	52	1	62	0	73	1	0	74	0	4	3	3	7	143
5:45 PM	0	7	47	2	54	0	71	1	0	72	0	3	4	5	7	133
Hourly Total	0	31	230	3	261	0	311	9	0	320	0	15	22	11	37	618
Grand Total	0	135	891	10	1026	0	920	87	1	1007	0	49	67	23	116	2149
Approach %	0.0	13.2	86.8	-	-	0.0	91.4	8.6	-	-	0.0	42.2	57.8	-	-	-
Total %	0.0	6.3	41.5	-	47.7	0.0	42.8	4.0	-	46.9	0.0	2.3	3.1	-	5.4	-
Lights	0	129	865	-	994	0	881	85	-	966	0	45	61	-	106	2066
% Lights	-	95.6	97.1	-	96.9	-	95.8	97.7	-	95.9	-	91.8	91.0	-	91.4	96.1
Buses	0	2	10	-	12	0	19	2	-	21	0	0	1	-	1	34
% Buses	-	1.5	1.1	-	1.2	-	2.1	2.3	-	2.1	-	0.0	1.5	-	0.9	1.6
Single-Unit Trucks	0	2	12	-	14	0	12	0	-	12	0	3	5	-	8	34
% Single-Unit Trucks	-	1.5	1.3	-	1.4	-	1.3	0.0	-	1.2	-	6.1	7.5	-	6.9	1.6
Articulated Trucks	0	1	2	-	3	0	3	0	-	3	0	1	0	-	1	7
% Articulated Trucks	-	0.7	0.2	-	0.3	-	0.3	0.0	-	0.3	-	2.0	0.0	-	0.9	0.3
Bicycles on Road	0	1	2	-	3	0	5	0	-	5	0	0	0	-	0	8
% Bicycles on Road	-	0.7	0.2	-	0.3	-	0.5	0.0	-	0.5	-	0.0	0.0	-	0.0	0.4
Pedestrians	-	-	-	10	-	-	-	-	1	-	-	-	-	23	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker Street with 1st Avenue
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					1st Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
8:00 AM	0	9	61	0	70	0	44	11	0	55	0	3	6	0	9	134
8:15 AM	0	9	59	0	68	0	52	4	0	56	0	4	7	4	11	135
8:30 AM	0	6	52	1	58	0	44	2	0	46	0	1	2	2	3	107
8:45 AM	0	6	69	0	75	0	50	2	0	52	0	4	2	1	6	133
Total	0	30	241	1	271	0	190	19	0	209	0	12	17	7	29	509
Approach %	0.0	11.1	88.9	-	-	0.0	90.9	9.1	-	-	0.0	41.4	58.6	-	-	-
Total %	0.0	5.9	47.3	-	53.2	0.0	37.3	3.7	-	41.1	0.0	2.4	3.3	-	5.7	-
PHF	0.000	0.833	0.873	-	0.903	0.000	0.913	0.432	-	0.933	0.000	0.750	0.607	-	0.659	0.943
Lights	0	29	230	-	259	0	181	17	-	198	0	10	14	-	24	481
% Lights	-	96.7	95.4	-	95.6	-	95.3	89.5	-	94.7	-	83.3	82.4	-	82.8	94.5
Buses	0	0	4	-	4	0	5	2	-	7	0	0	1	-	1	12
% Buses	-	0.0	1.7	-	1.5	-	2.6	10.5	-	3.3	-	0.0	5.9	-	3.4	2.4
Single-Unit Trucks	0	1	5	-	6	0	3	0	-	3	0	2	2	-	4	13
% Single-Unit Trucks	-	3.3	2.1	-	2.2	-	1.6	0.0	-	1.4	-	16.7	11.8	-	13.8	2.6
Articulated Trucks	0	0	2	-	2	0	1	0	-	1	0	0	0	-	0	3
% Articulated Trucks	-	0.0	0.8	-	0.7	-	0.5	0.0	-	0.5	-	0.0	0.0	-	0.0	0.6
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	7	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker Street with 1st Avenue
TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					1st Avenue Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:45 PM	0	5	51	3	56	0	73	5	0	78	0	3	3	3	6	140
5:00 PM	0	9	59	0	68	0	90	1	0	91	0	4	8	0	12	171
5:15 PM	0	5	72	0	77	0	77	6	0	83	0	4	7	3	11	171
5:30 PM	0	10	52	1	62	0	73	1	0	74	0	4	3	3	7	143
Total	0	29	234	4	263	0	313	13	0	326	0	15	21	9	36	625
Approach %	0.0	11.0	89.0	-	-	0.0	96.0	4.0	-	-	0.0	41.7	58.3	-	-	-
Total %	0.0	4.6	37.4	-	42.1	0.0	50.1	2.1	-	52.2	0.0	2.4	3.4	-	5.8	-
PHF	0.000	0.725	0.813	-	0.854	0.000	0.869	0.542	-	0.896	0.000	0.938	0.656	-	0.750	0.914
Lights	0	26	231	-	257	0	303	13	-	316	0	15	20	-	35	608
% Lights	-	89.7	98.7	-	97.7	-	96.8	100.0	-	96.9	-	100.0	95.2	-	97.2	97.3
Buses	0	0	1	-	1	0	2	0	-	2	0	0	0	-	0	3
% Buses	-	0.0	0.4	-	0.4	-	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	1	1	-	2	0	6	0	-	6	0	0	1	-	1	9
% Single-Unit Trucks	-	3.4	0.4	-	0.8	-	1.9	0.0	-	1.8	-	0.0	4.8	-	2.8	1.4
Articulated Trucks	0	1	0	-	1	0	1	0	-	1	0	0	0	-	0	2
% Articulated Trucks	-	3.4	0.0	-	0.4	-	0.3	0.0	-	0.3	-	0.0	0.0	-	0.0	0.3
Bicycles on Road	0	1	1	-	2	0	1	0	-	1	0	0	0	-	0	3
% Bicycles on Road	-	3.4	0.4	-	0.8	-	0.3	0.0	-	0.3	-	0.0	0.0	-	0.0	0.5
Pedestrians	-	-	-	4	-	-	-	-	0	-	-	-	-	9	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Data

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Gracelend Avenue Northbound						Graceland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00 AM	0	0	27	9	0	36	0	5	20	0	1	25	0	0	0	0	0	0	0	4	62	18	0	84	145
7:15 AM	0	0	32	11	1	43	0	10	21	0	2	31	0	0	0	0	0	0	0	4	73	18	1	95	169
7:30 AM	0	0	51	6	1	57	0	6	38	0	1	44	0	0	0	1	0	1	0	9	105	16	5	130	232
7:45 AM	0	0	53	9	1	62	0	7	44	0	3	51	0	0	0	0	1	0	0	8	124	20	2	152	265
Hourly Total	0	0	163	35	3	198	0	28	123	0	7	151	0	0	0	1	1	1	0	25	364	72	8	461	811
8:00 AM	0	0	56	9	2	65	0	12	40	0	1	52	0	0	0	0	2	0	0	13	102	17	2	132	249
8:15 AM	0	0	45	6	3	51	0	4	28	0	0	32	0	0	0	0	0	0	0	17	138	25	2	180	263
8:30 AM	0	0	54	9	0	63	0	9	30	0	0	39	0	0	0	0	0	0	0	16	119	19	0	154	256
8:45 AM	0	0	53	12	0	65	0	14	31	0	1	45	0	0	0	0	0	0	0	17	123	21	8	161	271
Hourly Total	0	0	208	36	5	244	0	39	129	0	2	168	0	0	0	0	2	0	0	63	482	82	12	627	1039
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	57	5	2	62	0	13	52	0	0	65	0	0	0	0	2	0	0	8	94	21	0	123	250
4:15 PM	0	0	36	7	0	43	0	14	38	0	1	52	0	0	0	0	1	0	0	10	150	39	0	199	294
4:30 PM	0	0	61	11	0	72	0	13	43	0	2	56	0	0	0	0	1	0	0	4	117	28	1	149	277
4:45 PM	0	0	51	7	0	58	0	10	43	0	2	53	0	0	0	0	1	0	0	10	99	31	1	140	251
Hourly Total	0	0	205	30	2	235	0	50	176	0	5	226	0	0	0	0	5	0	0	32	460	119	2	611	1072
5:00 PM	0	0	52	15	3	67	0	17	49	0	3	66	0	0	0	0	2	0	0	8	125	40	3	173	306
5:15 PM	0	0	51	15	1	66	0	13	58	0	4	71	0	0	0	0	2	0	0	12	146	33	3	191	328
5:30 PM	0	0	51	8	3	59	0	18	48	0	3	66	0	0	0	0	0	0	0	13	121	31	2	165	290
5:45 PM	0	0	37	14	4	51	0	14	48	1	3	63	0	0	0	0	5	0	0	11	98	27	2	136	250
Hourly Total	0	0	191	52	11	243	0	62	203	1	13	266	0	0	0	0	9	0	0	44	490	131	10	665	1174
Grand Total	0	0	767	153	21	920	0	179	631	1	27	811	0	0	0	1	17	1	0	164	1796	404	32	2364	4096
Approach %	0.0	0.0	83.4	16.6	-	-	0.0	22.1	77.8	0.1	-	-	0.0	0.0	0.0	100.0	-	-	0.0	6.9	76.0	17.1	-	-	-
Total %	0.0	0.0	18.7	3.7	-	22.5	0.0	4.4	15.4	0.0	-	19.8	0.0	0.0	0.0	0.0	-	0.0	0.0	4.0	43.8	9.9	-	57.7	-
Lights	0	0	741	150	-	891	0	174	603	0	-	777	0	0	0	0	-	0	0	160	1736	387	-	2283	3951
% Lights	-	-	96.6	98.0	-	96.8	-	97.2	95.6	0.0	-	95.8	-	-	-	0.0	-	0.0	-	97.6	96.7	95.8	-	96.6	96.5
Buses	0	0	9	1	-	10	0	4	12	0	-	16	0	0	0	0	-	0	0	4	25	10	-	39	65
% Buses	-	-	1.2	0.7	-	1.1	-	2.2	1.9	0.0	-	2.0	-	-	-	0.0	-	0.0	-	2.4	1.4	2.5	-	1.6	1.6
Single-Unit Trucks	0	0	12	2	-	14	0	1	8	0	-	9	0	0	0	0	-	0	0	0	21	5	-	26	49
% Single-Unit Trucks	-	-	1.6	1.3	-	1.5	-	0.6	1.3	0.0	-	1.1	-	-	-	0.0	-	0.0	-	0.0	1.2	1.2	-	1.1	1.2
Articulated Trucks	0	0	1	0	-	1	0	0	3	0	-	3	0	0	0	0	-	0	0	0	11	1	-	12	16
% Articulated Trucks	-	-	0.1	0.0	-	0.1	-	0.0	0.5	0.0	-	0.4	-	-	-	0.0	-	0.0	-	0.0	0.6	0.2	-	0.5	0.4
Bicycles on Road	0	0	4	0	-	4	0	0	5	1	-	6	0	0	0	1	-	1	0	0	3	1	-	4	15

% Bicycles on Road	-	-	0.5	0.0	-	0.4	-	0.0	0.8	100.0	-	0.7	-	-	-	100.0	-	100.0	-	0.0	0.2	0.2	-	0.2	0.4
Pedestrians	-	-	-	-	21	-	-	-	-	-	27	-	-	-	-	-	17	-	-	-	-	-	32	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Gracelend Avenue Northbound						Graceland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	0	0	56	9	2	65	0	12	40	0	1	52	0	0	0	0	2	0	0	13	102	17	2	132	249
8:15 AM	0	0	45	6	3	51	0	4	28	0	0	32	0	0	0	0	0	0	0	17	138	25	2	180	263
8:30 AM	0	0	54	9	0	63	0	9	30	0	0	39	0	0	0	0	0	0	0	16	119	19	0	154	256
8:45 AM	0	0	53	12	0	65	0	14	31	0	1	45	0	0	0	0	0	0	0	17	123	21	8	161	271
Total	0	0	208	36	5	244	0	39	129	0	2	168	0	0	0	0	2	0	0	63	482	82	12	627	1039
Approach %	0.0	0.0	85.2	14.8	-	-	0.0	23.2	76.8	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	10.0	76.9	13.1	-	-	-
Total %	0.0	0.0	20.0	3.5	-	23.5	0.0	3.8	12.4	0.0	-	16.2	0.0	0.0	0.0	0.0	-	0.0	0.0	6.1	46.4	7.9	-	60.3	-
PHF	0.000	0.000	0.929	0.750	-	0.938	0.000	0.696	0.806	0.000	-	0.808	0.000	0.000	0.000	0.000	-	0.000	0.000	0.926	0.873	0.820	-	0.871	0.958
Lights	0	0	195	36	-	231	0	37	123	0	-	160	0	0	0	0	-	0	0	61	463	76	-	600	991
% Lights	-	-	93.8	100.0	-	94.7	-	94.9	95.3	-	-	95.2	-	-	-	-	-	-	-	96.8	96.1	92.7	-	95.7	95.4
Buses	0	0	4	0	-	4	0	2	3	0	-	5	0	0	0	0	-	0	0	2	9	4	-	15	24
% Buses	-	-	1.9	0.0	-	1.6	-	5.1	2.3	-	-	3.0	-	-	-	-	-	-	-	3.2	1.9	4.9	-	2.4	2.3
Single-Unit Trucks	0	0	7	0	-	7	0	0	2	0	-	2	0	0	0	0	-	0	0	0	4	2	-	6	15
% Single-Unit Trucks	-	-	3.4	0.0	-	2.9	-	0.0	1.6	-	-	1.2	-	-	-	-	-	-	-	0.0	0.8	2.4	-	1.0	1.4
Articulated Trucks	0	0	1	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	5	0	-	5	7
% Articulated Trucks	-	-	0.5	0.0	-	0.4	-	0.0	0.8	-	-	0.6	-	-	-	-	-	-	-	0.0	1.0	0.0	-	0.8	0.7
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	2
% Bicycles on Road	-	-	0.5	0.0	-	0.4	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	-	0.0	0.2	0.0	-	0.2	0.2
Pedestrians	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Avenue TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Gracelend Avenue Northbound						Graceland Avenue Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	0	51	7	0	58	0	10	43	0	2	53	0	0	0	0	1	0	0	10	99	31	1	140	251
5:00 PM	0	0	52	15	3	67	0	17	49	0	3	66	0	0	0	0	2	0	0	8	125	40	3	173	306
5:15 PM	0	0	51	15	1	66	0	13	58	0	4	71	0	0	0	0	2	0	0	12	146	33	3	191	328
5:30 PM	0	0	51	8	3	59	0	18	48	0	3	66	0	0	0	0	0	0	0	13	121	31	2	165	290
Total	0	0	205	45	7	250	0	58	198	0	12	256	0	0	0	0	5	0	0	43	491	135	9	669	1175
Approach %	0.0	0.0	82.0	18.0	-	-	0.0	22.7	77.3	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	6.4	73.4	20.2	-	-	-
Total %	0.0	0.0	17.4	3.8	-	21.3	0.0	4.9	16.9	0.0	-	21.8	0.0	0.0	0.0	0.0	-	0.0	0.0	3.7	41.8	11.5	-	56.9	-
PHF	0.000	0.000	0.986	0.750	-	0.933	0.000	0.806	0.853	0.000	-	0.901	0.000	0.000	0.000	0.000	-	0.000	0.000	0.827	0.841	0.844	-	0.876	0.896
Lights	0	0	201	44	-	245	0	57	190	0	-	247	0	0	0	0	-	0	0	43	481	131	-	655	1147
% Lights	-	-	98.0	97.8	-	98.0	-	98.3	96.0	-	-	96.5	-	-	-	-	-	-	-	100.0	98.0	97.0	-	97.9	97.6
Buses	0	0	1	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	0	0	5	2	-	7	9
% Buses	-	-	0.5	0.0	-	0.4	-	1.7	0.0	-	-	0.4	-	-	-	-	-	-	-	0.0	1.0	1.5	-	1.0	0.8
Single-Unit Trucks	0	0	2	1	-	3	0	0	4	0	-	4	0	0	0	0	-	0	0	0	4	1	-	5	12
% Single-Unit Trucks	-	-	1.0	2.2	-	1.2	-	0.0	2.0	-	-	1.6	-	-	-	-	-	-	-	0.0	0.8	0.7	-	0.7	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	1	0	-	1	2
% Articulated Trucks	-	-	0.0	0.0	-	0.0	-	0.0	0.5	-	-	0.4	-	-	-	-	-	-	-	0.0	0.2	0.0	-	0.1	0.2
Bicycles on Road	0	0	1	0	-	1	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	1	-	1	5
% Bicycles on Road	-	-	0.5	0.0	-	0.4	-	0.0	1.5	-	-	1.2	-	-	-	-	-	-	-	0.0	0.0	0.7	-	0.1	0.4
Pedestrians	-	-	-	-	7	-	-	-	-	-	12	-	-	-	-	-	5	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Court Access Drive TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Data

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Graceland Court Access Drive Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	1	34	0	35	0	37	1	0	38	0	3	4	0	7	80
7:15 AM	0	0	41	0	41	0	39	0	0	39	0	2	0	1	2	82
7:30 AM	0	0	50	0	50	0	55	2	0	57	0	3	2	3	5	112
7:45 AM	0	1	64	1	65	0	64	3	1	67	0	3	2	3	5	137
Hourly Total	0	2	189	1	191	0	195	6	1	201	0	11	8	7	19	411
8:00 AM	0	2	59	0	61	0	51	3	0	54	0	1	2	2	3	118
8:15 AM	0	3	56	0	59	0	53	0	0	53	0	1	2	5	3	115
8:30 AM	0	1	53	0	54	0	48	1	0	49	0	1	3	4	4	107
8:45 AM	0	2	70	0	72	0	51	3	0	54	0	1	2	3	3	129
Hourly Total	0	8	238	0	246	0	203	7	0	210	0	4	9	14	13	469
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	1	58	0	59	0	72	2	0	74	0	3	0	1	3	136
4:15 PM	0	1	49	0	50	0	79	2	0	81	0	0	2	0	2	133
4:30 PM	0	1	67	0	68	1	59	4	0	64	0	2	0	2	2	134
4:45 PM	0	0	57	0	57	0	80	0	0	80	0	3	0	2	3	140
Hourly Total	0	3	231	0	234	1	290	8	0	299	0	8	2	5	10	543
5:00 PM	0	1	59	0	60	0	87	2	0	89	0	1	0	1	1	150
5:15 PM	0	3	71	0	74	0	93	2	0	95	0	0	1	6	1	170
5:30 PM	0	0	54	0	54	0	71	3	0	74	0	0	1	3	1	129
5:45 PM	0	0	50	0	50	0	77	2	0	79	0	2	0	3	2	131
Hourly Total	0	4	234	0	238	0	328	9	0	337	0	3	2	13	5	580
Grand Total	0	17	892	1	909	1	1016	30	1	1047	0	26	21	39	47	2003
Approach %	0.0	1.9	98.1	-	-	0.1	97.0	2.9	-	-	0.0	55.3	44.7	-	-	-
Total %	0.0	0.8	44.5	-	45.4	0.0	50.7	1.5	-	52.3	0.0	1.3	1.0	-	2.3	-
Lights	0	17	867	-	884	1	971	29	-	1001	0	26	21	-	47	1932
% Lights	-	100.0	97.2	-	97.2	100.0	95.6	96.7	-	95.6	-	100.0	100.0	-	100.0	96.5
Buses	0	0	9	-	9	0	22	0	-	22	0	0	0	-	0	31
% Buses	-	0.0	1.0	-	1.0	0.0	2.2	0.0	-	2.1	-	0.0	0.0	-	0.0	1.5
Single-Unit Trucks	0	0	14	-	14	0	12	1	-	13	0	0	0	-	0	27
% Single-Unit Trucks	-	0.0	1.6	-	1.5	0.0	1.2	3.3	-	1.2	-	0.0	0.0	-	0.0	1.3
Articulated Trucks	0	0	1	-	1	0	4	0	-	4	0	0	0	-	0	5
% Articulated Trucks	-	0.0	0.1	-	0.1	0.0	0.4	0.0	-	0.4	-	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	1	-	1	0	7	0	-	7	0	0	0	-	0	8
% Bicycles on Road	-	0.0	0.1	-	0.1	0.0	0.7	0.0	-	0.7	-	0.0	0.0	-	0.0	0.4
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	39	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Court Access Drive TMC
Site Code:
Start Date: 04/11/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Graceland Court Access Drive Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
8:00 AM	0	2	59	0	61	0	51	3	0	54	0	1	2	2	3	118
8:15 AM	0	3	56	0	59	0	53	0	0	53	0	1	2	5	3	115
8:30 AM	0	1	53	0	54	0	48	1	0	49	0	1	3	4	4	107
8:45 AM	0	2	70	0	72	0	51	3	0	54	0	1	2	3	3	129
Total	0	8	238	0	246	0	203	7	0	210	0	4	9	14	13	469
Approach %	0.0	3.3	96.7	-	-	0.0	96.7	3.3	-	-	0.0	30.8	69.2	-	-	-
Total %	0.0	1.7	50.7	-	52.5	0.0	43.3	1.5	-	44.8	0.0	0.9	1.9	-	2.8	-
PHF	0.000	0.667	0.850	-	0.854	0.000	0.958	0.583	-	0.972	0.000	1.000	0.750	-	0.813	0.909
Lights	0	8	226	-	234	0	192	7	-	199	0	4	9	-	13	446
% Lights	-	100.0	95.0	-	95.1	-	94.6	100.0	-	94.8	-	100.0	100.0	-	100.0	95.1
Buses	0	0	4	-	4	0	7	0	-	7	0	0	0	-	0	11
% Buses	-	0.0	1.7	-	1.6	-	3.4	0.0	-	3.3	-	0.0	0.0	-	0.0	2.3
Single-Unit Trucks	0	0	7	-	7	0	3	0	-	3	0	0	0	-	0	10
% Single-Unit Trucks	-	0.0	2.9	-	2.8	-	1.5	0.0	-	1.4	-	0.0	0.0	-	0.0	2.1
Articulated Trucks	0	0	1	-	1	0	1	0	-	1	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.4	-	0.4	-	0.5	0.0	-	0.5	-	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	14	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Thacker Street with Graceland Court Access Drive TMC
Site Code:
Start Date: 04/11/2023
Page No: 3

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound					Thacker Street Westbound					Graceland Court Access Drive Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:45 PM	0	0	57	0	57	0	80	0	0	80	0	3	0	2	3	140
5:00 PM	0	1	59	0	60	0	87	2	0	89	0	1	0	1	1	150
5:15 PM	0	3	71	0	74	0	93	2	0	95	0	0	1	6	1	170
5:30 PM	0	0	54	0	54	0	71	3	0	74	0	0	1	3	1	129
Total	0	4	241	0	245	0	331	7	0	338	0	4	2	12	6	589
Approach %	0.0	1.6	98.4	-	-	0.0	97.9	2.1	-	-	0.0	66.7	33.3	-	-	-
Total %	0.0	0.7	40.9	-	41.6	0.0	56.2	1.2	-	57.4	0.0	0.7	0.3	-	1.0	-
PHF	0.000	0.333	0.849	-	0.828	0.000	0.890	0.583	-	0.889	0.000	0.333	0.500	-	0.500	0.866
Lights	0	4	239	-	243	0	321	7	-	328	0	4	2	-	6	577
% Lights	-	100.0	99.2	-	99.2	-	97.0	100.0	-	97.0	-	100.0	100.0	-	100.0	98.0
Buses	0	0	1	-	1	0	2	0	-	2	0	0	0	-	0	3
% Buses	-	0.0	0.4	-	0.4	-	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.5
Single-Unit Trucks	0	0	1	-	1	0	5	0	-	5	0	0	0	-	0	6
% Single-Unit Trucks	-	0.0	0.4	-	0.4	-	1.5	0.0	-	1.5	-	0.0	0.0	-	0.0	1.0
Articulated Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.3	0.0	-	0.3	-	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	-	0	0	2	0	-	2	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.3
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	12	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker+with+Alley TMC
Site Code:
Start Date: 04/26/2023
Page No: 1

Turning Movement Data

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Public Alley Northbound						Public Alley Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:00 PM	0	3	60	3	0	66	0	0	45	1	0	46	0	1	0	1	0	2	0	0	0	0	0	0	114
4:15 PM	0	2	47	1	0	50	0	2	59	2	0	63	0	2	0	1	0	3	0	1	0	2	1	3	119
4:30 PM	0	0	48	3	0	51	0	1	54	3	0	58	0	2	0	0	1	2	0	1	0	4	0	5	116
4:45 PM	0	3	43	2	1	48	0	4	48	3	0	55	0	2	0	0	0	2	0	1	0	3	3	4	109
Hourly Total	0	8	198	9	1	215	0	7	206	9	0	222	0	7	0	2	1	9	0	3	0	9	4	12	458
5:00 PM	0	2	70	1	1	73	0	0	60	3	0	63	0	1	1	0	0	2	0	5	0	3	1	8	146
5:15 PM	0	4	63	0	0	67	0	3	45	2	0	50	0	0	0	0	0	0	0	1	1	2	3	4	121
5:30 PM	0	1	60	2	0	63	0	2	56	3	0	61	0	0	1	0	0	1	0	0	0	4	1	4	129
5:45 PM	0	0	45	3	1	48	0	1	51	7	0	59	0	2	0	1	0	3	0	4	0	4	1	8	118
Hourly Total	0	7	238	6	2	251	0	6	212	15	0	233	0	3	2	1	0	6	0	10	1	13	6	24	514
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	1	31	0	0	32	0	0	16	0	0	16	0	2	1	2	0	5	0	0	0	2	2	2	55
7:15 AM	0	4	39	0	1	43	0	0	22	1	0	23	0	0	0	5	0	5	0	1	0	1	2	2	73
7:30 AM	0	3	55	0	0	58	0	0	40	0	0	40	0	2	0	4	0	6	0	1	0	2	2	3	107
7:45 AM	0	2	56	0	0	58	0	0	56	1	0	57	0	1	0	2	0	3	0	1	0	3	2	4	122
Hourly Total	0	10	181	0	1	191	0	0	134	2	0	136	0	5	1	13	0	19	0	3	0	8	8	11	357
8:00 AM	1	3	71	2	0	77	0	1	43	5	0	49	0	1	0	1	0	2	0	2	0	0	1	2	130
8:15 AM	0	0	56	0	0	56	0	0	44	4	0	48	0	3	1	3	0	7	0	2	0	4	1	6	117
8:30 AM	0	1	59	4	0	64	0	0	28	1	0	29	0	3	1	3	0	7	0	1	0	2	0	3	103
8:45 AM	0	1	61	3	0	65	0	1	50	3	0	54	0	0	0	0	2	0	0	1	0	1	1	2	121
Hourly Total	1	5	247	9	0	262	0	2	165	13	0	180	0	7	2	7	2	16	0	6	0	7	3	13	471
Grand Total	1	30	864	24	4	919	0	15	717	39	0	771	0	22	5	23	3	50	0	22	1	37	21	60	1800
Approach %	0.1	3.3	94.0	2.6	-	-	0.0	1.9	93.0	5.1	-	-	0.0	44.0	10.0	46.0	-	-	0.0	36.7	1.7	61.7	-	-	-
Total %	0.1	1.7	48.0	1.3	-	51.1	0.0	0.8	39.8	2.2	-	42.8	0.0	1.2	0.3	1.3	-	2.8	0.0	1.2	0.1	2.1	-	3.3	-
Lights	1	29	837	23	-	890	0	15	692	38	-	745	0	22	4	23	-	49	0	21	1	36	-	58	1742
% Lights	100.0	96.7	96.9	95.8	-	96.8	-	100.0	96.5	97.4	-	96.6	-	100.0	80.0	100.0	-	98.0	-	95.5	100.0	97.3	-	96.7	96.8
Buses	0	0	15	0	-	15	0	0	11	1	-	12	0	0	0	0	-	0	0	0	0	1	-	1	28
% Buses	0.0	0.0	1.7	0.0	-	1.6	-	0.0	1.5	2.6	-	1.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	2.7	-	1.7	1.6
Single-Unit Trucks	0	1	6	0	-	7	0	0	10	0	-	10	0	0	1	0	-	1	0	1	0	0	-	1	19
% Single-Unit Trucks	0.0	3.3	0.7	0.0	-	0.8	-	0.0	1.4	0.0	-	1.3	-	0.0	20.0	0.0	-	2.0	-	4.5	0.0	0.0	-	1.7	1.1
Articulated Trucks	0	0	3	0	-	3	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	7
% Articulated Trucks	0.0	0.0	0.3	0.0	-	0.3	-	0.0	0.6	0.0	-	0.5	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	3	1	-	4	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	4

% Bicycles on Road	0.0	0.0	0.3	4.2	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	21	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker+with+Alley TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Public Alley Northbound						Public Alley Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
4:45 PM	0	3	43	2	1	48	0	4	48	3	0	55	0	2	0	0	0	2	0	1	0	3	3	4	109
5:00 PM	0	2	70	1	1	73	0	0	60	3	0	63	0	1	1	0	0	2	0	5	0	3	1	8	146
5:15 PM	0	4	63	0	0	67	0	3	45	2	0	50	0	0	0	0	0	0	0	1	1	2	3	4	121
5:30 PM	0	1	60	2	0	63	0	2	56	3	0	61	0	0	1	0	0	1	0	0	0	4	1	4	129
Total	0	10	236	5	2	251	0	9	209	11	0	229	0	3	2	0	0	5	0	7	1	12	8	20	505
Approach %	0.0	4.0	94.0	2.0	-	-	0.0	3.9	91.3	4.8	-	-	0.0	60.0	40.0	0.0	-	-	0.0	35.0	5.0	60.0	-	-	-
Total %	0.0	2.0	46.7	1.0	-	49.7	0.0	1.8	41.4	2.2	-	45.3	0.0	0.6	0.4	0.0	-	1.0	0.0	1.4	0.2	2.4	-	4.0	-
PHF	0.000	0.625	0.843	0.625	-	0.860	0.000	0.563	0.871	0.917	-	0.909	0.000	0.375	0.500	0.000	-	0.625	0.000	0.350	0.250	0.750	-	0.625	0.865
Lights	0	10	232	5	-	247	0	9	204	11	-	224	0	3	2	0	-	5	0	7	1	12	-	20	496
% Lights	-	100.0	98.3	100.0	-	98.4	-	100.0	97.6	100.0	-	97.8	-	100.0	100.0	-	-	100.0	-	100.0	100.0	100.0	-	100.0	98.2
Buses	0	0	2	0	-	2	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	3
% Buses	-	0.0	0.8	0.0	-	0.8	-	0.0	0.5	0.0	-	0.4	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.6
Single-Unit Trucks	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	1.0	0.0	-	0.9	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Articulated Trucks	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	1.0	0.0	-	0.9	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Bicycles on Road	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.8	0.0	-	0.8	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.4
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Thacker+with+Alley TMC
Site Code:
Start Date: 04/26/2023

Turning Movement Peak Hour Data (8:00 AM)

Start Time	Thacker Street Eastbound						Thacker Street Westbound						Public Alley Northbound						Public Alley Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
8:00 AM	1	3	71	2	0	77	0	1	43	5	0	49	0	1	0	1	0	2	0	2	0	0	1	2	130
8:15 AM	0	0	56	0	0	56	0	0	44	4	0	48	0	3	1	3	0	7	0	2	0	4	1	6	117
8:30 AM	0	1	59	4	0	64	0	0	28	1	0	29	0	3	1	3	0	7	0	1	0	2	0	3	103
8:45 AM	0	1	61	3	0	65	0	1	50	3	0	54	0	0	0	0	2	0	0	1	0	1	1	2	121
Total	1	5	247	9	0	262	0	2	165	13	0	180	0	7	2	7	2	16	0	6	0	7	3	13	471
Approach %	0.4	1.9	94.3	3.4	-	-	0.0	1.1	91.7	7.2	-	-	0.0	43.8	12.5	43.8	-	-	0.0	46.2	0.0	53.8	-	-	-
Total %	0.2	1.1	52.4	1.9	-	55.6	0.0	0.4	35.0	2.8	-	38.2	0.0	1.5	0.4	1.5	-	3.4	0.0	1.3	0.0	1.5	-	2.8	-
PHF	0.250	0.417	0.870	0.563	-	0.851	0.000	0.500	0.825	0.650	-	0.833	0.000	0.583	0.500	0.583	-	0.571	0.000	0.750	0.000	0.438	-	0.542	0.906
Lights	1	5	238	9	-	253	0	2	159	13	-	174	0	7	2	7	-	16	0	6	0	7	-	13	456
% Lights	100.0	100.0	96.4	100.0	-	96.6	-	100.0	96.4	100.0	-	96.7	-	100.0	100.0	100.0	-	100.0	-	100.0	-	100.0	-	100.0	96.8
Buses	0	0	6	0	-	6	0	0	4	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	10
% Buses	0.0	0.0	2.4	0.0	-	2.3	-	0.0	2.4	0.0	-	2.2	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	2.1
Single-Unit Trucks	0	0	2	0	-	2	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	4
% Single-Unit Trucks	0.0	0.0	0.8	0.0	-	0.8	-	0.0	1.2	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.8
Articulated Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	0.4	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

Study Name	1st Avenue with Public Alley TMC
Start Date	Wednesday, April 26, 2023 4:00 PM
End Date	Thursday, April 27, 2023 8:45 AM
Site Code	

Report Summary

		Eastbound						Westbound						Southbound						Southeastbound							Crosswalk	
Time Period	**Class.**	**U**	**HL**	**L**	**T**	**I**	**O**	**U**	**T**	**BR**	**R**	**I**	**O**	**U**	**L**	**R**	**HR**	**I**	**O**	**U**	**HL**	**BL**	**HR**	**I**	**O**	**Total**		**ıdestria**	**Total**
Peak 1	Lights	0	0	2	6	8	12	0	9	0	0	9	6	0	0	3	0	3	2	0	0	0	0	0	0	20	EB	0	0
Specified Period	%	0%	0%	67%	100%	89%	92%	0%	90%	0%	0%	90%	100%	0%	0%	100%	0%	100%	67%	0%	0%	0%	0%	0%	0%	91%		0%	
7:30 AM - 8:30 AM	Buses	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	WB	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	8%	0%	10%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%		0%	
7:30 AM - 8:30 AM	ngle-Unit Truc	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	SB	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%	
	ticulated Truc	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	SEB	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%	
	icycles on Roa	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1		**0**	**0**
	%	0%	0%	33%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	5%			
	Total	**0**	**0**	**3**	**6**	**9**	**13**	**0**	**10**	**0**	**0**	**10**	**6**	**0**	**0**	**3**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**22**			
	PHF	0	0	0.38	0.75	0.75	0.46	0	0.62	0	0	0.62	0.75	0	0	0.25	0	0.25	0.38	0	0	0	0	0	0	0.61			
	Approach %					41%	59%					45%	27%					14%	14%					0%	0%				

Study Name	1st Avenue with Public Alley TMC
Start Date	Wednesday, April 26, 2023 4:00 PM
End Date	Thursday, April 27, 2023 8:45 AM
Site Code	

Report Summary

		Eastbound						Westbound						Southbound						Southeastbound							Crosswalk	
Time Period	**Class.**	**U**	**HL**	**L**	**T**	**I**	**O**	**U**	**T**	**BR**	**R**	**I**	**O**	**U**	**L**	**R**	**HR**	**I**	**O**	**U**	**HL**	**BL**	**HR**	**I**	**O**	**Total**		**ıdestria**	**Total**
Peak 1	Lights	0	0	2	6	8	12	0	9	0	0	9	6	0	0	3	0	3	2	0	0	0	0	0	0	20	EB	0	0
Specified Period	%	0%	0%	67%	100%	89%	92%	0%	90%	0%	0%	90%	100%	0%	0%	100%	0%	100%	67%	0%	0%	0%	0%	0%	0%	91%		0%	
7:30 AM - 8:30 AM	Buses	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	WB	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	8%	0%	10%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%		0%	
7:30 AM - 8:30 AM	ngle-Unit Truc	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	SB	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%	
	ticulated Truc	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	SEB	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%	
	icycles on Roa	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1		**0**	**0**
	%	0%	0%	33%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	5%			
	Total	**0**	**0**	**3**	**6**	**9**	**13**	**0**	**10**	**0**	**0**	**10**	**6**	**0**	**0**	**3**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**22**			
	PHF	0	0	0.38	0.75	0.75	0.46	0	0.62	0	0	0.62	0.75	0	0	0.25	0	0.25	0.38	0	0	0	0	0	0	0.61			
	Approach %					41%	59%					45%	27%					14%	14%					0%	0%				

Site Plan

Overall Gross Floor Area = 57,542 sf
Total Dwelling Area = 46,794 sf
# of stories = 4

TOTAL:

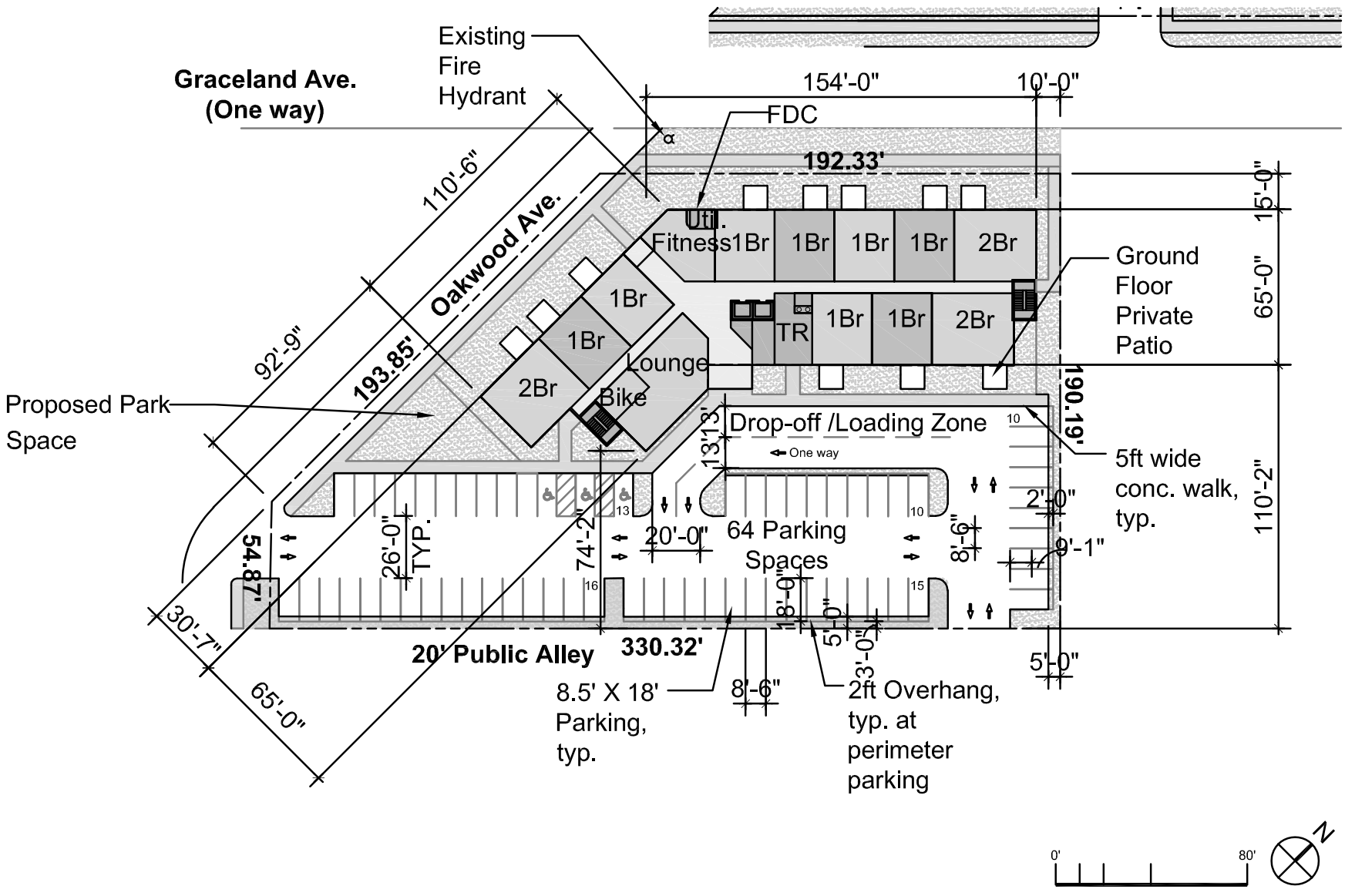
	Resi Ratio	Units Count	Resi Ratio	Parking Req'd
2Br	27%	15	1.5	22.5
1Br	73%	41	1	41
Total		**56**		**64 req'd**

Overall: **61 Standard + 3 Accessible Parking**
Total: 64 Parking Provided (64 req'd)

Gross Floor Area = 14,537 sf per floor
Dwelling Area = 9,090 sf per floor

Per Floor:

	Resi Ratio	Units Count
2Br	27%	3
1Br	73%	8
Total		**11**



Site Plan - South Site

FitzGerald

Graceland and Thacker 1
Des Plaines, Illinois | June 13, 2023

ITE Trip Generation Summary Sheets

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

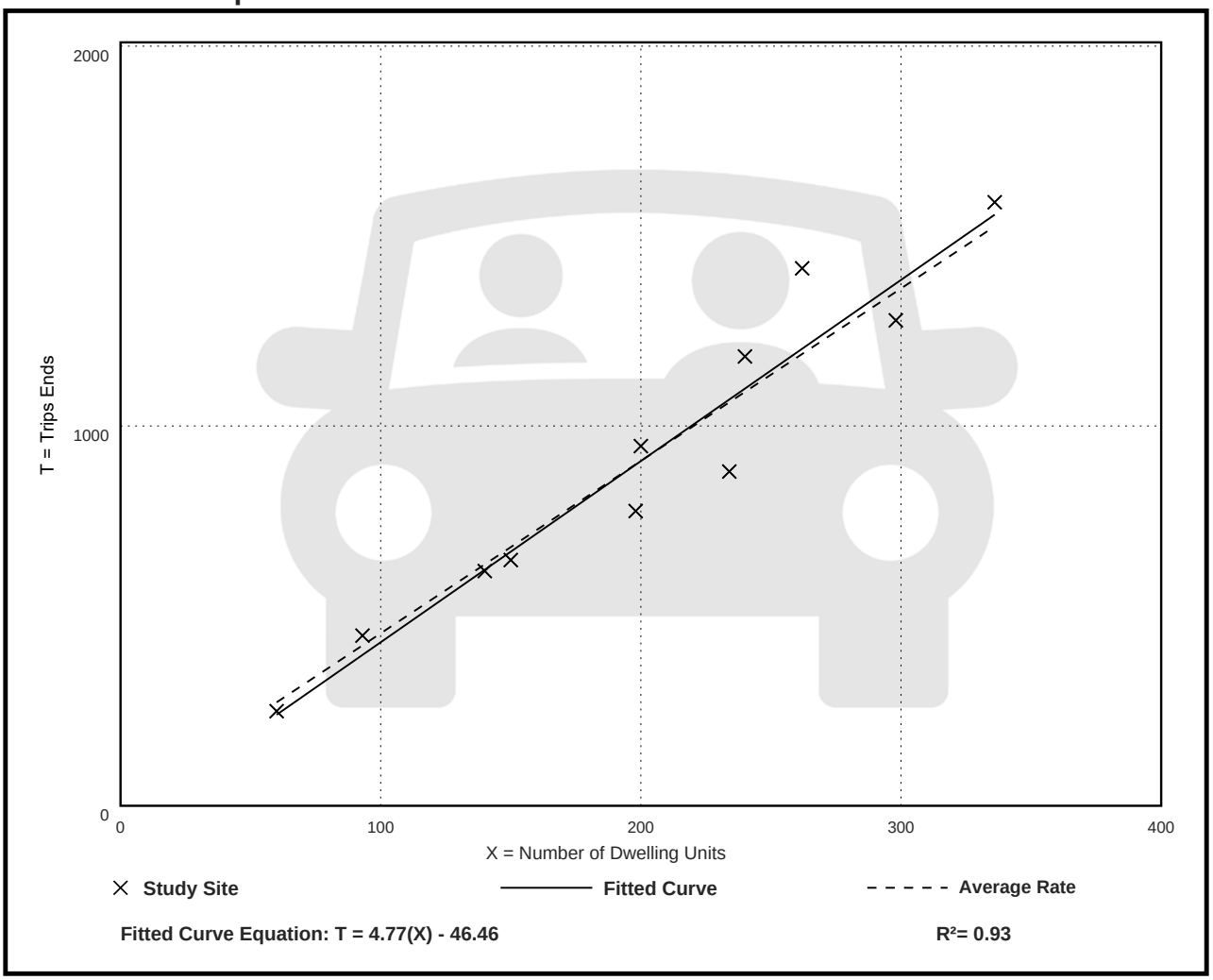
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



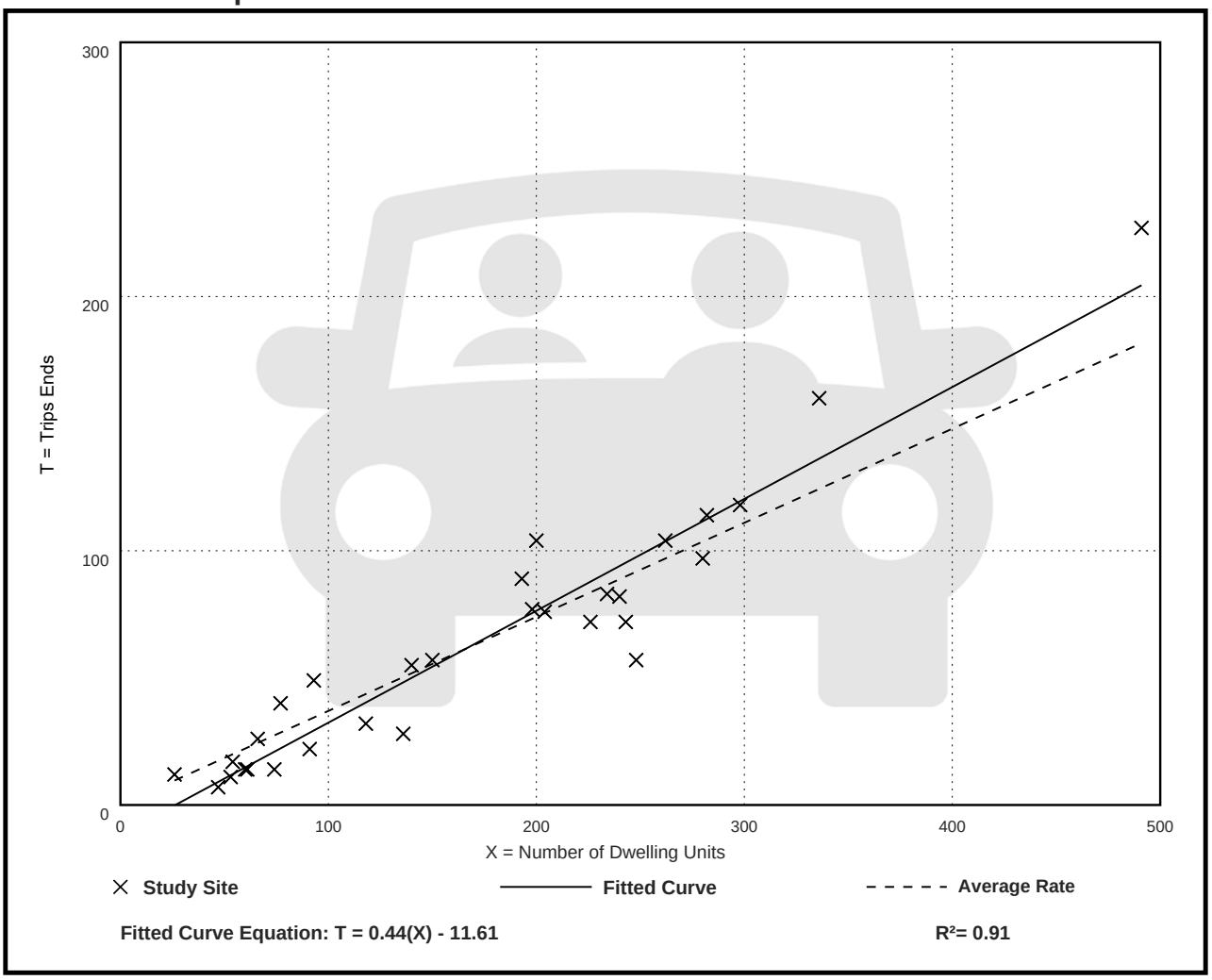
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
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: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



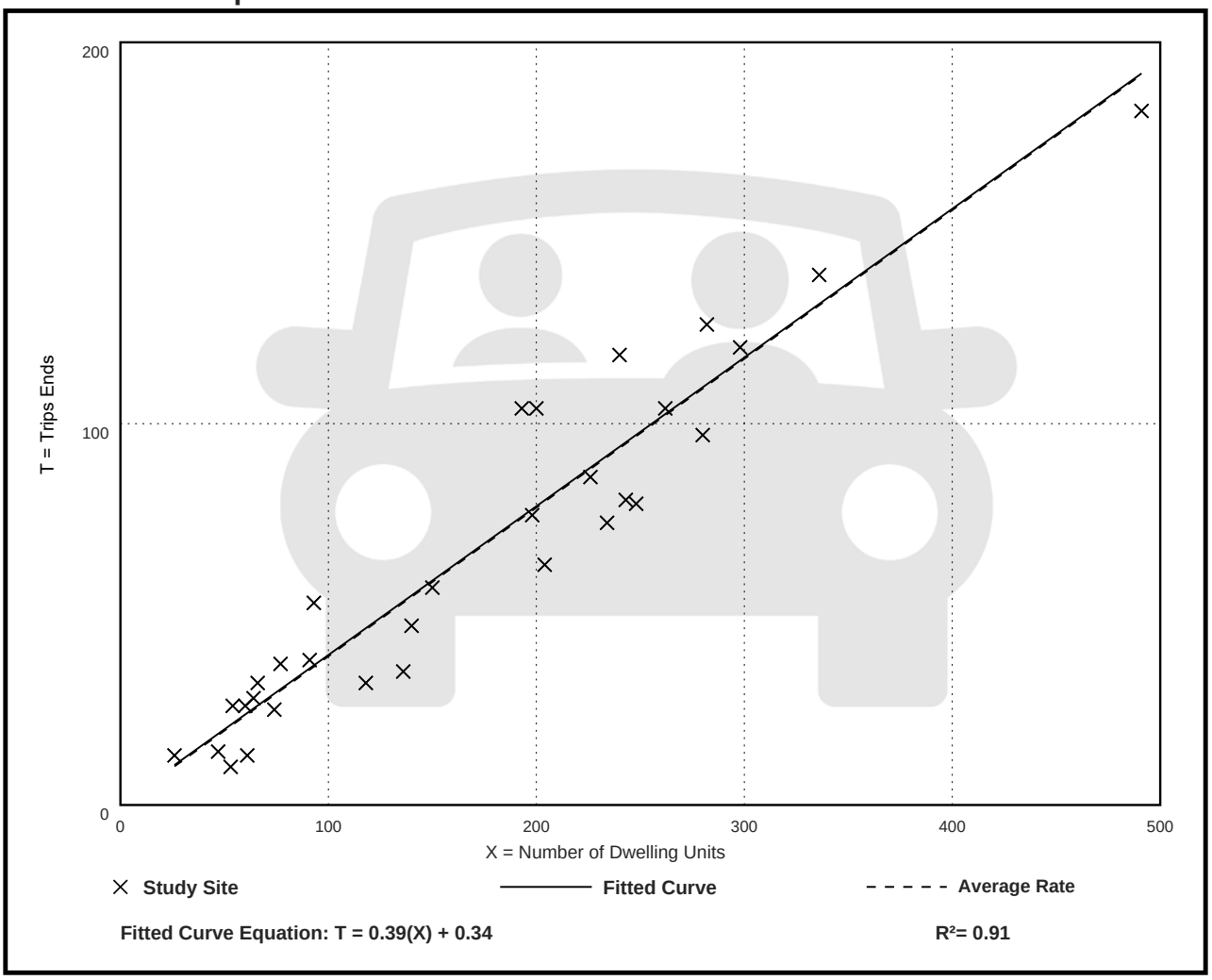
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
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: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Level of Service Criteria

LEVEL OF SERVICE CRITERIA

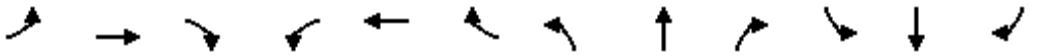
Signalized Intersections		
Level of Service	**Interpretation**	**Average Control Delay (seconds per vehicle)**
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level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

Unsignalized Intersections	
Level of Service	**Average Total Delay (sec/veh)**
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 6th Edition.

Capacity Analysis Summary Sheets

Existing Weekday Morning Peak Hour

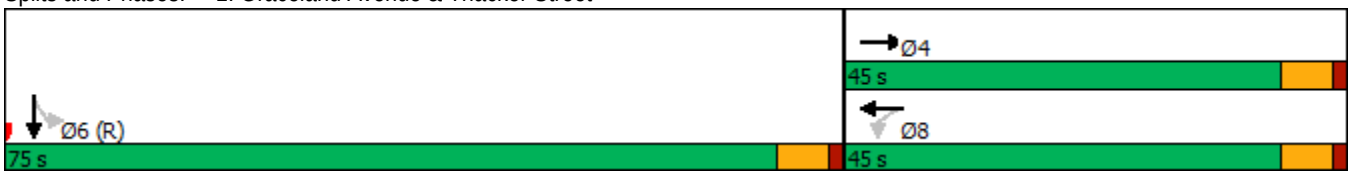


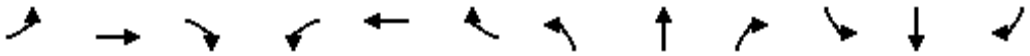
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	208	36	39	134	0	0	0	0	63	482	82
Future Volume (vph)	0	208	36	39	134	0	0	0	0	63	482	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.980									0.978	
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1772	0	1719	1810	0	0	0	0	1752	3381	0
Flt Permitted				0.328						0.950		
Satd. Flow (perm)	0	1772	0	594	1810	0	0	0	0	1752	3381	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8									27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			276			397			453	
Travel Time (s)		4.4			6.3			9.0			10.3	
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
Heavy Vehicles (%)	0%	6%	0%	5%	5%	0%	0%	0%	0%	3%	4%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	0	41	140	0	0	0	0	66	587	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		1.0		10.0	10.0					10.0	10.0	
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	
Total Split (s)		45.0		45.0	45.0					75.0	75.0	
Total Split (%)		37.5%		37.5%	37.5%					62.5%	62.5%	
Yellow Time (s)		4.5		4.5	4.5					4.5	4.5	
All-Red Time (s)		1.5		1.5	1.5					1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None		None	None					C-Min	C-Min	
Act Effct Green (s)		22.3		22.3	22.3					85.7	85.7	
Actuated g/C Ratio		0.19		0.19	0.19					0.71	0.71	
v/c Ratio		0.76		0.37	0.42					0.05	0.24	
Control Delay		59.1		51.0	46.9					6.3	6.5	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		59.1		51.0	46.9					6.3	6.5	
LOS		E		D	D					A	A	
Approach Delay		59.1			47.8						6.4	
Approach LOS		E			D						A	
Queue Length 50th (ft)		183		33	112					14	69	
Queue Length 95th (ft)		257		70	177					34	115	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		112			196			317			373	
Turn Bay Length (ft)				25								
Base Capacity (vph)		581		193	588					1251	2423	
Starvation Cap Reductn		0		0	0					0	0	
Spillback Cap Reductn		0		0	0					0	0	
Storage Cap Reductn		0		0	0					0	0	
Reduced v/c Ratio		0.44		0.21	0.24					0.05	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 81.6 (68%), Referenced to phase 2: and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 25.7		Intersection LOS: C	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Graceland Avenue & Thacker Street



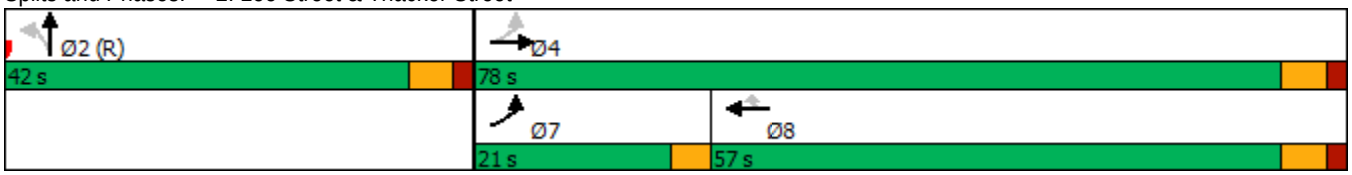


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	196	0	0	144	31	31	464	69	0	0	0
Future Volume (vph)	73	196	0	0	144	31	31	464	69	0	0	0
Ideal Flow (vphpl)	1900	2000	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt						0.850		0.982				
Flt Protected	0.950							0.997				
Satd. Flow (prot)	1687	1980	0	0	1827	1568	0	4794	0	0	0	0
Flt Permitted	0.408							0.997				
Satd. Flow (perm)	724	1980	0	0	1827	1568	0	4794	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						59		21				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		219			1072			519			495	
Travel Time (s)		5.0			24.4			11.8			11.3	
Peak Hour Factor	0.86	0.93	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	7%	1%	0%	0%	4%	3%	3%	7%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	211	0	0	167	36	0	656	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2					
Detector Phase	7	4			8	8	2	2				
Switch Phase												
Minimum Initial (s)	3.0	8.0			8.0	8.0	15.0	15.0				
Minimum Split (s)	9.5	24.0			24.0	24.0	24.0	24.0				
Total Split (s)	21.0	78.0			57.0	57.0	42.0	42.0				
Total Split (%)	17.5%	65.0%			47.5%	47.5%	35.0%	35.0%				
Yellow Time (s)	3.5	4.0			4.0	4.0	4.0	4.0				
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	3.5	6.0			6.0	6.0		6.0				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	None			None	None	C-Min	C-Min				
Act Effct Green (s)	32.4	29.9			17.8	17.8		78.1				
Actuated g/C Ratio	0.27	0.25			0.15	0.15		0.65				
v/c Ratio	0.30	0.43			0.62	0.13		0.21				
Control Delay	32.1	36.1			57.5	4.9		9.6				
Queue Delay	0.0	0.0			0.0	0.0		0.0				
Total Delay	32.1	36.1			57.5	4.9		9.6				
LOS	C	D			E	A		A				
Approach Delay		34.9			48.2			9.6				
Approach LOS		C			D			A				
Queue Length 50th (ft)	64	164			123	0		69				
Queue Length 95th (ft)	107	236			176	11		106				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		139			992			439			415	
Turn Bay Length (ft)	25											
Base Capacity (vph)	338	1188			776	700		3126				
Starvation Cap Reductn	0	0			0	0		0				
Spillback Cap Reductn	0	0			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.25	0.18			0.22	0.05		0.21				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 22.9		Intersection LOS: C	
Intersection Capacity Utilization 37.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lee Street & Thacker Street



Intersection	
Int Delay, s/veh	0.3

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations				↑↑	↰	
Traffic Vol, veh/h	0	0	12	558	16	0
Future Vol, veh/h	0	0	12	558	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	13	0
Mvmt Flow	0	0	13	594	17	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	323	-
Stage 1	-	-	0	-
Stage 2	-	-	323	-
Critical Hdwy	4.14	-	7.06	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	6.06	-
Follow-up Hdwy	2.22	-	3.63	-
Pot Cap-1 Maneuver	-	-	617	0
Stage 1	-	-	-	0
Stage 2	-	-	675	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	617	-
Mov Cap-2 Maneuver	-	-	617	-
Stage 1	-	-	-	-
Stage 2	-	-	675	-

Approach	SB	NW
HCM Control Delay, s		11
HCM LOS		B

Minor Lane/Major Mvmt	NWLn1	SBL	SBT
Capacity (veh/h)	617	-	-
HCM Lane V/C Ratio	0.028	-	-
HCM Control Delay (s)	11	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	17	0	0	564	10
Future Vol, veh/h	1	17	0	0	564	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	6	0	0	4	20
Mvmt Flow	1	18	0	0	594	11

Major/Minor	Minor2			Major2	
Conflicting Flow All	600	303		-	0
Stage 1	600	-		-	-
Stage 2	0	-		-	-
Critical Hdwy	6.8	7.02		-	-
Critical Hdwy Stg 1	5.8	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	3.5	3.36		-	-
Pot Cap-1 Maneuver	437	681		-	-
Stage 1	516	-		-	-
Stage 2	-	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	437	681		-	-
Mov Cap-2 Maneuver	437	-		-	-
Stage 1	516	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	10.4	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	681	-	-
HCM Lane V/C Ratio	0.026	-	-
HCM Control Delay (s)	10.4	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱			↰↑↱				
Traffic Vol, veh/h	6	5	0	0	5	3	6	545	20	0	0	0
Future Vol, veh/h	6	5	0	0	5	3	6	545	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	50	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	6	5	0	0	5	3	6	556	20	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	293	588	-	-	578	288	0	0	0
Stage 1	0	0	-	-	578	-	-	-	-
Stage 2	293	588	-	-	0	-	-	-	-
Critical Hdwy	8.5	6.5	-	-	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-
Critical Hdwy Stg 2	7.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4	4	-	-	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	528	424	0	0	430	715	-	-	-
Stage 1	-	-	0	0	504	-	-	-	-
Stage 2	573	499	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	521	424	-	-	430	715	-	-	-
Mov Cap-2 Maneuver	521	424	-	-	430	-	-	-	-
Stage 1	-	-	-	-	504	-	-	-	-
Stage 2	565	499	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	12.8	12.2	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	472	506
HCM Lane V/C Ratio	-	-	-	0.024	0.016
HCM Control Delay (s)	-	-	-	12.8	12.2
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	250	203	10	3	7
Future Vol, veh/h	3	250	203	10	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	8	0	0	0
Mvmt Flow	3	269	218	11	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	229	0	-	0	499	224
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1351	-	-	-	535	820
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	776	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1351	-	-	-	533	820
Mov Cap-2 Maneuver	-	-	-	-	533	-
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	776	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1351	-	-	-	706
HCM Lane V/C Ratio	0.002	-	-	-	0.015
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↑		↰	
Traffic Vol, veh/h	30	241	191	19	12	17
Future Vol, veh/h	30	241	191	19	12	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	5	5	11	17	18
Mvmt Flow	32	256	203	20	13	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	223	0	-	0	533	213
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	4.13	-	-	-	6.57	6.38
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	2.227	-	-	-	3.653	3.462
Pot Cap-1 Maneuver	1340	-	-	-	482	788
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	703	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1340	-	-	-	469	788
Mov Cap-2 Maneuver	-	-	-	-	469	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1340	-	-	-	615
HCM Lane V/C Ratio	0.024	-	-	-	0.05
HCM Control Delay (s)	7.8	0	-	-	11.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	258	12	12	196	13	13
Future Vol, veh/h	258	12	12	196	13	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	8	6	0	0
Mvmt Flow	287	13	13	218	14	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	300	0	538	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	244	-
Critical Hdwy	-	-	4.18	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.272	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1228	-	508	750
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1228	-	502	750
Mov Cap-2 Maneuver	-	-	-	-	502	-
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	791	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	601	-	-	1228	-
HCM Lane V/C Ratio	0.048	-	-	0.011	-
HCM Control Delay (s)	11.3	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↑		↰	
Traffic Vol, veh/h	8	240	204	7	4	9
Future Vol, veh/h	8	240	204	7	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	9	264	224	8	4	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	232	0	-	0	510	228
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	282	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1348	-	-	-	527	816
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1348	-	-	-	523	816
Mov Cap-2 Maneuver	-	-	-	-	523	-
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	770	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1348	-	-	-	696
HCM Lane V/C Ratio	0.007	-	-	-	0.021
HCM Control Delay (s)	7.7	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	256	9	2	165	13	7	2	7	6	0	7
Future Vol, veh/h	6	256	9	2	165	13	7	2	7	6	0	7
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	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	4	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	7	281	10	2	181	14	8	2	8	7	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	195	0	0	291	0	0	496	499	286	497	497	188
Stage 1	-	-	-	-	-	-	300	300	-	192	192	-
Stage 2	-	-	-	-	-	-	196	199	-	305	305	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1390	-	-	1282	-	-	487	476	758	487	477	859
Stage 1	-	-	-	-	-	-	713	669	-	814	745	-
Stage 2	-	-	-	-	-	-	810	740	-	709	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1390	-	-	1282	-	-	480	472	758	477	473	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	472	-	477	473	-
Stage 1	-	-	-	-	-	-	709	665	-	809	744	-
Stage 2	-	-	-	-	-	-	801	739	-	695	662	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	11.5	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	570	1390	-	-	1282	-	-	627
HCM Lane V/C Ratio	0.031	0.005	-	-	0.002	-	-	0.023
HCM Control Delay (s)	11.5	7.6	0	-	7.8	0	-	10.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	10	0	0	3
Future Vol, veh/h	3	6	10	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	61	61	61	61	61	61
Heavy Vehicles, %	0	0	10	0	2	0
Mvmt Flow	5	10	16	0	0	5

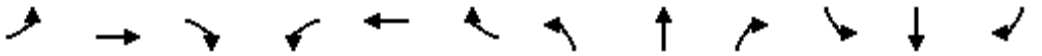
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	16	0	-	0	36	16
Stage 1	-	-	-	-	16	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.1	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1615	-	-	-	977	1069
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1615	-	-	-	974	1069
Mov Cap-2 Maneuver	-	-	-	-	974	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1615	-	-	-	1069
HCM Lane V/C Ratio	0.003	-	-	-	0.005
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Capacity Analysis Summary Sheets

Existing Weekday Evening Peak Hour

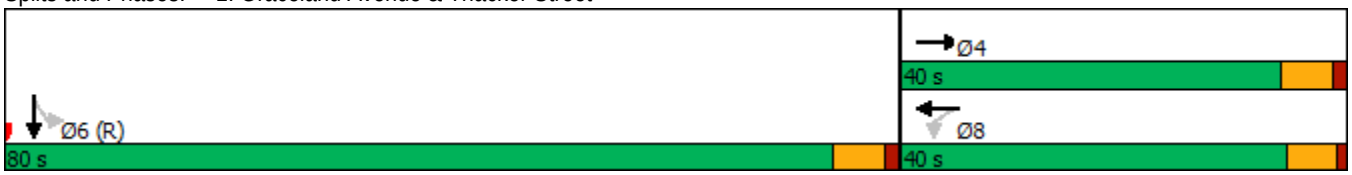


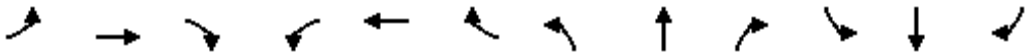
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	205	45	58	203	0	0	0	0	43	491	135
Future Volume (vph)	0	205	45	58	203	0	0	0	0	43	491	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.976									0.968	
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1833	0	1770	1845	0	0	0	0	1805	3426	0
Flt Permitted				0.295						0.950		
Satd. Flow (perm)	0	1833	0	550	1845	0	0	0	0	1805	3426	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9									54	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			276			397			453	
Travel Time (s)		4.4			6.3			9.0			10.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	2%	3%	0%	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	0	64	226	0	0	0	0	48	696	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		10.0		5.0	5.0					10.0	10.0	
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	
Total Split (s)		40.0		40.0	40.0					80.0	80.0	
Total Split (%)		33.3%		33.3%	33.3%					66.7%	66.7%	
Yellow Time (s)		4.5		4.5	4.5					4.5	4.5	
All-Red Time (s)		1.5		1.0	1.0					1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)		6.0		5.5	5.5					6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None		None	None					C-Min	C-Min	
Act Effct Green (s)		23.0		23.5	23.5					85.0	85.0	
Actuated g/C Ratio		0.19		0.20	0.20					0.71	0.71	
v/c Ratio		0.78		0.60	0.63					0.04	0.28	
Control Delay		59.0		65.9	52.4					6.6	6.7	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		59.0		65.9	52.4					6.6	6.7	
LOS		E		E	D					A	A	
Approach Delay		59.0			55.4						6.7	
Approach LOS		E			E						A	
Queue Length 50th (ft)		200		50	180					10	84	
Queue Length 95th (ft)		276		99	258					27	137	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		112			196			317			373	
Turn Bay Length (ft)				25								
Base Capacity (vph)		525		158	530					1278	2443	
Starvation Cap Reductn		0		0	0					0	0	
Spillback Cap Reductn		0		0	0					0	0	
Storage Cap Reductn		0		0	0					0	0	
Reduced v/c Ratio		0.53		0.41	0.43					0.04	0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 11.6 (10%), Referenced to phase 2: and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 28.5		Intersection LOS: C	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Graceland Avenue & Thacker Street



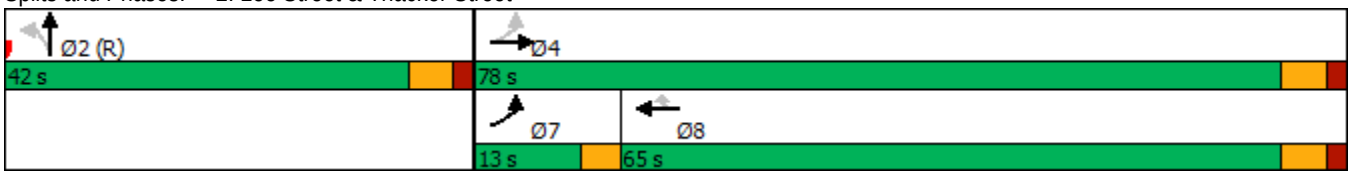


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	159	0	0	182	22	59	524	90	0	0	0
Future Volume (vph)	77	159	0	0	182	22	59	524	90	0	0	0
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt						0.850		0.980				
Flt Protected	0.950							0.996				
Satd. Flow (prot)	1752	1980	0	0	2000	1369	0	4964	0	0	0	0
Flt Permitted	0.341							0.996				
Satd. Flow (perm)	629	1980	0	0	2000	1369	0	4964	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						59		25				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		219			1072			519			495	
Travel Time (s)		5.0			24.4			11.8			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.91	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	1%	0%	0%	0%	18%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	173	0	0	200	24	0	732	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2					
Detector Phase	7	4			8	8	2	2				
Switch Phase												
Minimum Initial (s)	3.0	8.0			8.0	8.0	15.0	15.0				
Minimum Split (s)	9.5	22.5			22.5	22.5	22.5	22.5				
Total Split (s)	13.0	78.0			65.0	65.0	42.0	42.0				
Total Split (%)	10.8%	65.0%			54.2%	54.2%	35.0%	35.0%				
Yellow Time (s)	3.5	4.0			4.0	4.0	4.0	4.0				
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	3.5	6.0			6.0	6.0		6.0				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	None			None	None	C-Min	C-Min				
Act Effct Green (s)	32.3	29.8			18.6	18.6		78.2				
Actuated g/C Ratio	0.27	0.25			0.16	0.16		0.65				
v/c Ratio	0.32	0.35			0.65	0.09		0.23				
Control Delay	33.8	35.5			56.7	0.7		9.5				
Queue Delay	0.0	0.0			0.0	0.0		0.0				
Total Delay	33.8	35.5			56.7	0.7		9.5				
LOS	C	D			E	A		A				
Approach Delay		34.9			50.7			9.5				
Approach LOS		C			D			A				
Queue Length 50th (ft)	65	136			147	0		81				
Queue Length 95th (ft)	115	206			213	1		116				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		139			992			439			415	
Turn Bay Length (ft)	25											
Base Capacity (vph)	265	1188			983	703		3245				
Starvation Cap Reductn	0	0			0	0		0				
Spillback Cap Reductn	0	0			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.32	0.15			0.20	0.03		0.23				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 51.6 (43%), Referenced to phase 2:NBTL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 40.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lee Street & Thacker Street



Intersection	
Int Delay, s/veh	0.5

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations				↑↑	↰	
Traffic Vol, veh/h	0	0	13	592	29	0
Future Vol, veh/h	0	0	13	592	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	15	1	0	0
Mvmt Flow	0	0	14	630	31	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	343	-
Stage 1	-	-	0	-
Stage 2	-	-	343	-
Critical Hdwy	4.4	-	6.8	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.8	-
Follow-up Hdwy	2.35	-	3.5	-
Pot Cap-1 Maneuver	-	-	633	0
Stage 1	-	-	-	0
Stage 2	-	-	696	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	633	-
Mov Cap-2 Maneuver	-	-	633	-
Stage 1	-	-	-	-
Stage 2	-	-	696	-

Approach	SB	NW
HCM Control Delay, s		11
HCM LOS		B

Minor Lane/Major Mvmt	NWLn1	SBL	SBT
Capacity (veh/h)	633	-	-
HCM Lane V/C Ratio	0.049	-	-
HCM Control Delay (s)	11	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	17	0	0	607	14
Future Vol, veh/h	0	17	0	0	607	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	6	0	0	2	0
Mvmt Flow	0	20	0	0	714	16

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	365		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.02		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.36		-	-
Pot Cap-1 Maneuver	0	620		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	620		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	11	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	620	-	-
HCM Lane V/C Ratio	0.032	-	-
HCM Control Delay (s)	11	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱			↰↑↱				
Traffic Vol, veh/h	4	7	0	0	10	2	5	629	21	0	0	0
Future Vol, veh/h	4	7	0	0	10	2	5	629	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	8	0	0	11	2	6	699	23	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	367	734	-	-	723	361	0	0	0
Stage 1	0	0	-	-	723	-	-	-	-
Stage 2	367	734	-	-	0	-	-	-	-
Critical Hdwy	7.5	6.5	-	-	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	-	-	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	569	350	0	0	355	641	-	-	-
Stage 1	-	-	0	0	434	-	-	-	-
Stage 2	630	429	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	554	350	-	-	355	641	-	-	-
Mov Cap-2 Maneuver	554	350	-	-	355	-	-	-	-
Stage 1	-	-	-	-	434	-	-	-	-
Stage 2	612	429	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	14.2	14.7	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	404	384
HCM Lane V/C Ratio	-	-	-	0.03	0.035
HCM Control Delay (s)	-	-	-	14.2	14.7
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↑		↰	
Traffic Vol, veh/h	14	242	324	9	8	6
Future Vol, veh/h	14	242	324	9	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	1	2	0	0	17
Mvmt Flow	15	260	348	10	9	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	358	0	-	0	643	353
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	4.17	-	-	-	6.4	6.37
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.453
Pot Cap-1 Maneuver	1173	-	-	-	441	658
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1173	-	-	-	434	658
Mov Cap-2 Maneuver	-	-	-	-	434	-
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	764	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1173	-	-	-	508
HCM Lane V/C Ratio	0.013	-	-	-	0.03
HCM Control Delay (s)	8.1	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	234	318	13	15	21
Future Vol, veh/h	29	234	318	13	15	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	1	3	0	0	5
Mvmt Flow	32	257	349	14	16	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	363	0	-	0	677	356
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	321	-
Critical Hdwy	4.17	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	1168	-	-	-	421	681
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	740	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1168	-	-	-	408	681
Mov Cap-2 Maneuver	-	-	-	-	408	-
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	740	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1168	-	-	-	533
HCM Lane V/C Ratio	0.027	-	-	-	0.074
HCM Control Delay (s)	8.2	0	-	-	12.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	243	9	9	330	4	20
Future Vol, veh/h	243	9	9	330	4	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	0	0	3	0	0
Mvmt Flow	270	10	10	367	4	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	280	0	662	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1294	-	430	769
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1294	-	426	769
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	678	-	-	1294	-
HCM Lane V/C Ratio	0.039	-	-	0.008	-
HCM Control Delay (s)	10.5	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	246	331	7	4	2
Future Vol, veh/h	4	246	331	7	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	5	283	380	8	5	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	388	0	-	0	677	384
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1182	-	-	-	421	668
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1182	-	-	-	419	668
Mov Cap-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	762	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1182	-	-	-	478
HCM Lane V/C Ratio	0.004	-	-	-	0.014
HCM Control Delay (s)	8.1	0	-	-	12.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

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	10	236	5	9	233	11	3	2	0	7	1	12
Future Vol, veh/h	10	236	5	9	233	11	3	2	0	7	1	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	11	271	6	10	268	13	3	2	0	8	1	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	281	0	0	277	0	0	598	597	274	592	594	275
Stage 1	-	-	-	-	-	-	296	296	-	295	295	-
Stage 2	-	-	-	-	-	-	302	301	-	297	299	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1293	-	-	1298	-	-	417	419	770	421	421	769
Stage 1	-	-	-	-	-	-	717	672	-	718	673	-
Stage 2	-	-	-	-	-	-	712	669	-	716	670	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1293	-	-	1298	-	-	403	411	770	413	413	769
Mov Cap-2 Maneuver	-	-	-	-	-	-	403	411	-	413	413	-
Stage 1	-	-	-	-	-	-	710	665	-	711	667	-
Stage 2	-	-	-	-	-	-	692	663	-	706	663	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	14	11.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	406	1293	-	-	1298	-	-	572
HCM Lane V/C Ratio	0.014	0.009	-	-	0.008	-	-	0.04
HCM Control Delay (s)	14	7.8	0	-	7.8	0	-	11.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	9	16	1	3	18
Future Vol, veh/h	4	9	16	1	3	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	11	20	1	4	23

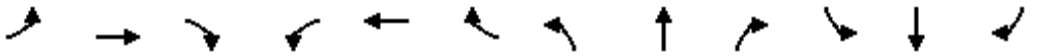
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	21	0	-	0	42	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	21	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1608	-	-	-	974	1062
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1608	-	-	-	971	1062
Mov Cap-2 Maneuver	-	-	-	-	971	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	1048
HCM Lane V/C Ratio	0.003	-	-	-	0.025
HCM Control Delay (s)	7.2	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Capacity Analysis Summary Sheets

Year 2029 Total Projected Weekday Morning Peak Hour

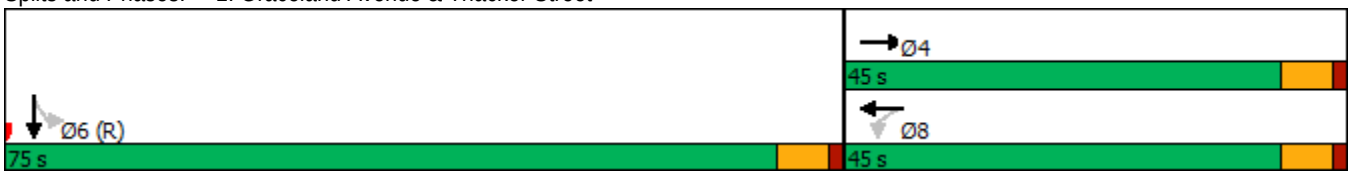


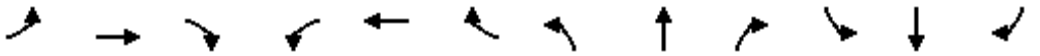
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	246	38	53	165	0	0	0	0	106	513	85
Future Volume (vph)	0	246	38	53	165	0	0	0	0	106	513	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.982									0.979	
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1774	0	1719	1810	0	0	0	0	1752	3384	0
Flt Permitted				0.287						0.950		
Satd. Flow (perm)	0	1774	0	519	1810	0	0	0	0	1752	3384	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7									26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			276			397			453	
Travel Time (s)		4.4			6.3			9.0			10.3	
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
Heavy Vehicles (%)	0%	6%	0%	5%	5%	0%	0%	0%	0%	3%	4%	7%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	296	0	55	172	0	0	0	0	110	623	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		1.0		10.0	10.0					10.0	10.0	
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	
Total Split (s)		45.0		45.0	45.0					75.0	75.0	
Total Split (%)		37.5%		37.5%	37.5%					62.5%	62.5%	
Yellow Time (s)		4.5		4.5	4.5					4.5	4.5	
All-Red Time (s)		1.5		1.5	1.5					1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)		6.0		6.0	6.0					6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None		None	None					C-Min	C-Min	
Act Effct Green (s)		25.1		25.1	25.1					82.9	82.9	
Actuated g/C Ratio		0.21		0.21	0.21					0.69	0.69	
v/c Ratio		0.79		0.51	0.46					0.09	0.27	
Control Delay		58.3		56.4	43.7					7.4	7.7	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		58.3		56.4	43.7					7.4	7.7	
LOS		E		E	D					A	A	
Approach Delay		58.3			46.8						7.6	
Approach LOS		E			D						A	
Queue Length 50th (ft)		214		43	134					25	82	
Queue Length 95th (ft)		290		87	200					56	135	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		112			196			317			373	
Turn Bay Length (ft)				25								
Base Capacity (vph)		581		168	588					1210	2346	
Starvation Cap Reductn		0		0	0					0	0	
Spillback Cap Reductn		0		0	0					0	0	
Storage Cap Reductn		0		0	0					0	0	
Reduced v/c Ratio		0.51		0.33	0.29					0.09	0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 81.6 (68%), Referenced to phase 2: and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 26.7		Intersection LOS: C	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Graceland Avenue & Thacker Street



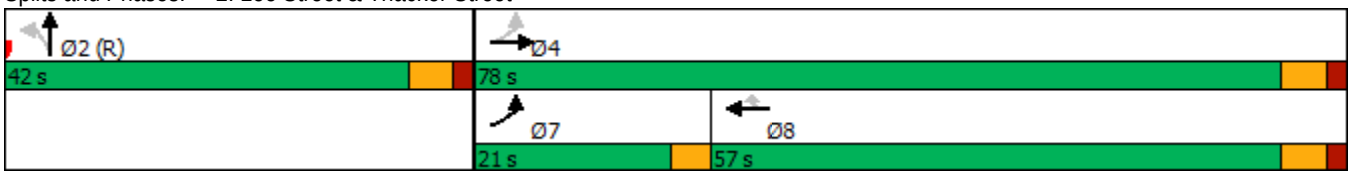


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	209	0	0	167	32	55	483	71	0	0	0
Future Volume (vph)	89	209	0	0	167	32	55	483	71	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt						0.850		0.982				
Flt Protected	0.950							0.996				
Satd. Flow (prot)	1687	1881	0	0	1827	1568	0	4794	0	0	0	0
Flt Permitted	0.365							0.996				
Satd. Flow (perm)	648	1881	0	0	1827	1568	0	4794	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						59		20				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		219			1072			519			495	
Travel Time (s)		5.0			24.4			11.8			11.3	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	7%	1%	0%	0%	4%	3%	3%	7%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	243	0	0	194	37	0	709	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2					
Detector Phase	7	4			8	8	2	2				
Switch Phase												
Minimum Initial (s)	3.0	8.0			8.0	8.0	15.0	15.0				
Minimum Split (s)	9.5	24.0			24.0	24.0	24.0	24.0				
Total Split (s)	21.0	78.0			57.0	57.0	42.0	42.0				
Total Split (%)	17.5%	65.0%			47.5%	47.5%	35.0%	35.0%				
Yellow Time (s)	3.5	4.0			4.0	4.0	4.0	4.0				
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	3.5	6.0			6.0	6.0		6.0				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	None			None	None	C-Min	C-Min				
Act Effct Green (s)	36.9	34.4			19.2	19.2		73.6				
Actuated g/C Ratio	0.31	0.29			0.16	0.16		0.61				
v/c Ratio	0.34	0.45			0.66	0.12		0.24				
Control Delay	30.9	35.1			57.8	4.9		11.4				
Queue Delay	0.0	0.0			0.0	0.0		0.0				
Total Delay	30.9	35.1			57.8	4.9		11.4				
LOS	C	D			E	A		B				
Approach Delay		33.8			49.3			11.4				
Approach LOS		C			D			B				
Queue Length 50th (ft)	75	184			143	0		82				
Queue Length 95th (ft)	114	243			197	12		124				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		139			992			439			415	
Turn Bay Length (ft)	25											
Base Capacity (vph)	351	1128			776	700		2946				
Starvation Cap Reductn	0	0			0	0		0				
Spillback Cap Reductn	0	0			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.29	0.22			0.25	0.05		0.24				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lee Street & Thacker Street



Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	0	0	0	13	612
Future Vol, veh/h	30	0	0	0	13	612
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	13	0	2	2	2	2
Mvmt Flow	32	0	0	0	14	651

Major/Minor	Minor1		Major2	
Conflicting Flow All	354	-	0	0
Stage 1	0	-	-	-
Stage 2	354	-	-	-
Critical Hdwy	7.06	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-
Follow-up Hdwy	3.63	-	2.22	-
Pot Cap-1 Maneuver	589	0	-	-
Stage 1	-	0	-	-
Stage 2	650	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	589	-	-	-
Mov Cap-2 Maneuver	589	-	-	-
Stage 1	-	-	-	-
Stage 2	650	-	-	-

Approach	WB	SB
HCM Control Delay, s	11.5	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	589	-	-
HCM Lane V/C Ratio	0.054	-	-
HCM Control Delay (s)	11.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	18	0	0	632	10
Future Vol, veh/h	0	18	0	0	632	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	6	0	0	4	20
Mvmt Flow	0	19	0	0	665	11

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	338		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.02		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.36		-	-
Pot Cap-1 Maneuver	0	646		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	646		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	10.7	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	646	-	-
HCM Lane V/C Ratio	0.029	-	-
HCM Control Delay (s)	10.7	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	5	0	0	5	3	27	589	21	0	0	0
Future Vol, veh/h	6	5	0	0	5	3	27	589	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	50	0	0	0	0	0	0	3	0	0	0	0
Mvmt Flow	6	5	0	0	5	3	28	601	21	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	359	678	-	-	668	311	0	0	0
Stage 1	0	0	-	-	668	-	-	-	-
Stage 2	359	678	-	-	0	-	-	-	-
Critical Hdwy	8.5	6.5	-	-	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-
Critical Hdwy Stg 2	7.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4	4	-	-	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	468	377	0	0	382	691	-	-	-
Stage 1	-	-	0	0	459	-	-	-	-
Stage 2	517	455	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	461	377	-	-	382	691	-	-	-
Mov Cap-2 Maneuver	461	377	-	-	382	-	-	-	-
Stage 1	-	-	-	-	459	-	-	-	-
Stage 2	509	455	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	13.8	13	
HCM LOS	B	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	419	459
HCM Lane V/C Ratio	-	-	-	0.027	0.018
HCM Control Delay (s)	-	-	-	13.8	13
HCM Lane LOS	-	-	-	B	B
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	277	238	10	3	7
Future Vol, veh/h	3	277	238	10	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	3	8	0	0	0
Mvmt Flow	3	298	256	11	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	267	0	-	0	566	262
Stage 1	-	-	-	-	262	-
Stage 2	-	-	-	-	304	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1308	-	-	-	489	782
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1308	-	-	-	488	782
Mov Cap-2 Maneuver	-	-	-	-	488	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	753	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1308	-	-	-	662
HCM Lane V/C Ratio	0.002	-	-	-	0.016
HCM Control Delay (s)	7.8	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	267	226	20	12	18
Future Vol, veh/h	31	267	226	20	12	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	5	5	11	17	18
Mvmt Flow	33	284	240	21	13	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	261	0	-	0	601	251
Stage 1	-	-	-	-	251	-
Stage 2	-	-	-	-	350	-
Critical Hdwy	4.13	-	-	-	6.57	6.38
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	5.57	-
Follow-up Hdwy	2.227	-	-	-	3.653	3.462
Pot Cap-1 Maneuver	1298	-	-	-	440	750
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1298	-	-	-	427	750
Mov Cap-2 Maneuver	-	-	-	-	427	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	681	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1298	-	-	-	576
HCM Lane V/C Ratio	0.025	-	-	-	0.055
HCM Control Delay (s)	7.8	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	285	12	12	231	13	13
Future Vol, veh/h	285	12	12	231	13	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	8	6	0	0
Mvmt Flow	317	13	13	257	14	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	330	0	607	324
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	283	-
Critical Hdwy	-	-	4.18	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.272	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1197	-	463	722
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	457	722
Mov Cap-2 Maneuver	-	-	-	-	457	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	760	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	560	-	-	1197	-
HCM Lane V/C Ratio	0.052	-	-	0.011	-
HCM Control Delay (s)	11.8	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	278	238	7	4	9
Future Vol, veh/h	8	278	238	7	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	5	5	0	0	0
Mvmt Flow	9	305	262	8	4	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	270	0	-	0	589	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	323	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1305	-	-	-	474	778
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1305	-	-	-	470	778
Mov Cap-2 Maneuver	-	-	-	-	470	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1305	-	-	-	647
HCM Lane V/C Ratio	0.007	-	-	-	0.022
HCM Control Delay (s)	7.8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	62	280	10	2	175	50	9	22	12	6	11	40
Future Vol, veh/h	62	280	10	2	175	50	9	22	12	6	11	40
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	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	4	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	68	308	11	2	192	55	10	24	13	7	12	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	247	0	0	319	0	0	702	701	314	692	679	220
Stage 1	-	-	-	-	-	-	450	450	-	224	224	-
Stage 2	-	-	-	-	-	-	252	251	-	468	455	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1331	-	-	1252	-	-	355	365	731	361	376	825
Stage 1	-	-	-	-	-	-	592	575	-	783	722	-
Stage 2	-	-	-	-	-	-	757	703	-	579	572	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1331	-	-	1252	-	-	311	342	731	319	352	825
Mov Cap-2 Maneuver	-	-	-	-	-	-	311	342	-	319	352	-
Stage 1	-	-	-	-	-	-	555	539	-	734	721	-
Stage 2	-	-	-	-	-	-	703	702	-	509	537	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.1	15.4	12
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	392	1331	-	-	1252	-	-	578
HCM Lane V/C Ratio	0.121	0.051	-	-	0.002	-	-	0.108
HCM Control Delay (s)	15.4	7.9	0	-	7.9	0	-	12
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	6	11	20	0	14
Future Vol, veh/h	3	6	11	20	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	61	61	61	61	61	61
Heavy Vehicles, %	0	0	10	0	2	0
Mvmt Flow	5	10	18	33	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	55	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.1	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	1568	-	-	-	953	1044
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1568	-	-	-	950	1044
Mov Cap-2 Maneuver	-	-	-	-	950	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1568	-	-	-	1044
HCM Lane V/C Ratio	0.003	-	-	-	0.022
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	11	0	0	607	4
Future Vol, veh/h	0	11	0	0	607	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	4	0
Mvmt Flow	0	12	0	0	639	4

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	322		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	6.9		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.3		-	-
Pot Cap-1 Maneuver	0	680		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	680		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	10.4	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	680	-	-
HCM Lane V/C Ratio	0.017	-	-
HCM Control Delay (s)	10.4	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	275	2	4	243	5	16
Future Vol, veh/h	275	2	4	243	5	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	0	0	5	0	0
Mvmt Flow	289	2	4	256	5	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	291	0	554	290
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	264	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1282	-	497	754
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1282	-	495	754
Mov Cap-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	782	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	670	-	-	1282	-
HCM Lane V/C Ratio	0.033	-	-	0.003	-
HCM Control Delay (s)	10.6	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	13	41	1	0	3
Future Vol, veh/h	1	13	41	1	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	14	43	1	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	44	0	-	0	60	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1577	-	-	-	952	1032
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1577	-	-	-	951	1032
Mov Cap-2 Maneuver	-	-	-	-	951	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	1012	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1577	-	-	-	1032
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.7

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	0	3	11	1	7	0
Future Vol, veh/h	0	3	11	1	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	3	12	1	7	0

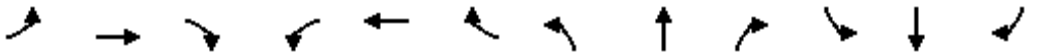
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	13	0	-	0	16	13
Stage 1	-	-	-	-	13	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1619	-	-	-	1008	1073
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1025	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1619	-	-	-	1008	1073
Mov Cap-2 Maneuver	-	-	-	-	1008	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	1025	-

Approach	NB	SB	SE
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1619	-	1008	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Capacity Analysis Summary Sheets

Year 2029 Total Projected Weekday Evening Peak Hour

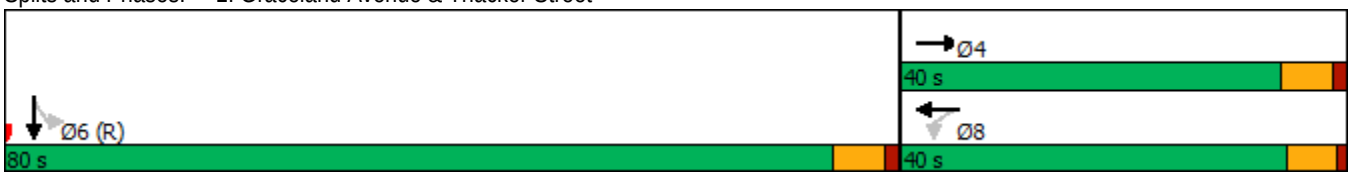


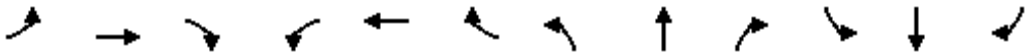
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	225	47	69	224	0	0	0	0	56	520	144
Future Volume (vph)	0	225	47	69	224	0	0	0	0	56	520	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	25		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.977									0.967	
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	1835	0	1770	1845	0	0	0	0	1805	3422	0
Flt Permitted				0.271						0.950		
Satd. Flow (perm)	0	1835	0	505	1845	0	0	0	0	1805	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9									55	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		192			276			397			453	
Travel Time (s)		4.4			6.3			9.0			10.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	1%	2%	2%	3%	0%	0%	0%	0%	0%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	302	0	77	249	0	0	0	0	62	738	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		10.0		5.0	5.0					10.0	10.0	
Minimum Split (s)		22.5		22.5	22.5					22.5	22.5	
Total Split (s)		40.0		40.0	40.0					80.0	80.0	
Total Split (%)		33.3%		33.3%	33.3%					66.7%	66.7%	
Yellow Time (s)		4.5		4.5	4.5					4.5	4.5	
All-Red Time (s)		1.5		1.0	1.0					1.5	1.5	
Lost Time Adjust (s)		0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)		6.0		5.5	5.5					6.0	6.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		None		None	None					C-Min	C-Min	
Act Effct Green (s)		24.5		25.0	25.0					83.5	83.5	
Actuated g/C Ratio		0.20		0.21	0.21					0.70	0.70	
v/c Ratio		0.79		0.73	0.65					0.05	0.31	
Control Delay		58.6		80.0	50.0					7.1	7.4	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		58.6		80.0	50.0					7.1	7.4	
LOS		E		E	D					A	A	
Approach Delay		58.6			57.1						7.4	
Approach LOS		E			E						A	
Queue Length 50th (ft)		217		62	197					14	96	
Queue Length 95th (ft)		296		#116	278					34	154	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		112			196			317			373	
Turn Bay Length (ft)				25								
Base Capacity (vph)		526		145	530					1256	2397	
Starvation Cap Reductn		0		0	0					0	0	
Spillback Cap Reductn		0		0	0					0	0	
Storage Cap Reductn		0		0	0					0	0	
Reduced v/c Ratio		0.57		0.53	0.47					0.05	0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 11.6 (10%), Referenced to phase 2: and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 29.6		Intersection LOS: C	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Graceland Avenue & Thacker Street



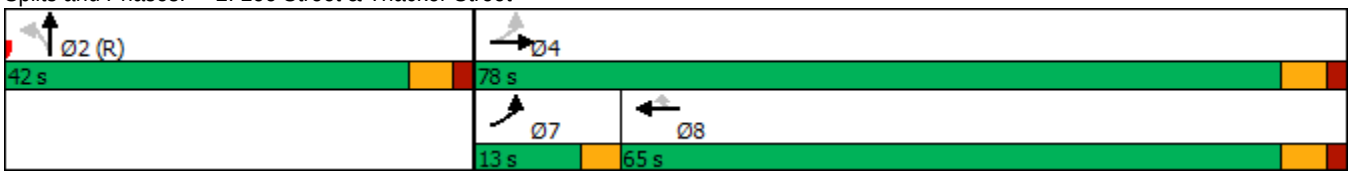


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	167	0	0	197	23	75	553	93	0	0	0
Future Volume (vph)	89	167	0	0	197	23	75	553	93	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt						0.850		0.981				
Flt Protected	0.950							0.995				
Satd. Flow (prot)	1752	1845	0	0	1900	1369	0	4964	0	0	0	0
Flt Permitted	0.337							0.995				
Satd. Flow (perm)	622	1845	0	0	1900	1369	0	4964	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						59		23				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		219			1072			519			495	
Travel Time (s)		5.0			24.4			11.8			11.3	
Peak Hour Factor	0.92	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	0%	0%	0%	18%	2%	2%	2%	0%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	186	0	0	214	25	0	784	0	0	0	0
Turn Type	pm+pt	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases	4					8	2					
Detector Phase	7	4			8	8	2	2				
Switch Phase												
Minimum Initial (s)	3.0	8.0			8.0	8.0	15.0	15.0				
Minimum Split (s)	9.5	22.5			22.5	22.5	22.5	22.5				
Total Split (s)	13.0	78.0			65.0	65.0	42.0	42.0				
Total Split (%)	10.8%	65.0%			54.2%	54.2%	35.0%	35.0%				
Yellow Time (s)	3.5	4.0			4.0	4.0	4.0	4.0				
All-Red Time (s)	0.0	2.0			2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0				
Total Lost Time (s)	3.5	6.0			6.0	6.0		6.0				
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	None	None			None	None	C-Min	C-Min				
Act Effct Green (s)	36.4	33.9			20.2	20.2		74.1				
Actuated g/C Ratio	0.30	0.28			0.17	0.17		0.62				
v/c Ratio	0.34	0.36			0.67	0.09		0.25				
Control Delay	33.4	35.5			56.6	0.9		11.0				
Queue Delay	0.0	0.0			0.0	0.0		0.0				
Total Delay	33.4	35.5			56.6	0.9		11.0				
LOS	C	D			E	A		B				
Approach Delay		34.8			50.7			11.0				
Approach LOS		C			D			B				
Queue Length 50th (ft)	74	144			157	0		93				
Queue Length 95th (ft)	127	216			224	2		130				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		139			992			439			415	
Turn Bay Length (ft)	25											
Base Capacity (vph)	288	1107			934	703		3075				
Starvation Cap Reductn	0	0			0	0		0				
Spillback Cap Reductn	0	0			0	0		0				
Storage Cap Reductn	0	0			0	0		0				
Reduced v/c Ratio	0.34	0.17			0.23	0.04		0.25				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 53 (44%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 23.4		Intersection LOS: C	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Lee Street & Thacker Street



Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	0	0	0	15	628
Future Vol, veh/h	38	0	0	0	15	628
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	15	1
Mvmt Flow	40	0	0	0	16	668

Major/Minor	Minor1		Major2	
Conflicting Flow All	366	-	0	0
Stage 1	0	-	-	-
Stage 2	366	-	-	-
Critical Hdwy	6.8	-	4.4	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-
Follow-up Hdwy	3.5	-	2.35	-
Pot Cap-1 Maneuver	612	0	-	-
Stage 1	-	0	-	-
Stage 2	678	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	612	-	-	-
Mov Cap-2 Maneuver	612	-	-	-
Stage 1	-	-	-	-
Stage 2	678	-	-	-

Approach	WB	SB
HCM Control Delay, s	11.3	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	612	-	-
HCM Lane V/C Ratio	0.066	-	-
HCM Control Delay (s)	11.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	18	0	0	650	14
Future Vol, veh/h	0	18	0	0	650	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	6	0	0	2	0
Mvmt Flow	0	21	0	0	765	16

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	391		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.02		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.36		-	-
Pot Cap-1 Maneuver	0	597		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	597		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	11.3	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	597	-	-
HCM Lane V/C Ratio	0.035	-	-
HCM Control Delay (s)	11.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	7	0	0	10	2	14	675	22	0	0	0
Future Vol, veh/h	4	7	0	0	10	2	14	675	22	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	0	0
Mvmt Flow	4	8	0	0	11	2	16	750	24	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	413	806	-	-	794	387	0	0	0
Stage 1	0	0	-	-	794	-	-	-	-
Stage 2	413	806	-	-	0	-	-	-	-
Critical Hdwy	7.5	6.5	-	-	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	-	-	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	528	318	0	0	323	617	-	-	-
Stage 1	-	-	0	0	403	-	-	-	-
Stage 2	592	398	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	512	318	-	-	323	617	-	-	-
Mov Cap-2 Maneuver	512	318	-	-	323	-	-	-	-
Stage 1	-	-	-	-	403	-	-	-	-
Stage 2	574	398	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	15.1	15.7	
HCM LOS	C	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	369	351
HCM Lane V/C Ratio	-	-	-	0.033	0.038
HCM Control Delay (s)	-	-	-	15.1	15.7
HCM Lane LOS	-	-	-	C	C
HCM 95th %tile Q(veh)	-	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	260	345	9	8	6
Future Vol, veh/h	14	260	345	9	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	7	1	2	0	0	17
Mvmt Flow	15	280	371	10	9	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	381	0	-	0	686	376
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	310	-
Critical Hdwy	4.17	-	-	-	6.4	6.37
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.453
Pot Cap-1 Maneuver	1151	-	-	-	416	638
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1151	-	-	-	410	638
Mov Cap-2 Maneuver	-	-	-	-	410	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	748	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1151	-	-	-	484
HCM Lane V/C Ratio	0.013	-	-	-	0.031
HCM Control Delay (s)	8.2	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	252	339	13	15	22
Future Vol, veh/h	30	252	339	13	15	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	1	3	0	0	5
Mvmt Flow	33	277	373	14	16	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	387	0	-	0	723	380
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	343	-
Critical Hdwy	4.17	-	-	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.345
Pot Cap-1 Maneuver	1145	-	-	-	396	660
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1145	-	-	-	383	660
Mov Cap-2 Maneuver	-	-	-	-	383	-
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	723	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1145	-	-	-	510
HCM Lane V/C Ratio	0.029	-	-	-	0.08
HCM Control Delay (s)	8.2	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	261	9	9	351	4	21
Future Vol, veh/h	261	9	9	351	4	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	0	0	3	0	0
Mvmt Flow	290	10	10	390	4	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	300	0	705	295
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	410	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1273	-	406	749
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1273	-	402	749
Mov Cap-2 Maneuver	-	-	-	-	402	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	667	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	658	-	-	1273	-
HCM Lane V/C Ratio	0.042	-	-	0.008	-
HCM Control Delay (s)	10.7	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	268	361	7	4	2
Future Vol, veh/h	4	268	361	7	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	5	308	415	8	5	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	423	0	-	0	737	419
Stage 1	-	-	-	-	419	-
Stage 2	-	-	-	-	318	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1147	-	-	-	389	638
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1147	-	-	-	387	638
Mov Cap-2 Maneuver	-	-	-	-	387	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1147	-	-	-	445
HCM Lane V/C Ratio	0.004	-	-	-	0.015
HCM Control Delay (s)	8.2	0	-	-	13.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	22	252	10	11	254	11	4	6	4	7	6	21
Future Vol, veh/h	22	252	10	11	254	11	4	6	4	7	6	21
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	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	25	290	11	13	292	13	5	7	5	8	7	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	301	0	0	686	677	296	677	676	299
Stage 1	-	-	-	-	-	-	346	346	-	325	325	-
Stage 2	-	-	-	-	-	-	340	331	-	352	351	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	1272	-	-	364	377	748	369	378	745
Stage 1	-	-	-	-	-	-	674	639	-	692	653	-
Stage 2	-	-	-	-	-	-	679	649	-	669	636	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1272	-	-	338	363	748	352	364	745
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	363	-	352	364	-
Stage 1	-	-	-	-	-	-	658	624	-	675	645	-
Stage 2	-	-	-	-	-	-	642	641	-	642	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	14	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	415	1267	-	-	1272	-	-	527
HCM Lane V/C Ratio	0.039	0.02	-	-	0.01	-	-	0.074
HCM Control Delay (s)	14	7.9	0	-	7.9	0	-	12.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	9	21	5	3	24
Future Vol, veh/h	4	9	21	5	3	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	11	26	6	4	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	32	0	-	0	50	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	21	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1593	-	-	-	964	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	961	1052
Mov Cap-2 Maneuver	-	-	-	-	961	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1593	-	-	-	1041
HCM Lane V/C Ratio	0.003	-	-	-	0.032
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	0	630	12
Future Vol, veh/h	0	7	0	0	630	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	0	0	663	13

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	338		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	6.9		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.3		-	-
Pot Cap-1 Maneuver	0	664		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	664		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	10.5	0
HCM LOS	B	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	664	-	-
HCM Lane V/C Ratio	0.011	-	-
HCM Control Delay (s)	10.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	264	5	12	351	3	9
Future Vol, veh/h	264	5	12	351	3	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	2	0	0
Mvmt Flow	278	5	13	369	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	283	0	676	281
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1291	-	422	763
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	685	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1291	-	417	763
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	676	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	632	-	-	1291	-
HCM Lane V/C Ratio	0.02	-	-	0.01	-
HCM Control Delay (s)	10.8	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	13	35	5	0	3
Future Vol, veh/h	2	13	35	5	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	14	37	5	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	42	0	-	0	58	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1580	-	-	-	954	1037
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1580	-	-	-	953	1037
Mov Cap-2 Maneuver	-	-	-	-	953	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1010	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1580	-	-	-	1037
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	0	5	24	7	0	5
Future Vol, veh/h	0	5	24	7	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5	25	7	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	32	0	-	0	34	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	5	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1593	-	-	-	984	1052
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1023	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	984	1052
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1023	-

Approach	NB	SB	SE
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1593	-	1052	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Control Delay (s)	0	-	8.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-