



AGENDA PACKET
VILLAGE OF LAKE ZURICH
Planning and Zoning Commission Meeting

June 21, 2023
07:00 pm

VILLAGE OF LAKE ZURICH

PLANNING AND ZONING COMMISSION MEETING

JUNE 21, 2023
07:00 PM
AGENDA

1. CALL TO ORDER AND ROLL CALL

Chairperson Orlando Stratman, Vice-Chair Antonio Castillo, Joe Giannini, Sean Glowacz, Jake Marx, Scott Morrison, Mike Muir and Ildiko Schultz.

2. CONSIDERATION OF MINUTES AND FINDINGS OF THE COMMISSION

Minutes of the Planning and Zoning Commission Meeting, on May 17, 2023

Attachment: [2A.pdf](#)

3. PUBLIC MEETING - No items received.

4. PUBLIC HEARING

(This agenda item includes proposals presented to the Planning & Zoning Commission requiring public testimony, discussion and recommendation to the Village Board for final action.)

A. 120 Telser Road -- Special Use Permit. (2023-12)

Application for a Special Use Permit and Final Plat of Subdivision to establish a self-storage facility with outdoor vehicle storage on the rear 2/3 portion of a vacant property located within the I Industrial District. The facility will be operated by "Extra Space Storage."

The Applicant has requested continuing the application to the July 19 meeting to be able to address certain comments related to stormwater management.

Applicant: James Lapetina of Design Build Storage Owner: Rose Road Enterprises, LLC

Attachment: [4A.pdf](#)

B. 442 S Rand Road -- Amendment to Planned Unit Development (PUD) (2023-11)

Application for an amendment to Planned Unit Development (PUD) Ordinance 2022-04-461 to construct a single tenant commercial building at the Subject Property to be operated as a Chipotle quick-service restaurant.

Applicant: Terraco, Inc.

Owners: SA 444 Rand LLC, SG 444 Rand LLC and DP 444 Rand LLC

Attachment: [4B.pdf](#)

C. 22843 North Lakewood Lane -- Annexation, Zoning and Plan Approval (2023-09)

Application for Annexation, Zoning and Plan Approval to redevelop the property commonly known as Midlothian Manor with a new two-story building containing 24 affordable rental apartments. The property will be zoned within the R-6 multiple-family residential district. Applicant: Housing Opportunity Development Corporation (HODC)

Owners: Lake County Housing Authority

Attachment: [4C.pdf](#)

5. OTHER BUSINESS

6. STAFF REPORTS

This is an opportunity for staff of the Community Development Department to report on matters of interest to the Planning & Zoning Commission

7. PUBLIC COMMENT

This is an opportunity for residents to comment briefly on matters included on the agenda and otherwise of interest to the PZC.

8. ADJOURNMENT

The Village of Lake Zurich is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations so that they can observe or participate in this meeting, or who have questions regarding the accessibility of the meeting or the Village's facilities, should contact the Village's ADA coordinator at (847) 438-5141 (TDB #438-2349) promptly to allow the Village to make reasonable accommodation.

Unapproved
VILLAGE OF LAKE ZURICH
PLANNING & ZONING COMMISSION MINUTES
May 17, 2023

Village Hall
70 E Main Street, Lake Zurich, IL 60047

The meeting was called to order by Chairman Castillo at 7:01 p.m. and immediately put into recess until 7:14 p.m. when Mayor Poynton arrived.

APPOINTMENTS: Mayor Poynton made a brief speech before swearing in the two new commissioners.

First, Commissioner Antonio Castillo was sworn into the Vice-Chairman role.

Second, Commissioner Jake Marx was sworn into a full voting PZC Commissioner.

Finally, Commissioner Scott Morrison was sworn into the role of first alternate of the PZC.

ROLL CALL: *Present* – Vice-Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz. Chairman Castillo noted a quorum was present. Commissioner Muir and Chairman Stratman were absent and excused.

Also present: Community Development Director Sarosh Saher, Planner Tim Verbeke and Management Services Director Michael Duebner.

CONSIDERATION OF MINUTES AND FINDINGS OF THE COMMISSION

Approval of the April 19, 2023 Meeting Minutes of the Planning & Zoning Commission:

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini to approve the April 19, 2023 minutes of the Planning and Zoning Commission with no changes.

Upon roll call:

AYES: 4 Chairman Castillo, Commissioners Marx, Morrison, and Schultz

OBSTAIN: 2 Giannini, and Glowacz

NAYS: 0

MOTION CARRIED

PUBLIC HEARING:

MOTION was made by Commissioner Schultz, seconded by Commissioner Glowacz to open the following public hearings at 7:27 p.m. for Application PZC 2023-08 for the property 154 Oak Street – Planned Unit Development and Final Plat of Subdivision, and PZC 2023-10 for the property 833 Foxmoor Lane – Variation for a fence in the corner side yard.

Upon roll call vote:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

Planning & Zoning Commission Meeting Minutes, May 17, 2023

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Those wishing to speak were sworn in by Chairman Castillo.

The following applications were considered:

A. 154 Oak Street – Planned Unit Development and Final Plat of Subdivision (2023-08):

This Public Hearing is to consider an Application for a Planned Unit Development (PUD), and Final Plat approval to subdivide the existing lot into two buildable lots at 154 Oak Street.

Applicant & Owner: Mr. Patryk Wielgo of SV Estates, LLC

This item was presented by Mr. Patryk Wielgo representing SV Estates. He gave a brief description on the project, assisted by Director Saher. These two lots, when combined make a larger lot – allowing for Mr. Wielgo to split the lot into two and still meet a majority of the neighborhood standards. The commissioners had questions regarding lot size, what will happen if modifications are needed in the future, what concessions are being offered and do any neighboring properties have objections. All the questions were answered to the satisfaction of the commission.

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini to close the public hearing.

Upon roll call:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini, to receive into the public record the staff review of compliance of this Application with the zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight's Public Hearing; and make these standards and testimony a part of the official record for the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-08 – an Application for a Planned Unit Development and Final Plat of Subdivision in the Single Family Residential District.”

Upon roll call:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

B. 833 Foxmoor Lane – Variation for a Fence in the Corner Side Yard (2023-10):

This Public Hearing is to consider an application for a variation to allow for the construction of a five-foot (5') high fence within the required corner yard setback at 833 Foxmoor Lane.

Applicant and Owner: Mr. Jay and Ms. Divya Gandhi

The item was presented by Mr. Jay Gandhi, who is the property owner. He described the scope of the project and the potential location of the 5-foot fence. The commissioners had questions regarding matching neighboring fence lines and the style of the fence. All the commissioners expressed their approval of the fence design.

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini to close the public hearing.

Planning & Zoning Commission Meeting Minutes, May 17, 2023

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Upon roll call:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini, to receive into the public record the staff review of compliance of this Application with the zoning standards as presented by staff; and to receive the testimony presented by the Applicants, by members of the public, by the PZC Members, and by Village Staff at tonight's Public Hearing; and make these standards and testimony a part of the official record for the Application and Findings of the PZC; and to recommend that the Village Board approve Application PZC 2023-10 – an Application for a Variation to allow for the construction of a five-foot (5') high fence within the required corner yard setback.”

Upon roll call:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

OTHER BUSINESS – None.

STAFF REPORT:

Staff indicated there will be 3 items on the next PZC meeting agenda.

Director Saher also informed the PZC that there will be a short introductory Comprehensive Plan discussion at a future PZC meeting by staff and the selected consultant.

PUBLIC COMMENT:

No additional public comment was provided.

ADJOURNMENT:

MOTION was made by Commissioner Schultz, seconded by Commissioner Giannini to conclude the meeting.

Upon roll call:

AYES: 6 Chairman Castillo, Commissioners Giannini, Glowacz, Marx, Morrison, and Schultz.

NAYS: 0

MOTION CARRIED

The meeting was adjourned at 8:13 p.m.

Submitted by: Tim Verbeke, Planner

Approved by:



At the Heart of Community

COMMUNITY DEVELOPMENT DEPARTMENT

505 Telser Road
Lake Zurich, Illinois 60047

(847) 540-1696
Fax (847) 726-2182
LakeZurich.org

PZC Hearing Date: June 21, 2023
PZC 2023-12

Item 4.A

STAFF REPORT

To: Chairperson Stratman and Members of the Planning & Zoning Commission

From: Sarosh Saher, Community Development Director

CC: Mary Meyer, Building Services Supervisor
Tim Verbeke, Planner

Re: PZC 2023-12 – 120 Telser Road – “Extra Space” Self Storage
Special Use Permit and Plat of Subdivision
Request to Continue Hearing to July 19, 2023

SUBJECT

Mr. James Lapetina, representing Design Build Storage, and Mr. Jeff Budgell of Architect’s Studio, the architect for the project (jointly referred to as the “Applicant”) with the consent of the property owner Rose Road Enterprises LLC (the “Owner”), request a Special Use Permit and Final Plat of Subdivision to establish a self-storage facility with outdoor vehicle storage on the rear 2/3 portion of a vacant property located within the I Industrial District. The facility will be operated by “Extra Space Storage.”

BACKGROUND

The Application for the Special Use Permit for a self-storage facility with outdoor vehicle storage was submitted for consideration by the PZC on June 21, 2023. During that process the Village’s Development Review Team (DRT) conducted its review of the submittal.

However, upon completion of review by the Village Engineer, it was brought to the attention of staff that there are stormwater management and wetland considerations that may have a significant impact on the layout and design of the proposed storage area as it relates to the zoning consideration by be conducted by the PZC. Upon being made aware of these, and following discussion with the Applicant, it was determined that there may be benefit to hold off on the zoning consideration of the project to give the Applicant time to address the engineering concerns.

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The Applicant additionally indicated that it would also provide time to look into obtaining potential TIF assistance that could cover some of the costs needed to address the engineering and infrastructure issues on the property

The Applicant has therefore requested that the hearing be continued to the July 19, 2023 meeting of the PZC to allow for additional time to address these issues.

REQUESTED ACTION

Staff recommends that the public hearing be continued to the July 19, 2023 meeting of the PZC to provide the Applicant time to complete their preparation of necessary exhibits.



At the Heart of Community

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APPLICATION PZC 2023-11
PZC Meeting Date: June 21, 2023

AGENDA ITEM 4.B

STAFF REPORT

To: Chairperson Stratman and Members of the Planning & Zoning Commission
From: Sarosh Saher, Community Development Director
CC: Tim Verbeke, Planner
Mary Meyer, Building Services Supervisor
Date: June 21, 2023
Re: PZC 2023-11 442 South Rand Road – Development of Outlot
Chipotle Mexican Grill Restaurant with Drive-through Pickup Window

SUBJECT

Mr. Joseph Goodman, (the “Applicant”), representing the owners and developers of the property, Terraco Inc, is proposing the development of the vacant outlot at 442 South Rand Road, also referred to as Lot 1 of Route 12 and Main Resubdivision, and legally described in Exhibit A attached hereto (the “Subject Property”).

GENERAL INFORMATION

Requested Action: PUD Amendment to PUD Ordinance 2022-04-461
Current Zoning: B-3 Regional Shopping Business District
Current Use: Parking for the adjacent 3-story Commercial Building, former Bank Drive-through Facility Parking Lot
Proposed Use: Fast-Causal/Quick Service Restaurant with Drive-through pick-up lane to be operated by Chipotle Mexican Grill (“Chipotle”)
Property Location: 442 South Rand Road
Applicant: Mr. Joseph Goodman of Terraco Inc
Owner: SA 44 Rand LLC, SG 444 Rand LLC and DP 444 Rand LLC
Staff Coordinator: Tim Verbeke, Planner

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

LIST OF EXHIBITS

- A. Legal Description
- B. Public Meeting Sign
- C. Site Photos
- D. Aerial Map
- E. Zoning Map
- F. Parcel Map
- G. Development Application and Attachments
- H. Development Review Comments

BACKGROUND

Mr. Goodman, (the “Applicant”), is proposing a development that will consist of a new 2,370 square-foot freestanding building to house a quick service restaurant with pick up lane and patio. The quick service restaurant will be operated by Chipotle Mexican Grill.

The property is located at the southeast corner of Rand Road (IL Route 12) and IL Route 22, and legally described in Exhibit A attached hereto (the “Subject Property”). The Applicant filed an application with the Village of Lake Zurich received on May 10, 2023, (the “Application”) seeking:

- Planned Unit Development (PUD) Amendment for the construction of a Quick Service Restaurant with a Pick-up Lane and Outdoor Patio at Lot 1 of Route 12 and Main Resubdivision.
- Special Use Permits for Outdoor Seating and Drive-Through Pick-up window at the property

In order to accommodate the proposed restaurant, the following modifications to the code are being requested through an amendment to the existing PUD:

- Approval of Outdoor seating accessory to permitted eating places
- Approval of a drive-through, pick up lane, along with a reduction in the vehicular stacking requirement by 2 vehicles.
- Maintenance of the setback along Illinois Route 22 at 29 feet as approved by the previous PUD.
- Reduction in the total sitewide parking space requirement by 23 spaces.
- Reduction in the required landscape requirement for each lot line as approved by the previous PUD.

The property comprises of an irregularly shaped parcel with a total land area of 1 acre. It is currently improved with a parking lot. It has approximately 271 feet of frontage along IL Rt 22 and approximately 284 feet of frontage along Rand Road, making it highly visible to passing vehicular traffic. The outlot was previously part of a larger property containing a three-story office building that housed Chase Bank and other offices. In April 2022, approval was granted to the previous owners to subdivide this property thereby creating the outlot. Reasons cited for the subdivision were to accommodate the sale of the existing office building site and to create a separate outlot with the potential to be developed in the future.

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The proposed development will consist of a new 2,370 square-foot freestanding building to accommodate a quick service restaurant with a drive-through/pick up lane and outdoor seating patio. The building will include finishes in brick and EIFS in keeping with the Chipotle brand.

The purpose of the pick-up window is to accommodate mobile ordering and provide an additional option for their online customers and delivery agents to pick up food. Chipotle maintains that over 50% of sales are online orders. The pick-up lane will not contain an ordering menu board that require drive-through speaker boxes or other signage components, as all the ordering will be done in advance and the drive-through will be strictly used for pickup.

The property has vehicular access from both Rand Road (Route 12) & Illinois Route 22. The existing access points to the property are proposed to be maintained in their current configuration thereby removing the need for access permits from IDOT. A utility construction permit will still need to be granted from IDOT to work within their right-of-way.

The intensity of this proposed use presents multiple challenges for this already constrained site. The parcel of land was originally designed and planned as a parking lot to support a low intensity office building. However, the previous owners consistently indicated that the parking lot was under-utilized and therefore sought to create an outlot to increase its use to a higher and better use. Staff has therefore advised the Developer that the access points, circulation patterns, landscape buffers, and neighboring parking areas must be enhanced to support a quick service restaurant.

Pursuant to public notice published on June 3, 2023, in the Daily Herald, a Public Meeting has been scheduled with the Lake Zurich Planning & Zoning Commission for June 21, 2023, to consider the Application. On May 25, 2023, the Village posted a public meeting sign on the Subject Property (Exhibit B).

Staff offers the following additional information:

- A. Courtesy Review.** The Applicant, represented by Mr. Joseph Goodman first presented this concept to the Village Board at a Courtesy Review on May 15, 2023. The proposal included a 2,300 square foot building on the newly created outlot at 442 Rand Road. The video stream of the meeting can be viewed at the following link:
<https://play.champds.com/lakezurichil/event/87/s/2533>
- B. Zoning History.** The property is zoned within the B-3 Regional Shopping Business District. It was developed under the requirements of a Planned Unit Development (PUD) in 1980 and 1981 under Ordinances No. 1002-80 and No. 1048-81, and further amended in 1984 through Ordinance No. 84-05-117.

The PUD provided for the development of the property consisting of 4 lots – Lots 1 and 2 at 444 S Rand Road, Lot 3 at 561 W Rt 22 and Lot 4 at 466 S Rand Road. The PUD provided entitlements for setbacks, parking, landscaped areas and building location, design and operation among others. Such development was contemplated to be able to maximize the use and operation of the property.

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- C. Surrounding Land Use and Zoning.** The Subject property is surrounded on three sides by properties zoned within the B-3 Regional Shopping Business district. These properties are improved with large lot commercial shopping centers supporting retail, office and service uses. The property to the north across Rt 22 is zoned within the B-1 Local and Community Business District and was the earliest of Lake Zurich's commercial development to be established along the Rand Road corridor and outside of the downtown Main Street area. The lots here are smaller in land area and improved with commercial establishments, many of them locally owned.
- D. Trend of Development.** The property is located at the intersection of the community's two major arterial corridors – Rand Road and IL Rt 22. The commercial land uses within these corridors have been serving the Lake Zurich and surrounding area since the 1980s.
- E. Zoning District.** The B-3 Regional Shopping District is intended to provide locations for major retail centers. The regulations are designed to encourage a broad range of attractive retail and compatible service uses in those centers.

GENERAL FINDINGS

The Application requires approval through a Planned Unit Development (PUD), which is classified as a Special Use Permit. As such the Application is reviewed against the standards for Special Use Permits and PUDs.

Staff of the Community Development Department's development review team has evaluated the development against the various standards and provisions of the Lake Zurich Municipal Code and offers findings on specific sections of the Code.

Standards for Special Use Permits

- A. General Standards. No special use permit shall be recommended or granted pursuant to this Chapter unless the applicant shall establish that:

1. Code and Plan Purposes. The proposed use and development will be in harmony with the general and specific purposes for which this Code was enacted and for which the regulations of the district in question were established and with the general purpose and intent of the official Comprehensive Plan.

Staff Response: Standard met. The development will continue to remain in conformance with the purpose and intent of the B-3 Regional Shopping District and the land use designation of the adopted Comprehensive Plan.

2. No Undue Adverse Impact. The proposed use and development will not have a substantial or undue adverse effect upon adjacent property, the character of the area, or the public health, safety, and general welfare.

Staff Response: Standard met. A suggestion of improving the building materials was proposed by the Village Board at the May 15th Courtesy Review

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from what was presented at that meeting. In response the company has proposed elevations that are designed with a face brick veneer in a darker grey, a stucco band in light grey and cementitious fiber cement paneling in a brown color to highlight the portion of the elevation above the entrances and to provide a base for the signage.

The exterior of the proposed development will be similar in material to the Panera Bread development at 430 South Rand Rd which includes a similar combination of brick and Stucco.

The building will complete the development of all 4 corners of the intersection which have been turned over within the past 7-10 years.

3. No Interference with Surrounding Development. The proposed use and development will be constructed, arranged, and operated so as not to dominate the immediate vicinity or to interfere with the use and development of neighboring property in accordance with the applicable district regulations.

Staff Response: Standard somewhat met. The proposed restaurant will be located at the heavily traveled IL Route 22 and US. Route 12 intersection. This corridor is developed with a number of commercial uses along its frontage and the proposed building is consistent with the surrounding development. The proposed dining facility will be constructed within the existing parking field leading to a reduction in the total available sitewide parking spaces by 19.

The Applicant has also indicated that there is additional room in the area of the former Chase Bank's drive-through area that could potentially be converted to additional parking should the need arise.

4. Adequate Public Facilities. The proposed use and development will be served adequately by essential public facilities and services such as streets, public utilities, drainage structures, police and fire protection, refuse disposal, parks, libraries, and schools, or the applicant will provide adequately for such services.

Staff Response: Standard met. the property is currently served with public utilities. As part of the new development, additional utilities will be brought to the site, including connections made in the IDOT right-of-way.

5. No Traffic Congestion. The proposed use and development will not cause undue traffic congestion nor draw significant amounts of traffic through the surrounding streets.

Staff Response: Standard partially met. At the May 15, 2023 Courtesy Review, the Village Board recommended that the Applicant conduct a traffic study. The Engineering and Zoning Department have also required a traffic study to

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evaluate the potential impacts on the adjacent highways the neighboring developments.

The developer has provided an operations study of how their restaurants with a pick-up lane “Chipotlane” works.

According to the developer “Our current site has access directly from Rand Road, which has several major shopping centers along both sides, which was strategically designed to carry higher traffic volumes. Rand Road also provides three through lanes in each direction.

We see Chipotle as a “supportive use” to the community, as customers are already on the road coming to this area for other things, such as Costco, Home Depot, and Target – all of which are much larger draws than Chipotle – so Chipotle will not increase the traffic flow. This site was picked by Chipotle to help support the community of Lake Zurich, so our customers would not have to travel far. Chipotle has looked at their internal database and assessed the customer frequencies for all nearby Chipotles (listed below), and those customer numbers have already been accounted for in the proposal of this site.

Nearby Chipotle restaurants this proposed location are:

- 3.7 mi (6min) 20505 Rand Rd, Suite 400, Kildeer IL – NO Chipotlane
- 6.0 mi (11min) 781 E. Dundee Rd. Palatine, IL 60074 – YES Chipotlane
- 10.6 mi (19min) 5006 NW Hwy St A., Crystal Lake, IL 60014 – NO Chipotlane”

6. No Destruction of Significant Features. The proposed use and development will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance.

Staff Response: Standard Met. The reconfiguration of the property will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance other than what was previously impacted by the prior development.

7. Compliance with Standards. The proposed use and development complies with all additional standards imposed on it by the particular provision of this Code authorizing such use.

Staff Response: Standard met. The proposed development will comply with all other additional standards imposed through the building codes for retail buildings.

8. Positive Effect. The proposed special use creating a positive effect for the zoning district, its purpose, and adjacent properties shall be placed before the benefits of the petitioner.

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Staff Response: Standard met. One of the purposes of the B-3 district is to “provide a location for major retail centers.” The proposed restaurant will create a positive effect for the Village and the neighboring shopping development.

- B. Special Standards for Specified Special Uses. When the district regulations authorizing any special use in a particular district impose special standards to be met by such use in such district, a permit for such use in such district shall not be recommended or granted unless the applicant shall establish compliance with such special standards.

Staff Response: Standard met. There are no uses proposed that warrant special standards for their establishment. Staff will ensure that compliance is established before any additional permit are issued.

- C. Considerations. In determining whether the applicant's evidence establishes that the foregoing standards have been met, the Plan Commission and the Board of Trustees shall consider:

1. Benefit. Whether and to what extent the proposed use and development at the particular location requested is necessary or desirable to provide a service or a facility that is in the interest of the public convenience or that will contribute to the general welfare of the neighborhood or community.

Staff Response: Standard met. The proposed restaurants location along the heavily trafficked intersection of Route 12 and Route 22 provides an appropriate location for such an establishment.

2. Alternative Locations. Whether the purposes of the zoning code can be met by the location of the proposed use and development in some other area or zoning district that may be more appropriate than the proposed site.

Staff Response: Standard met. While there are are many other locations that are equally appropriate for the location of a quick service restaurant that would not require modifications to the zoning and land development code, the proposal at this time maximizes the use of this site, and is attractive to the developer from the standpoint of visibility of a highly traveled intersection of two regional arterial roadways that are designed to carry a high volume of vehicular traffic.

3. Mitigation of Adverse Impacts. Whether all steps possible have been taken to minimize any substantial or undue adverse effects of the proposed use and development on the immediate vicinity through building design, site design, landscaping, and screening.

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Staff Response: Standard somewhat met. The Applicant is requesting modifications to the zoning and land development code through the PUD amendment to be able to construct the restaurant at this location.

9-22-5: STANDARDS FOR PLANNED UNIT DEVELOPMENTS (PUDs).

Planned unit developments are included in the zoning code as a distinct category of special use. As such, they are authorized for the same general purposes as all other special uses and in recognition of the fact that traditional bulk, space, and yard regulations that may be useful in protecting the character of substantially developed and stable areas may impose rigidities on the development or redevelopment of parcels or areas that lend themselves to an individual, planned approach.

- A. Special Use Permit Standards: No special use permit for a planned unit development shall be recommended or granted pursuant to this chapter unless the applicant shall establish that the proposed development will meet each of the standards made applicable to special use permits pursuant to chapter 19 of this title.

Staff Response: Standard met. Please refer to the “Standards for Special Use Permits” contained within this report.

- B. Additional Standards for All Planned Unit Developments: No special use permit for a planned unit development shall be recommended or granted unless the applicant shall establish that the proposed development will meet each of the following additional standards:

1. Unified Ownership Required: The entire property proposed for planned unit development treatment shall be in single ownership or under such unified control as to ensure that the entire property will be developed as a unified whole. All owners of the property shall be included as joint applicants on all applications and all approvals shall bind all owners. The violation of any owner as to any tract shall be deemed a violation as to all owners and all tracts.

Staff Response: Standard met. The entirety of the PUD Amendment is under common ownership of SA 44 Rand LLC, SG 444 Rand LLC and DP 444 Rand LLC.

2. Minimum Area: The applicant shall have the burden of establishing that the subject property is of sufficient size and shape to be planned and developed as a unified whole capable of meeting the objectives for which planned unit developments may be established pursuant to this section.

Staff Response: Standard somewhat met. The property is of a sufficient size to accommodate the proposed restaurant, but unable to accommodate the required parking lot and landscaping. The approximately 1-acre corner of land is proposed to accommodate a quick service restaurant building, its associated drive-through and parking lot.

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However, the outlot was setup with a cross access and cross-parking agreement which allows for vehicles that are unable to be accommodated on the Subject Property to be parking on the adjacent office or strip center properties. The configuration of the development is intended to use the existing on-site circulation to move traffic through the development.

3. Covenants and Restrictions to Be Enforceable by Village: All covenants, deed restrictions, easements, and similar restrictions to be recorded in connection with the planned unit development shall provide that they may not be modified, removed, or released without the express consent of the board of trustees and that they may be enforced by the village as well as by future landowners within the proposed development.

Staff Response: Standard met. The Village will ensure that all easements are properly recorded, abided by the owners and enforced by the Village.

4. Public Open Space and Contributions: Whenever the official comprehensive plan, zoning map, or official map indicates that development of a planned unit development will create a need for land for public purposes of the village within the proposed planned unit development, the board of trustees may require that such area be designated and to the extent such need is specifically and uniquely attributable to the proposed development, dedicated to the village for such use. In addition, the board of trustees may require evidence that all requirements of village ordinances pertaining to the dedication of land or the contribution of cash in connection with subdivisions or developments of land have been met as respects the proposed planned unit development.

Staff Response: Not Applicable. The nature and scope of the development – does not create a need for land for public purposes of the village within the proposed planned unit development. The purpose and intent of such contributions are provided primarily for larger residential developments consisting of multiple properties with common areas to provide for or compensate for public amenities for the benefit of new residents that will move into the community to occupy such developments.

The village has therefore determined that the development is not required to provide any public open space or compensate for such at this time.

5. Common Open Space:
- a. Amount, Location, And Use: The failure of a planned unit development to provide common open space shall be considered to be an indication that it has not satisfied the objectives for which such developments may be approved pursuant to this zoning code. When common open space is provided in a planned unit development, the amount and location of such open space shall be consistent with its intended function as set forth in the application and planned unit development plans. No such open space shall be used for the construction of any structure or improvement except such

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structures and improvements as may be approved in the final plan as appropriate to the intended leisure and recreational uses for which such open space is intended.

- b. **Preservation**: Adequate safeguards, including recorded covenants or dedication of development rights, shall be provided to prevent the subsequent use of common open space for any use, structure, improvement, or development other than that shown on the approved final plan. The restrictions must be permanent and not for a given period of years and must run with the land. Such covenants and dedications may provide that they may be released, but only with the express written consent of the board of trustees.
- c. **Ownership And Maintenance**: The final plan shall include such provisions for the ownership and maintenance of such open space and improvements as are reasonably necessary to ensure their continuity, care, conservation, maintenance, and operation in accordance with predetermined standards and to ensure that remedial measures will be available to the village if such open space or improvements are permitted to deteriorate or are not maintained in a condition consistent with the best interests of the planned unit development or the village.
- d. **Property Owners' Association**: When the requirements of subsection B5c of this section are to be satisfied by the ownership or maintenance of such open space or improvements by a property owners' association, such association shall meet each of the following standards:
 - i. The bylaws and rules of the association and all declarations, covenants, and restrictions to be recorded must be approved as part of the final plan prior to becoming effective. Each such document shall provide that it shall not be amended in any manner that would result in it being in violation of the requirements of this subsection B5d(1); and
 - ii. The association must be established and all covenants and restrictions must be recorded prior to the sale of any property within the area of the planned unit development designated to have the exclusive use of the proposed open space or improvements; and
 - iii. The association must be responsible for casualty and liability insurance, taxes, and the maintenance of the open space and improvements to be deeded to it; and
 - iv. Membership in the association must be mandatory for each property owner and any successive owner having a right to the use or enjoyment of such open space or improvements; and
 - v. Every property owner having a right to the use or enjoyment of such open space or improvements must pay its pro rata share of the cost of the association by means of an assessment to be levied by the

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

association that meets the requirements for becoming a lien on the property in accordance with state statutes; and

- vi. The association must have the right to adjust the assessment to meet changed needs. The membership vote required to authorize such adjustment shall not be fixed at more than two-thirds (2/3) of the members voting on the issue; and
- vii. The village must be given the right to enforce the covenants; and
- viii. The village must be given the right, after ten (10) days' written notice to the association, to perform any maintenance or repair work that the association has neglected to perform, to assess the membership for such work and to have a lien against the property of any member failing to pay such assessment. For this purpose alone, the village shall have all the rights and powers of the association and its governing body under the agreements and declarations creating the association.

Staff Response: Not Applicable. Based on the nature and scope of the development, and size of the subject property, the village has determined that the development is not required to provide any public open space or compensate for such at this time.

- 6. Landscaping and Perimeter Treatment: Any area of a planned unit development not used for structures or circulation elements shall be landscaped or otherwise improved. The perimeter of the planned unit development shall be treated so as to ensure compatibility with surrounding uses by means such as provision of compatible uses and structures, setbacks, screening, or natural or manmade buffers.

Staff Response: Standard partially met. While all portions of the development are proposed to be either improved with paved areas or landscaped, the landscape requirement is unable to be met.

The property was originally developed under the requirements of a PUD which provided for reduced landscaped areas on the property. The development has therefore proposed maximizing landscaping along the Route 22 lot line to the extent that the minimum landscaped areas approved by the previous PUD and the existing overhead and underground utilities allow. Along the Route 12 lot line, the development proposes a reduction of 2.5 plant units to the extent that the minimum landscaped areas approved by the previous PUD will allow.

While the existing landscape material currently only contains trees and ground cover in the form of lawn area, the developer is additionally proposing the use of a combination of both evergreen and deciduous trees and shrubs and ornamental grasses.

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7. Private Streets: Private streets are prohibited unless expressly approved by the board of trustees. If so approved, they shall meet all construction standards applicable to public streets. No such streets shall be approved except upon the condition that they shall be owned and maintained by a property owners' association meeting the requirements set forth in subsection B5d of this section.

Staff Response: Not Applicable. The development is being proposed on a single site and therefore no private streets are proposed.

8. Sidewalks: A sidewalk meeting the standards of the Lake Zurich subdivision ordinance shall be provided along at least one side of every street in or abutting a planned unit development; provided, however, that such sidewalk may be constructed in a street right of way or as a specific element of the design of the planned unit development.

Staff Response: Standard somewhat met. A sidewalk exists within the development along the northerly boundary (Route 22) of the Subject Property. There is no sidewalk along the Route 12 frontage of the property. This trend along the east side of Rand Road continues south until its intersection Ela Road.

Staff is requiring the developer to install a sidewalk along Route 12 in the event future consideration of sidewalks along Rand Road is contemplated by the Village.

9. Utilities: All utility lines shall be installed underground.

Staff Response: Standard met. All new utilities including water and sanitary mains, electric, gas and communications (cable) attributable to the development are proposed to be underground, with the exception of the regional communication and electric cables that run overhead along Route 22.

- C. Additional Standards for Specific Planned Unit Developments: When the district regulations authorizing any planned unit development use in a particular district impose standards to be met by such planned unit development in such district, a special use permit for such development shall not be recommended or granted unless the applicant shall establish compliance with such standards. (Ord., 10-2004)

Staff Response: Standard Met. There are no additional standards imposed through the establishment of the retail banking building that is proposed within such district other than what are currently being requested for approval.

Staff Report
APPLICATION PZC 2023-11

Community Development Department
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IDENTIFICATION AND ANALYSIS OF ZONING RELIEF FOR THE PLANNED UNIT DEVELOPMENT (PUD)

On analysis of the proposed development against the various standards contained within the municipal code, staff has identified the following modifications to the zoning code.

1. **Drive-In Facilities.** Section 9-10-1-F.b.(5) requires 8 stacking spaces leading to each drive-in window. The development proposes 6 vehicular stacking spaces leading to the drive-through/pick-up window along the north side of the building. However, this is proposed as a pick-up window only for online orders and delivery agents, not as a standard drive-through requiring an ordering menu-board, speakers, etc, thereby using less stacking space in the pick-up lane.
2. **Route 22 Setback.** Section 9-4-10-F.8 requires that Special Yards Abutting Route 12 And Route 22: Notwithstanding any other provision of this section, all yards along every lot line abutting Route 12 or abutting Route 22 between Ela Road and the westernmost village limits shall be not less than 50 feet. The Applicant is requesting a building setback of 29 feet off of Illinois Route 22 that will continue to maintain the setback approved as part of the original PUD.

It should be noted that there are multiple buildings along the Route 22 corridor, including the property directly to the east (561 W Rt 22), and several properties to the north (564 W Rt 22, 554 W Rt 22, 560 W Rt 22) that encroach into the 50-foot Route 22 special yard setback.

3. **Required Parking Spaces.** Section 9-10-1-F. The Subject Property (outlot) currently provides 90 parking spaces for the use of the multi-story office building. These properties are also shared with the strip center to the east. The proposed Chipotle will result in the loss of 46 parking spaces resulting in a projected parking inventory of 44 spaces. The developer believes that these spaces should be adequate for walk-in customers as a portion of the clientele will also use the pick-up window.

Currently all uses occupying the property require 207 parking spaces. This is based on a retail building area of 11,944 feet, (1 space for 200 square feet) resulting in 60 parking spaces; plus, an office building area of 40,244 feet, (1 space for 275 square feet) resulting in 147 parking spaces.

With the addition of the proposed restaurant, the property would require 229 parking spaces, and only 210 spaces are provided for. The parking breakdown is: 195 general spaces, 11 ADA parking spaces, and 4 Pick-Up only spaces.

4. **Landscaping.** Section 9-8A-3 states that landscaping shall be required along every lot line and along the perimeter of parking lots, residential recreational facilities, and antennas and antenna support structures. The landscaping shall extend along the entire length of the lot line, right of way line, or structure in question. The development has proposed landscaping along the Route 22 lot line to the extent that the minimum landscaped areas approved by

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

the previous PUD and the existing overhead and underground utilities allow. Along the Route 12 lot line, the development proposes a reduction of 2.5 plant units to the extent that the minimum landscaped areas approved by the previous PUD will allow.

While the existing landscape material currently only contains trees and ground cover in the form of lawn area, the developer is additionally proposing the use of a combination of both evergreen and deciduous trees and shrubs and ornamental grasses.

The following are identified preexisting lawful non-conformities on the site that will continue to remain in place:

- The existing parking lot does not conform to required setbacks from Rand Road or Route 22. However, this condition preceded this development and is identified as a lawful non-conforming site design feature subject to the provisions of Chapter 11 (Section 9-11-5) of the Zoning Code entitled “Nonconformities.”
 Section 9-4-10.F.8 code requires that all yards along every lot line abutting Route 12 or abutting Route 22 between Ela Road and the westernmost village limits shall be not less than 50 feet.
- The proposed landscaped surface area (greenspace) does not conform to minimum requirements. This is similarly subject to the provisions of Chapter 11 (Section 9-11-5) of the Zoning Code. However, due to the upgrades proposed to the site landscape plantings and the fact that the existing site nonconformities did not create major concerns, staff believes that relief from this requirement is acceptable.
 Section 9-4-10.E3. of the code requires the minimum landscaped surface area for office uses be no less than 45% of the total land area of the lot.
- The site plan does not include the extension of the existing sidewalk along Route 22 in a direction southeast along Route 12.
 Staff is requiring the developer to install a sidewalk along Rt 12 in the event future consideration of sidewalks along Rand Road is contemplated by the Village.

RECOMMENDATION

The recommendation of the Planning and Zoning Commission should be based on the standards included in the following Sections of the Lake Zurich Municipal Code:

- Section 9-19-3: Standards for Special Use Permits
- Section 9-22-8: Standards for Planned Unit Developments (PUD)

Staff has determined that all standards for approval have been met or will be met through approval of the identified modifications to the code, and recommends that the Planning and Zoning Commission make these standards a part of the official record of the Application.

Staff of the Community Development Department therefore recommends the approval of Application PZC 2023-11, subject to the following conditions:

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application and Cover Letter dated May 10, 2023 prepared by Mr. Joseph Goodman of Terraco Inc on behalf of the Applicants, Chipotle.
 - b. Overall Site Plan prepared by Terraco Inc comprising of the following:
 - c. Engineering Improvement Plans prepared by RTM Engineering Consultants dated May 10, 2023.
 - d. Landscape Plans prepared by RTM Engineering Consultants dated May 10, 2023.
 - e. Photometric Calculations plan prepared by RTM Engineering Consultants dated May 10, 2023.
 - f. ALTA/NSPS Land Title and Topographic Survey Sheets 1-4, prepared by Schoenberg Fikel Newman & Rosenberg, dated May 10, 2023.
 - g. Parking Study KLOA dated May 10, 2023
 - h. Geometrics/Architectural Plans prepared by Wilkus Architects dated May 10, 2023
2. If the existing sidewalk on Rt 22 is to remain, it appears to have non-compliant cross slopes and curb ramp. The Developer shall be responsible to upgrade the non-compliant sidewalk and construct new sidewalk along the frontage of South Rand Road. The new sidewalk shall be installed along the westerly frontage of the property with Rand Road. The sidewalk shall be constructed to village specifications for width and location.
3. If it is determined that the proposed development results in a shortage of parking that creates a negative impact on itself, adjacent commercial property or the adjoining arterial roadways, the Applicant shall use the additional room in the area of the former Chase Bank's drive-through area to be converted to additional parking.
4. All parking of vehicles and vehicle stacking in the pick-up lane shall be accommodated on the Subject Property, or adjacent property with which the Subject Property enjoys a shared access and parking agreement. No vehicles shall be allowed to stack within the public right-of-way.
5. All construction staging must occur on the subject property premises, unless written permission is provided by the adjacent property owners.
6. All signage (wall mounted and ground mounted) shall meet the requirements of Title 12 – Signs. Separate application shall be submitted for the review and approval by Village staff. All obsolete signage related to uses no longer occupying the Subject Property or adjacent property shall be removed prior to construction. New signage shall be placed in a manner so as not to block any line of sight of vehicles entering and leaving the Subject Property.
7. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich.

Respectfully Submitted,
 Tim Verbeke, Planner

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

LAKE ZURICH PLANNING & ZONING COMMISSION
FINAL FINDINGS & RECOMMENDATIONS

442 South Rand Road
June 21, 2023

The Planning & Zoning Commission recommends approval of Application PZC 2023-11, and the Planning & Zoning Commission adopts the findings as contained within the Staff Report dated **June 21, 2023** for this Application and subject to any changes or approval conditions as listed below:

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application and Cover Letter dated May 10, 2023 prepared by Mr. Joseph Goodman of Terraco Inc on behalf of the Applicants, Chipotle.
 - b. Overall Site Plan prepared by Terraco Inc comprising of the following:
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2. If the existing sidewalk on Rt 22 is to remain, it appears to have non-compliant cross slopes and curb ramp. The Developer shall be responsible to upgrade the non-compliant sidewalk and construct new sidewalk along the frontage of South Rand Road. The new sidewalk shall be installed along the westerly frontage of the property with Rand Road. The sidewalk shall be constructed to village specifications for width and location.
3. If it is determined that the proposed development results in a shortage of parking that creates a negative impact on itself, adjacent commercial property or the adjoining arterial roadways, the Applicant shall use the additional room in the area of the former Chase Bank's drive-through area to be converted to additional parking.
4. All parking of vehicles and vehicle stacking in the pick-up lane shall be accommodated on the Subject Property, or adjacent property with which the Subject Property enjoys a shared access and parking agreement. No vehicles shall be allowed to stack within the public right-of-way.
5. All construction staging must occur on the subject property premises, unless written permission is provided by the adjacent property owners.

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

6. All signage (wall mounted and ground mounted) shall meet the requirements of Title 12 – Signs. Separate application shall be submitted for the review and approval by Village staff. All obsolete signage related to uses no longer occupying the Subject Property or adjacent property shall be removed prior to construction. New signage shall be placed in a manner so as not to block any line of sight of vehicles entering and leaving the Subject Property.
 7. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich.
- Without any further additions, changes, modifications and/or approval conditions.
 - With the following additions, changes, modifications and/or approval conditions:

Planning & Zoning Commission Chairman

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

EXHIBIT A
LEGAL DESCRIPTION OF SUBJECT PROPERTY

LOT 1 IN ROUTE 12 AND MAIN RESUBDIVISION, BEING A RESUBDIVISION OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 43 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 12, 2022 AS DOCUMENT 7926089, IN LAKE COUNTY, ILLINOIS.

Parcel Involved: 14-19-401-012

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

EXHIBIT B
PUBLIC HEARING SIGN PRESENT AT SUBJECT PROPERTY



Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

EXHIBIT C
PHOTOS OF THE SUBJECT PROPERTY
(Photographs Courtesy “Google Maps/Google Earth” 2022)

View looking SE from the intersection of Rt 22 and Rand Road



Photograph courtesy of Google Streetview

View of outlet from Rt 22



Photograph courtesy of Google Streetview

Staff Report
APPLICATION PZC 2023-11

Community Development Department
PZC Meeting Date: June 21, 2023

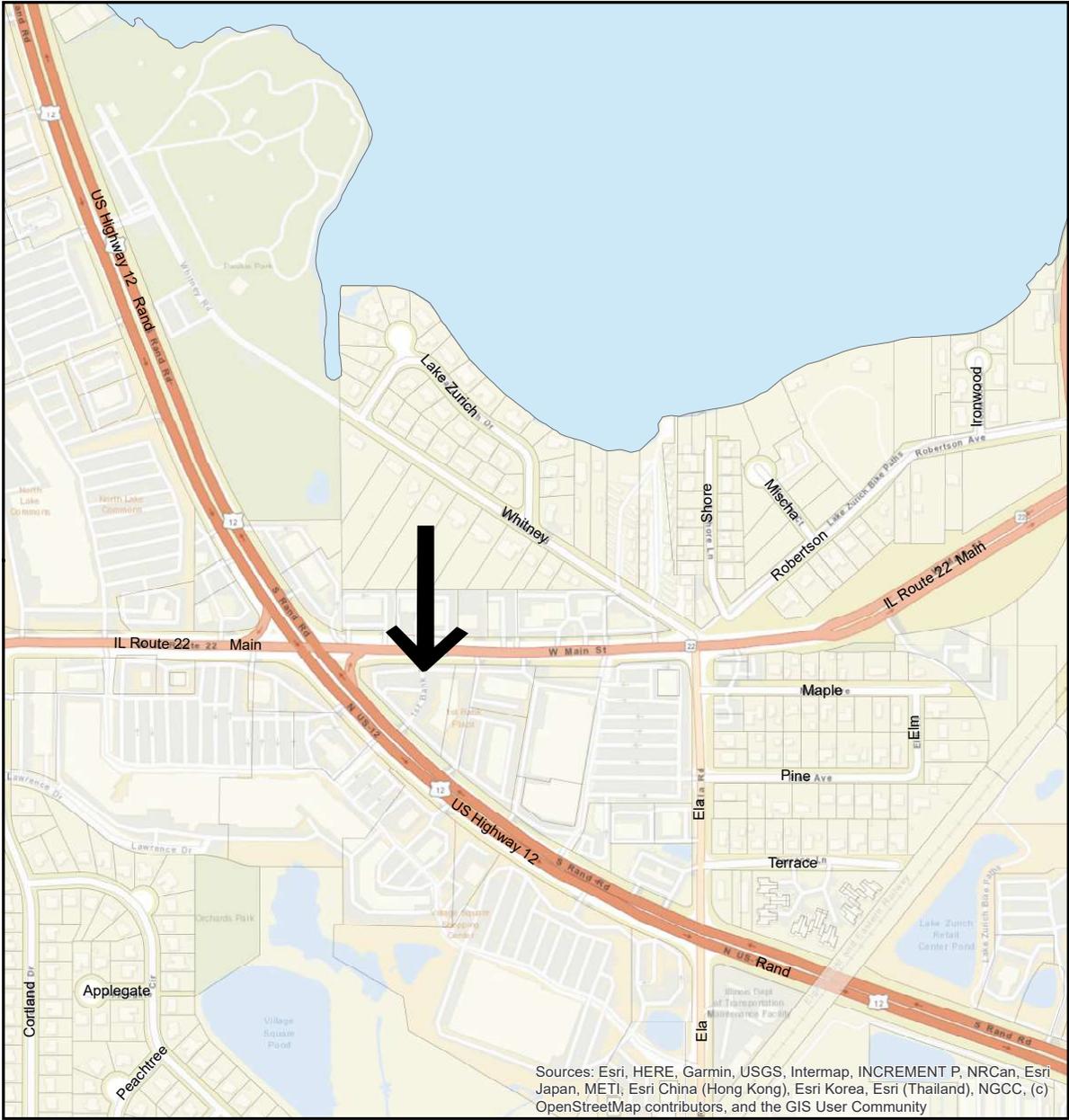
View of outlot from Rand Road



Photograph courtesy of Google Streetview



PUD Amendment 442 S Rand Road



COMMUNITY SERVICES DEPARTMENT
Building and Zoning Division
505 Telsor Road, Lake Zurich, Illinois 60047

(847) 540-1696
Fax: (847) 726-2182
LakeZurich.org



PUD Amendment 442 S Rand Road

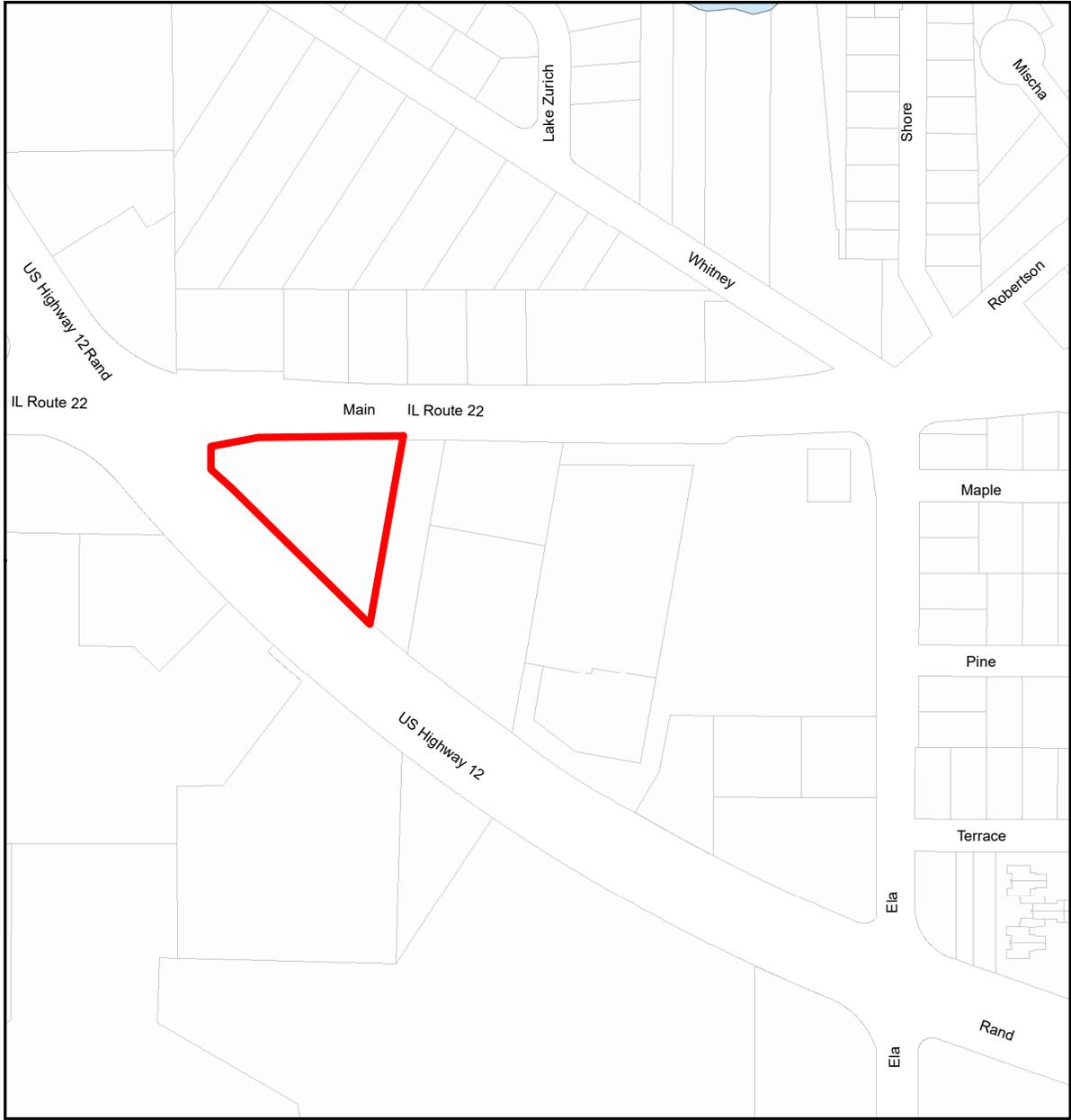


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PUD Amendment 442 S Rand Road

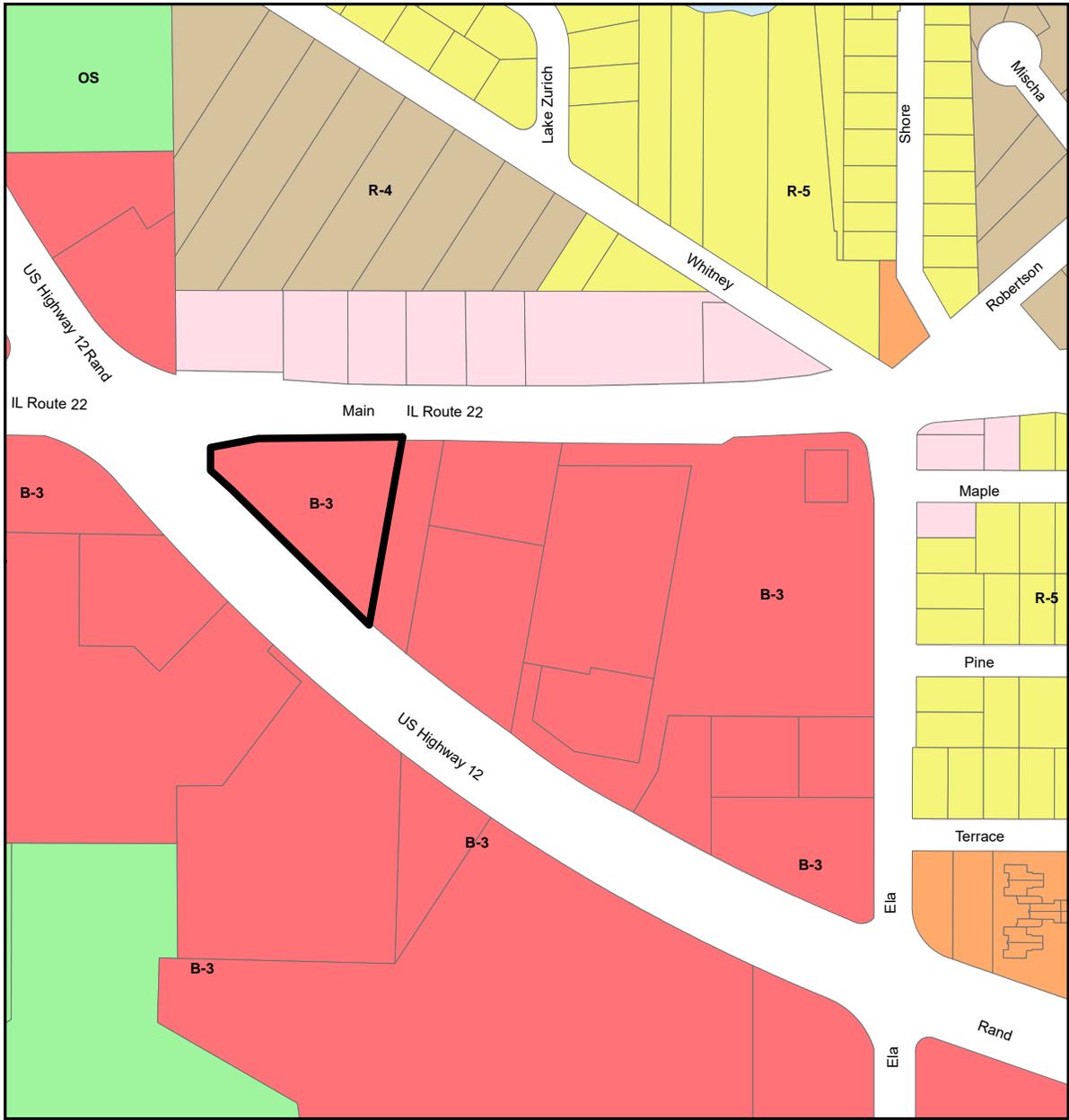


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PUD Amendment 442 S Rand Road



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 Building and Zoning Division
 505 Telsor Road, Lake Zurich, Illinois 60047

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 LakeZurich.org



ZONING APPLICATION

Community Development Department
505 Telser Rd.
Lake Zurich, IL 60047
Phone: (847) 540-1696
Fax: (847) 540-1769

(Please Type or Print)

- 1. Address of Subject Property: 444 S. Rand Road Lake Zurich, IL 60047
2. Please attach complete legal description
3. Property Identification number(s): 1419401012
4. Owner of record is: SA 444 Rand LLC, SG 444 Rand LLC and DP 444 Rand LLC Phone: 847-679-6660
E-Mail JGoodman@Terracorealestate.com Address: 3201 Old Glenview Road, Suite 300, Wilmette, IL 60091
5. Applicant is (if different from owner): Terraco, Inc. Phone: 847-906-5023
E-Mail JGoodman@Terracorealestate.com Address: 3201 Old Glenview Road, Suite 300, Wilmette, IL 60091
6. Applicant's interest in the property (owner, agent, realtor, etc.): Agent for Owner
7. All existing uses and improvements on the property are: Existing Park Lot
8. The proposed uses on the property are: QSR Restaurant with pick up window and outdoor seating
9. List any covenants, conditions, or restrictions concerning the use, type of improvements, setbacks, area, or height requirements placed on the Subject Property and now of record and the date of expiration of said restrictions: Governed by existing PUD
10. Describe any contract or agreement of any nature relevant to the sale or disposal of the Subject Property: Owner of the Property
11. For applications requiring a public hearing, please attach a list which contains the PIN, owner, and owner's mailing address of all properties located within 250 feet (excluding all Public Right-of-Ways) of the Subject Property.

THE APPLICANT'S SIGNATURE BELOW INDICATES THE INFORMATION CONTAINED IN THIS APPLICATION AND ON ANY ACCOMPANYING DOCUMENTS IS TRUE AND CORRECT. THE APPLICANT ALSO ACKNOWLEDGES IF THE CONSULTANT EXPENSES EXCEED THE INITIAL ESCROW DEPOSIT, THE APPLICANT WILL REIMBURSE THE ACCOUNT IMMEDIATELY.

See Next Page

(Name of applicant) (Signature of applicant)
Subscribed and sworn to before me this ___ day of ___, 2023.
(My Commission Expires ___)
(Name of Owner, if different) (Signature of Owner, if different)
Subscribed and sworn to before me this ___ day of ___, 2023.
(My Commission Expires ___)



ZONING APPLICATION

Community Development Department
505 Telser Rd.
Lake Zurich, IL 60047
Phone: (847) 540-1696
Fax: (847) 540-1769

(Please Type or Print)

- 1. Address of Subject Property: _____
- 2. Please attach complete legal description
- 3. Property Identification number(s): _____
- 4. Owner of record is: _____ Phone: _____
E-Mail _____ Address: _____
- 5. Applicant is (if different from owner): _____ Phone: _____
E-Mail _____ Address: _____
- 6. Applicant's interest in the property (owner, agent, realtor, etc.): _____
- 7. All existing uses and improvements on the property are: _____
- 8. The proposed uses on the property are: _____
- 9. List any covenants, conditions, or restrictions concerning the use, type of improvements, setbacks, area, or height requirements placed on the Subject Property and now of record and the date of expiration of said restrictions: _____
- 10. Describe any contract or agreement of any nature relevant to the sale or disposal of the Subject Property: _____
- 11. For applications requiring a public hearing, please attach a list which contains the PIN, owner, and owner's mailing address of all properties located within 250 feet (excluding all Public Right-of-Ways) of the Subject Property.

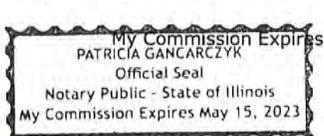
THE APPLICANT'S SIGNATURE BELOW INDICATES THE INFORMATION CONTAINED IN THIS APPLICATION AND ON ANY ACCOMPANYING DOCUMENTS IS TRUE AND CORRECT. THE APPLICANT ALSO ACKNOWLEDGES IF THE CONSULTANT EXPENSES EXCEED THE INITIAL ESCROW DEPOSIT, THE APPLICANT WILL REIMBURSE THE ACCOUNT IMMEDIATELY.

Joe Gorman - Attorney
(Name of applicant)

[Signature]
(Signature of applicant)

Subscribed and sworn to before me this 10 day of MAY, 2023.

Patricia Gancarczyk
(Notary Public)



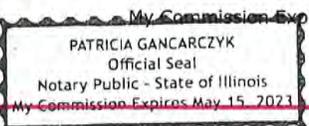
5/15/2023

[Signature]
(Name of Owner, if different) owner

(Signature of Owner, if different)

Subscribed and sworn to before me this 2 day of MAY, 2023.

Patricia Gancarczyk
(Notary Public)



5/15/2023

Please indicate what zoning relief your application requires. For assistance, please contact Staff.

- Zoning Code **Map** Amendment to change zoning of Subject Property from ____ to ____
- Zoning Code **Text** Amendment to amend the following section(s) of the Zoning Code _____

(See Section 18-103 of the Lake Zurich Zoning Code for specific standards. If a specific parcel is the subject of this amendment, then provide the additional information listed in Section 18-103C.)

- Special Use Permit/Amendment for _____
(See Section 19-103 of the Lake Zurich Zoning Code for specific standards.)

- Planned Unit Development/Major Adjustment/Amendment

(Planned Unit Developments are a distinct category of special use and are intended to create a more desirable environment than through strict application of the zoning and subdivision regulations. See Section 22-105 of the Lake Zurich Zoning Code for specific standards. Please list all the 'modifications' requested in the cover letter.)

- Variation for _____

(See Section 17-104 of the Lake Zurich Zoning Code for specific standards. Please indicate what your specific hardships are in the cover letter.)

- Modification to the Land Development Code (includes retaining walls more than 2 feet in height)
(See Section 10-6-18 of the Land Development Code for specific standards.)

- Preliminary Plat of Subdivision

- Final Plat of Subdivision or Amendment to Plat of Subdivision
(See Sections 10-5-2 and 10-5-9 of the Land Development Code for specific standards.)

- Site Plan Approval/Major Adjustment/Amendment
(See Section 20-103 of the Lake Zurich Zoning Code for specific standards.)

- Exterior Appearance Approval or Amendment
(See Section 21-103 of the Lake Zurich Zoning Code for specific standards.)

APPLICATION TO ANNEX CERTAIN TERRITORY

All land annexed to the Village is classified automatically after such annexation in the R-1\2 Single Family Residential District. The owner must file an application for a Zoning Map amendment if he or she desires a different zoning classification for the Subject Property.

- Petition to Annex Certain Territory (Please complete attached petition)
- Application to Annex Certain Territory

COMPREHENSIVE PLAN APPLICATION

- Comprehensive Plan **Map** Amendment for _____

- Comprehensive Plan **Text** Amendment for _____



IF APPLICABLE
VILLAGE OF LAKE ZURICH
NOTIFICATION AFFIDAVIT

I, Tim Verbeke hereby certify as follows:

- 1. That on the 1 day of June 2023, affiant caused to be mailed in the Post Office of Lake Zurich, Illinois, copies of the attached Notice of Public Hearing to all listed taxpayers of real estate within 250 feet, excluding all Public Right of Way, of the subject property and to the owners or representatives of property listed as exempt.
2. That the parties to whom said notice was mailed are set forth on Page 15, Item #13 of this application.

*Note: This is to be notarized and returned to Staff after notifications are mailed out.

Signature [Handwritten Signature]

Subscribed and sworn to before me this 1st day of June 2023.

[Handwritten Signature]
(Notary Public)

My Commission Expires 6/30/2024



May 15, 2023 - Chipotle Courtesy Review Meeting notes

Trustee Riley – asked why the pick-up window and drive is on the north side. That is also the side where the sidewalk is and would expect pedestrians to approach the building that way. Consider relating the drive-up to the interior of the lot.

Also, dumpster location is highly visible

Trustee Euker – pic-up window with drive-through. Are there other locations that she can visit and experience.

Lakemoor is closest.

Trustee Spacone – three issues

1. Circulation for garbage, dumpster trucks backing in and out
2. Food delivery trucks
3. Fire department access

Trustee Weider – as a resident who navigates the intersection is there a traffic impact study?

Trustee Sugrue – hours of operation – 10:45am to 10:00pm

Mayor Poynton – we currently have 6 Mexican restaurants, a Chipotle in Deer Park. Building design – make it better looking. The parking on the corner creates a certain look. Do something to improve that.

Anthony Burns of Chipotle - we cater to a special needs clientele who need gluten free, etc foods. All Chipotle stores are corporate owned and this store will not compete with the others – particularly Deer Park where there is no drive through and the store is strained. We are bound by the corporate look, but will revisit that.



At the Heart of Community

PUBLIC WORKS DEPARTMENT

505 Telser Road
Lake Zurich, Illinois 60047

(847) 540-1696
LakeZurich.org

May 25th, 2023

Mr. Sarosh Saher
Director of Community Development
Village of Lake Zurich
505 Telser Road
Lake Zurich, Illinois 60047

**PRELIMINARY ENGINEERING REVIEW #1 – NOT APPROVED
PRELIMINARY UTILITY REVIEW #1 – NOT APPROVED**

DEVELOPMENT: **442 S. Rand Road
Chipotle
Lake Zurich, IL 60047**

ITEMS RECEIVED: **1) Preliminary Engineering Plan Packet**

On behalf of the Village of Lake Zurich, Manhard Consulting has completed a Preliminary Engineering review of the above referenced material for conformance with the Village ordinances and general accepted engineering practices. We reserve the right to generate additional comments on future submittals. The comments below are preliminary in nature. A detailed review will be provided with the final engineering plan submittal. By copy of this letter, we request that the Developer address all comments in a response letter and submit the appropriate revisions for further review.

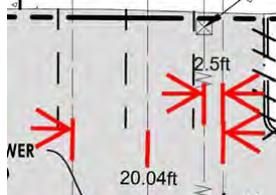
General

- 1) Please clarify address. Village records indicate the address is 442 S Rand Road.
- 2) Please include dates on future submittals for tracking purposes.
- 3) The queue line for drive through service should always be on the property. Lines for drive through service should never extend into the cross access and parking easement.
- 4) We request that the Applicant address all comments in a response letter and submit the appropriate revisions for further review and final approval by the Village.
- 5) The developer is required to provide verification and/or submit documentation of approval or sign off letters from all agencies other than the Village of Lake Zurich that exercise jurisdiction over this development (for example IDOT, IEPA, SMC. Please submit a copy of all approvals received to-date and list any approvals pending in the response letter, including but not limited to:
- 6) It is the property owner's responsibility to ensure compliance with the 2010 ADA standards for Accessible Design and the Illinois Accessibility Code and subsequent amendments.

- 7) An Engineer's Opinion of Probable Cost (EOPC) has been submitted for the proposed site improvements.
- 8) An autoturn exhibit should be provided to confirm maneuverability of fire and garbage trucks on the site. The Fire Department should confirm that the AutoTurn movements are adequate for their operations.
- 9) A traffic study is required to evaluate the potential impacts the proposed development may have on the adjacent highways and area.
- 10) Lake Zurich Details should be included in the plans with nonapplicable details crossed out.
- 11) The Village of Lake Zurich and Manhard Consulting shall be listed as additionally insured during construction.

Boundary and Topographic Survey

- 12) Please revise easement alignment for water main through the site so that it is centered within the 20' easement. The centerline of the water main is currently shown 2.5' from the easement line. If it is aligned this way, repair work would likely occur outside of the easement.



Sheet C 1.0 Demolition and Removal Plan

- 13) The storm sewer being removed and replaced is tied to existing storm sewer. What are the upstream off-site implications while the storm sewer line is being replaced?
- 14) It is recommended that the entire parking lot be removed and replaced or at least the HMA surface course be milled. Unnecessary cold joints may reduce the lifespan of the proposed pavement.
- 15) It appears the on site sidewalk, driveway apron, and offsite sidewalk are hatched to be removed. Please clarify if this is indeed the intention.

Sheet C 2.0 Geometric Plan

- 16) Please submit pavement cross sections with structural numbers meeting the Lake Zurich commercial parking lot development ordinance section 10-6-20.
- 17) The proposed driveway apron has PCC Sidewalk hatching. Is the intent to remove and replace the driveway? If so, IDOT commercial driveway detail shall be applicable in its design and construction.
- 18) The heavy duty pavement strip patch shown on the NE drive lane shall be a consistent width with a minimum 2' wide so that a plate compactor may compact the asphalt layers constructed.
- 19) The heavy duty pavement should extend to all areas that the garbage truck is anticipated to drive over. This should be confirmed by the autoturn exhibit.

Sheet C3.0 Utility Plan

- 20) Sanitary sewer connection is proposed in IDOT ROW. An IDOT permit will be needed prior to this work being performed.
- 21) The sanitary monitoring manhole shall be located less than 10' from the building.
- 22) Sanitary sewer invert changes greater than 1' shall be constructed with external drops per the Lake Zurich Details.
- 23) Sanitary services shall be minimum 6" SDR 26 PVC.

- 24) Storm sewer crossings over the water service shall maintain a vertical clearance of 18". The storm sewer should be constructed of water main quality pipe for 10' either side of the water service crossing.
- 25) All utility trenches within 2' of any structural curbs, pavements, buildings etc. shall be backfilled with CA-6 trench backfill per applicable Lake Zurich ordinances.
- 26) Village preference is for watermain connections to be performed by pressure connections.
- 27) Contractor to contact Public Works 48 hours in advance when scheduling water service disconnect or water service interruption for possible conflict adjustments.
- 28) Per Ordinance 11-1-8 roof drainage shall be accomplished by downspouts splashing at grade and not tie directly into the storm sewer. Depending on the proposed roof material, this may be waived by the Village.
- 29) If waived, 6" roof drains shall be tied into structure to avoid blind connections into pipes.
- 30) Connection fees will be determined by domestic service size requirement. This size should be determined by WSFU calculations.
- 31) A Plumber riser diagram shall be submitted. RPZ backflow prevention is required on both the domestic and fire suppression sides of the water service.
- 32) RPZ's shall each have their own dedicated floor drain.
- 33) RPZs shall be tested on an annual basis and results remitted to the Village of Lake Zurich
- 34) Plans must be submitted to Lake County for their assessment of their sewer connection fee.
- 35) A 1/2-inch conduit for the exterior remote reader wire must be installed. Conduit needs to be within 18-inches of the meter and terminate flush on the exterior side wall.
- 36) Village shall be present for all crossings of existing water, storm, or sanitary mains.
- 37) A full diameter flush and chlorination of the service is required. Water service will require Village to operate valve to fill.
- 38) Village shall be contacted a minimum 48 hours in advance of any requested water valve operation.
- 39) Curb and gutter is shown on easement line, water main is not centered in easement. A water main break may affect the curb and gutter where shown. It is recommended that curb and gutter be installed minimum 4' away from the centerline of the water main. It is currently offset by ~3'.

Sheet C4.0 Grading Plan

- 40) It is unclear based on the removal plan and geometric plan whether the existing sidewalk is proposed to be removed and replaced. If the existing sidewalk is to remain it appears to have non compliant cross slopes and curb ramp. It is the developers responsibility to upgrade the non-compliant sidewalk and construct new sidewalk along the frontage of S Rand Road.
- 41) It is unclear where stormwater will drain on the west side of the building where pavement parking stalls match existing. Please clarify with drainage arrows or ridge lines where storm water is proposed to drain.
- 42) Parking lots and curbs should be designed to drain at minimum 1%. 0.5% should be considered the absolute minimum.
- 43) Any portions of reverse pitched curb should be identified on the plan.
- 44) The applicant should confirm that all existing handicap stalls to remain meet current ADA standards and are sloped less than 2% in every direction.
- 45) A curb ramp for deliveries is denoted on the architectural site plan exhibit, however the grading plan does not appear to show a depressed ramp at the southeast corner of the building.

Stormwater Management

- 46) It appears that the proposed development will be classified as a "Minor Development" per the WDO. The stormwater narrative and plan should include the items listed in 400.04, including all overland flow paths and storm sewer calculations (inlet capacity, ponding depth, storm sewer sizing, etc) that show conformance with Sections 506.01 and 506.03.
- 47) Per Section 300.06, redevelopment of previously developed sites shall maintain existing storage volume and shall not increase the rate of runoff from the site. The applicant shall provide supporting data and calculations to ensure the site design either provides a watershed benefit and there is adequate downstream capacity. The submittal should, at a minimum, include quantitative calculations, delineation of existing and proposed tributary areas for the points of discharge, comparison of existing and proposed runoff rates, location of overland flow routes, inlet capacity and ponding depth for storm sewer inlets, etc. It should be confirmed that the redirection of flow to the storm sewer will not impact the downstream storm sewer.

If you should have any questions, please do not hesitate to contact me.

Yours truly,
MANHARD CONSULTING

Kevin Lill
Project Engineer



P:\201.001 Village of Lake Zurich_Permits\442 S Rand Road - Chipotle\442 S Rand Rd\Engineering Review 1_442 S Rand Rd_Chipotle_2023.05.19.docx



At the Heart of Community

FIRE DEPARTMENT
Fire Prevention Bureau

1075 N. Old McHenry Road
Lake Zurich, Illinois 60047
Fire.bureau@lakezurich.org
(847) 540-5073
LakeZurich.org

May 19, 2023

To: Tim Verbeke
Village of Lake Zurich
505 Telsler Road
Lake Zurich, Illinois 60047

Re: PR23-093
Chipotle
444 S. Rand Rd.
Lake Zurich, IL 60047
Site Plan

Dear Tim,

Thank you for the submittal. After reviewing the drawings, I have the following comments:

1. The address they are proposing is 444, the same as the bank building. The new building will need a different address number to avoid confusion in an emergency!
2. The building will require a sprinkler riser room facing the parking lot and not in the drive-through lane.
3. The curb cut radius on each entrance will need to be increased for truck access.
4. Provide an aerial fire truck turning template turning into the lot from both entrances.
5. How will the cars that are parked in the stacking area of the drive-through back up without hitting another vehicle?
6. If public works approves, provide a fire hydrant in the grass area to the east of the trash enclosure.

If there are any questions, please contact my office.

Sincerely,

Bob Kleinheinz
Bob Kleinheinz
Fire Prevention Specialist-CFO
Lake Zurich Fire Department
Bob.kleinheinz@lakezurich.org
Fire.bureau@lakezurich.org
C: 847-489-3280
O: 847-540-5073



At the Heart of Community

COMMUNITY DEVELOPMENT DEPARTMENT
Building and Zoning Division

505 Telsler Road
Lake Zurich, Illinois 60047

(847) 540-1696
Fax (847) 726-2182
LakeZurich.org

ZONING REVIEW

PROJECT: Chipotle
LOCATION: 442 Rand Road
REVIEWED BY: Tim Verbeke
DATE: June 2, 2023

Modification requested through the PUD:

- Outdoor dining/seating
- Drive-thru
- Setback along Route 22 to be 29 feet
- Reduction in parking spaces
- Reduction in plant unit count

Zoning: B-3 Regional Shopping Business District
Only the zoning lot along Route 22 would require a setback variance or modification.
The encroachment into the Rand Road/Route 22 setback would be allowable due to precedent set along Rand Road and Route 22.

Minimum Yards Per Code for B-3:
• Route 22 (Main Street): 50 Feet – Requesting 29 Feet

Use: Drive Thru – Eating and drinking places

Current Parking:
Required Parking Spaces: 207
Based on Retail Building Area: 11,944 feet
1 space for 200 square feet resulting in 60 parking spaces
Based on Office Building Area: 40,244 feet
1 space for 275 square feet resulting in 147 parking spaces

Proposed Parking
(22 required) Lot 1: 28 parking paces + 3 ADA Parking Spaces + 4 Pick-up designated Spaces = 28 parking spaces. Therefore, there would be an excess of 6 parking spaces
Six parking spaces are in direct conflict with the access aisle, plus an ADA parking space with no direct access to a building.
(147 required) Lot 2: 74 parking spaces
Office Building Area: 40,244 feet



1 space for 275 square feet would result in 147 required parking spaces. Therefore, there would be a deficiency of 73 parking spaces on the proposed plan.

Lot 3: No parking noted

(60 required) Lot 4: 93 parking spaces

Retail Building Area: 11,944 feet

1 space for 200 square feet resulting in 60 parking spaces. Therefore, there would be an excess of 33 parking spaces.

Total Parking Required: 229

Total Parking Proposed: 195 + 11 ADA Parking Spaces + 4 Pick-up designated Spaces

This would require a modification to the zoning code or an enlargement to the parking lot

Access

Lot 1 is the only lot that has access to both Route 22 and Rand Road.

Lot 2 is only accessible from Rand Road. It will require a cross-access agreement to access Route 22.

Lot 3 – no information is provided.

Lot 4 is not accessible from either Rand Road or Route 22 and will require a cross-access agreement to access the lot.

Site Plan

Geometric Plan (Page 3 of 9)

- Drive thru windows require 8 vehicles stacking – currently proposing 6 vehicles stacking. (if using the window as a pickup window without an ordering menu board), provide justification for reduced stacking requirements)

Exterior Appearance

Exterior building materials in conjunction with approved materials in the B-3 District.

Lighting

The maximum foot-candles on the property is 5.1 fc. The property is in substantial conformance.

Landscaping

A reduction in plant units is requested through the PUD

Signage

Proposed signage is in accordance with sign code.

Traffic Study

A traffic study will be required due to the intensity of the use. (This question was raised by a trustee at the Courtesy Review. If not providing one, provide justification in the response)





TERRACO, INC.
3201 Old Glenview Road, Suite 300
Wilmette, IL 60091
Main: 847.679.6660 Direct: 847.906.5023
JGoodman@TerracoRealEstate.com
www.TerracoRealEstate.com

EXHIBIT A

Zoning Application
Application & Consultant Fee
Plat of Subdivision
Legal Description
Proof of Ownership
Overall Site Plan
Geometric Plan
Photometric Plan
Preliminary Engineering Plans
Tree Survey
Tree Preservation Plan
Proposed Elevation/Sample Photos
Preliminary Signage Plans
Alta Survey



TERRACO, INC.
 3201 Old Glenview Road, Suite 300
 Wilmette, IL 60091

Main: 847.679.6660 Direct: 847.906.5023
 JGoodman@TerracoRealEstate.com
 www.TerracoRealEstate.com

May 8, 2023

Orlando Stratman
 Chairperson of the Planning & Zoning Commission
 Village of Lake Zurich
 505 Telser Road
 Lake Zurich, IL 60047

Re: Zoning Application Cover Letter
 Route 12 & Main St-Chipotle Development

Dear Chairperson Stratman,

On behalf of the owner, SA 444 Rand LLC, SG 444 Rand LLC and DP 444 Rand LLC, Terraco, Inc (Developer) is pleased to submit a Zoning Application for our proposed development at the Southeast Corner of Route 12 & Route 22. The subject property is Lot 1 of the Route 12 and Main Resubdivision (attached) and is governed by an existing PUD. The PUD is comprised of three Lots (Lots 1 & 2 are at 444 S. Rand Road and Lot 3 is 466 S. Rand Road) and all currently owned by the same entity. We are seeking approval for our development plans through an Amendment of the PUD. A list of the documents included with our application can be found in Exhibit A.

The proposed development will consist of a new freestanding building that is approximately 2,370 square feet which will accommodate a Quick Serve Restaurant w/ a Pick up lane and outdoor Patio. Work includes, but is not limited to, site work, building envelope and future interior building out. It will include equipment and finishes to brand as a Chipotle. The site plan and subsequent information being provided at this location prioritized minimal site disturbances by keeping most existing curbing/parking, an updated corner appearance including a new building in an otherwise vacant parking lot. The property can be accessed from both Rand Road & Route 22 and all required utilities are on or near the property. Careful consideration was taken to not disrupt any existing ingress or egress. The only work required in the IDOT ROW is a sanitary sewer connection.

Minimal Exceptions to the underlying B-3 Zoning will be required for the project. First, we are asking that the required 50' building setback along Route 22 only be 29'. Similar setback variances were granted at this intersection for the recently constructed True North and Panera buildings. Second, we are asking for a variance regarding the required plant units. The reasons are as follows, along Route 22, there are underground utilities, overhead utilities, and the Public Utility & a Drainage Easement, which do not allow us to plant trees in this area. We have maximized shrub plantings in this area. Nearby properties have not been held to this requirement. Along Rand Road, there are several very large existing trees we are looking to protect. Their size does not leave us the space needed to reach the required plant unit count. The

interior lot line contains no plantable area within our property. Lastly, we are asking for a variance of the required parking spaces for the three lots. All three lots allow for cross parking and cross access. A total of 230 spaces would be required, and the proposed development will only provide 226 spaces. Based on the staggered hours of operation of all the businesses, the various peak business hours and the fact that 50% of Chipotle sales are generated online through the pickup window we do not foresee any shortage of parking.

The building will be comprised of brick with an EIFS band. The decision behind our proposed exterior materials is based on Chipotle's trademark/branded standards, village code, and surrounding buildings (in our zoning district) at all corners. Most customers recognize the trademark color/material scheme, and we would prefer to not deter from Chipotle's brand when at all possible, but also take into consideration the existing buildings throughout Lake Zurich. We are proposing to blend within our surrounding buildings and have provided examples of buildings located adjacent to us, as well as in our zoning district, that have similar aesthetics. EIFS is a synthetic version of stucco, which ends up being more versatile and durable. It is more flexible than traditional stucco, which results in less cracking over time. Appearance wise – they virtually look identical.

The proposed pick-up lane is strictly for online orders that have been pre-ordered through a mobile app; a modern spin on the traditional drive-through experience and stacking is minimal. The pick-up window helps expedite mobile ordering and creates a smoother service and overall Chipotle customer flow. Over 50% of sales are online orders. Our site components are minimal and do not require drive-thru speaker boxes or other bulky components.

Our proposed Tenant, Chipotle, is a leading Quick Serve Restaurant with over 3,000 locations worldwide. Hours of operation vary, but most are open daily from 10:45 am to 10:00 pm. A typical Chipotle will employ approximately 20-30 employees with a minimum of 6-7 employees working at any given time.

We appreciate the opportunity to present our project to the Planning & Zoning Commission and look forward to bringing a high-quality development to Lake Zurich.

Sincerely,



Joe Goodman
Terraco, Inc.

22 LS 02988 LFE
This Instrument Prepared by:

Peter Turke
Turke & Strauss LLP
613 Williamson Street, Suite 201
Madison, WI 53703

After Recording Mail To:

Theodore R. Timm
Timm & Garfinkel, LLC
770 Lake Cook Road, Suite 150
Deerfield, IL 60015



Image# 062721640005 Type: DW
Recorded: 10/28/2022 at 11:04:37 AM
Receipt#: 2022-00072333
Page 1 of 5
Fees: \$11,480.00
IL Rental Housing Fund: \$9.00
Lake County IL Recorder
Mary Ellen Vanderventer Recorder
File **7941233**

REAL ESTATE TRANSFER TAX	
County:	\$3,800.00
Illinois:	\$7,600.00
Total:	\$11,400.00
Stamp No:	1-840-122-192
Declaration ID:	20220904953389
Instrument No:	7941233
Date:	28-Oct-2022



SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED, made as of the 11th day of October, 2022, between **J2M-IV LLC**, a Delaware limited liability company (the "Grantor"), and **SA 444 RAND LLC**, a Delaware limited liability company, as to an undivided 75% tenants in common interest, **SG 444 RAND LLC**, a Delaware limited liability company, as to an undivided 15% tenants in common interest, and **DP 444 RAND LLC**, a Delaware limited liability company, as to an undivided 10% tenants in common interest (collectively, the "Grantee") *ALL OF 3201 OLD GLENVIEW RD. W, LAKE CO. IL 60091.*

WITNESSETH, that the Grantor, for and in consideration of the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, by these presents does REMISE, RELEASE, ALIEN, AND CONVEY unto the Grantee and its successors and assigns, FOREVER, all of the following described real estate, situated in the County of Lake, and State of Illinois known and described as follows, to wit:

PARCEL 1: LOTS 1 AND 2 IN ROUTE 12 AND MAIN RESUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 43 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 12, 2022 AS DOCUMENT 7926089, IN LAKE COUNTY, ILLINOIS.

PARCEL 2: LOT 4 IN FIRST LAKE ZURICH PARTNERS SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 19, TOWNSHIP 43 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 14, 1980 AS DOCUMENT 2088762,

PARCEL 3: NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS THE BENEFIT OF PARCELS 1 AND 2 AS CREATED BY AGREEMENT AND GRANT OF EASEMENT RECORDED MAY 17, 1985 AS DOCUMENT 2355970, IN LAKE COUNTY, ILLINOIS.

FORMERLY DESCRIBED AS:

PARCEL 1:

LOTS 1, 2, AND 4 IN FIRST LAKE ZURICH PARTNERS SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 43 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED NOVEMBER 14, 1980 AS DOCUMENT 2088762, EXCEPTING THEREFROM THAT PART OF LOTS 1

(5)

AND 2 AFORESAID ACQUIRED FOR ROAD PURPOSES IN CONDEMNATION CASE 04ED36, IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

TOGETHER WITH AND SUBJECT TO THE COVENANTS, CONDITIONS AND RESTRICTIONS CONTAINED IN THE AGREEMENT AND GRANT EASEMENT RECORDED AS DOCUMENT 2355970 AND ANY AMENDMENTS THERETO, RELATING TO, AMONG OTHER THINGS: CROSS ACCESS; INGRESS AND EGRESS; AND MAINTENANCE.

P.I.N. Nos.: 14-19-401-010-0000, 14-19-401-011-0000, 14-19-401-006-0000

Address of Real Estate: 444-484 South Rand Road, Lake Zurich, Illinois 60047

Together with all of Grantor's right, title and interest in and to the improvements, hereditaments, easements and appurtenances thereunto belonging, or in any way appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim or demand whatsoever, either in law or equity, of, in and to the above described premises, together with such improvements, hereditaments, easements and appurtenances (collectively, the "Property"). TO HAVE AND TO HOLD the Property, unto Grantee and Grantee's successors and assigns forever.

And Grantor, for itself, and its successors, does covenant, promise and agree, to and with Grantee and Grantee's successors and assigns, that Grantor has not done, or suffered to be done, anything whereby the said premises hereby granted are, or may be, in any manner encumbered or charged, and WILL WARRANT AND DEFEND against all persons lawfully claiming or to claim the same by, through or under Grantor, subject to those Permitted Exceptions listed on Exhibit A attached hereto and made a part hereof.

IN WITNESS WHEREOF, Grantor has executed this Special Warranty Deed as of the day and date first above written.

GRANTOR:

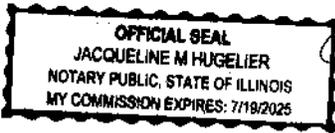
J2M-IV LLC,
a Delaware limited liability company

By: *Matthew D. Baumann*
Matthew D. Baumann, Manager

STATE OF ILLINOIS }
COUNTY OF COOK } ss

The undersigned, a Notary Public in and for said County, in the State aforesaid, DOES HEREBY CERTIFY THAT MATTHEW D. BAUMANN personally known to me to be the Manager of J2M-IV LLC, a Delaware limited liability company, the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument pursuant to authority given by the Operating Agreement of said Company, as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and official seal, this 3rd day of October, 2022.



Jacqueline M. Hugelier
Notary Public
Commission expires: 7/19/2025

Mail Subsequent Tax Bills to:
SA 444 RAND LLC, SG 444 RAND LLC, and DP 444 RAND LLC
c/o Terraco, Inc.
3201 Old Glenview Road
Wilmette, IL 60091

EXHIBIT A**Permitted Exceptions**

1. Taxes for 2022 and subsequent years which are not yet due or payable.
2. Existing unrecorded leases and all rights thereunder of the lessees and of any person or party claiming by, through or under the lessees.
3. Rights of the Village of Lake Zurich to install, repair and maintain a water line of portions of Lots 1 and 2 of Doralno Subdivision, as granted by Instrument recorded as document 1286180.
4. Easements for public utilities and drainage over, upon and under that portion of Lot 1 falling in Doralno Subdivision as shown on the Plat of Lake Zurich Partners Subdivision recorded as document number 2088762.
5. 10 foot easement for public utilities and drainage as shown on Plat of First Lake Zurich Partners recorded as document number 2088762.
6. 5 foot easement for public utilities and drainage as shown on Plat of First Lake Zurich Partners recorded as document number 2088762.
7. Easements for public utilities and drainage over, upon and under a portion of the Land as contained in document recorded as Document No. 2088762.
8. Easement for utilities over the Northerly 15 feet as shown on the Plat of Doralno Subdivision. (affects that part of Lot 1 falling in Lot 2 of Doralno Subdivision)
9. Terms and provisions of an unrecorded electric service station agreement dated November 4, 1975, by and between First National Bank of Lake Zurich and Commonwealth Edison Company.
10. Easements for public utilities and drainage over, upon and under a portion of Parcel 2 as contained in document recorded as Document No. 2323219.
11. Easements for public utilities and drainage over, upon and under a portion of Parcel 1 as contained in document recorded as Document No. 2369504.
12. Terms, provisions and conditions contained in the ordinance granting a special use permit by the Village of Lake Zurich recorded as document number 2283608.
13. Easements for public utilities and drainage over, upon and under a portion of the Land as contained in document recorded as Document No. 2355970.

14. Possible easements or claims of easement for ingress and egress over a paved area along the East line of Lot 2 and the West line of Lot 4 as disclosed by survey by Gentile and Associates, Inc., dated March 16, 2012, number 12-20158.

15. Possible unrecorded easements in favor of public and quasi-public utility companies for the right to maintain and repair storm sewers, sanitary sewers, water mains, water valves, flood lights, together with the right of access thereto, and disclosed by survey presented at closing prepared by Gentile and Associates, Inc., dated August 14, 2015, known as survey number 12-20158.

16. Notes on the Plat of Route 12 and Main Resubdivision recorded as document number 7926089

There shall be at most one (1) restricted vehicular access point along U.S. Route no 12 (Rand road) serving Lot 1, depicted hereon.

There shall be at most one (1) restricted vehicular access point along U.S. Route no 12 (Rand road) serving Lot 2, depicted hereon.

There shall be at most one (1) restricted vehicular access point along Route no 22 (Main street) serving Lot 1, depicted hereon.

There shall be at most one (1) restricted vehicular access point along Route no 22 (Main street) serving Lot 2, depicted hereon.

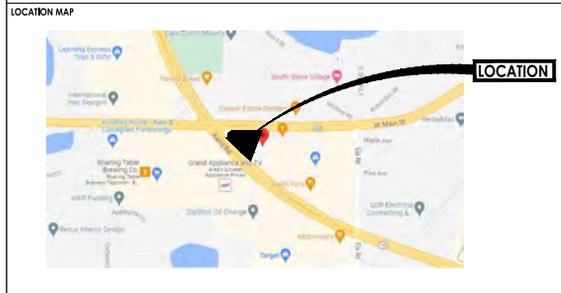
17. Terms and provisions of the Declaration of Access, Easements and Restrictions dated May 11, 2022, and recorded August 12, 2022 as document 7926090 made by J2M-IV, LLC and the covenants and conditions contained therein.

18. Mortgage, Assignment of Leases and Rents, and Security Agreement dated August 19, 2015 and recorded August 25, 2015 as Document No. 7225063 made by J2M-IV, LLC to Bank of America, N.A. to secure an indebtedness in the amount of \$3,500,000.00. Assigned to Wilmington Trust, National Association, as Trustee for Morgan Stanley Bank of America Merrill Lynch Trust 2015-C26, Commercial Mortgage Pass-Through Certificates, Series 2015-C26 by instrument recorded as Document No. 7257772.

Assumption Agreement among WILMINGTON TRUST, NATIONAL ASSOCIATION, AS TRUSTEE FOR MORGAN STANLEY BANK OF AMERICA MERRILL LYNCH TRUST 2015-C26, COMMERCIAL MORTGAGE PASS-THROUGH CERTIFICATES, SERIES 2015-C26, J2M-IV, LLC, a Delaware limited liability company, SA 444 RAND LLC, SG 444 RAND LLC and DP 444 RAND LLC, each a Delaware limited liability company, dated October 11, 2022.

SYMBOL AND LINE LEGEND

⊗	VALVE VALET	— W — W —	WATERSHAW PIPE
●	WATER 8-BOX	— > — > —	STORM SEWER PIPE
■	WATER VALVE BOX	— > — > —	STORM UNDERDRAIN
⊗	FIRE HYDRANT	— > — > —	SANITARY SEWER PIPE
⊗	WELL HEAD	— IRR — IRR —	IRRIGATION SLEEVING PIPE
⊗	FIRE DEPARTMENT CONNECTION	— E — E —	ELECTRICAL DUCT BANK
⊗	STORM INLET	— G — G —	NATURAL GAS LINE
⊗	STORM MANHOLE	— COM — COM —	COMMUNICATIONS LINE
⊗	CATCH BASIN	— CWS — CWS —	CHILLED WATER SUPPLY
⊗	STORM CLEANOUT	— CWR — CWR —	CHILLED WATER RETURN
⊗	DOWNSPOUT	— TV — TV —	TELEVISION CABLE
⊗	FLARED END SECTION	— UGW — UGW —	UNDERGROUND WIRE
⊗	SANITARY MANHOLE	— T — T —	TELEPHONE CABLE
⊗	SANITARY CLEANOUT	— FO — FO —	FIBER OPTIC CABLE
⊗	LIGHT POLE	— A — A —	AERIAL WIRES
⊗	TELEPHONE MANHOLE	— — — —	CONSTRUCTION LIMES
⊗	POWER POLE	— — — —	PROPERTY LINE
⊗	GAS VALVE	— — — —	BASEMENT LINE
⊗	GAS METER	— — — —	VENT LINE
⊗	HAND HOLE	— HWL — HWL —	HIGH WATER LINE
⊗	MAIL BOX	— NWL — NWL —	NORMAL WATER LINE
⊗	ELECTRICAL MANHOLE	— — — —	CHAIN LINK FENCE
⊗	CABLE TV PEDestal	— X — X —	BARNED-WIRE FENCE
⊗	TELEPHONE PEDestal	— — — —	WOODEN FENCE
⊗	TRAFFIC OR STREET SIGN	— // —	SET FENCE
⊗	SOIL BORING	⊗	DECIDUOUS TREE
⊗	21.54 SPOT ELEVATION	⊗	SHRUB OR BUSH
⊗	SURFACE FLOW	⊗	EVERGREEN TREE
⊗	100-YEAR OVERFLOW	⊗	



PRELIMINARY ENGINEERING PLANS

CHIPOTLE - LAKE ZURICH
444 S. RAND ROAD, LAKE ZURICH, IL

OWNER INFORMATION

NAME: JOE GOODMAN
 EMAIL: JOEGOODMAN@STARRKONSTRUCTION.COM
 PHONE: 847.479.4440
 ADDRESS: 2001 630 S. GREENVIEW, SUITE 200
 #6 METRO, IL 60009-4001

NOTES

1. SITE ACCESS CONTROL INCLUDING SAFETY FENCES AND TRAFFIC CONTROL, ALL CONSTRUCTION METHODS AND MEASUREMENTS, AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ALL UTILITIES SHOWN IN THE PLANS ARE FROM RECORDS OR FIELD OBSERVABLE IN FORWARD LOCATED BY SURVEYOR. ANY UTILITY LOCATIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP AND SAVE HARMLESS THE MUNICIPALITY, OWNER, AND ENGINEER, AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS AND EMPLOYEES IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES AGAINST ALL SUCH CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY OR ARISING OUT OF OR INCIDENTAL TO THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ILLINOIS AND NOT EXCEEDING ANY EXTENT WHICH WOULD EXCEED THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO, THE UNLAWFUL LAWS REGARDING STRUCTURAL WORK (IL. REV. STAT. CH. 48, PAR. 60 AT 60.3), AND REGARDING THE PROTECTION OF ASSOCIATE LANDOWNERS (IL. REV. STAT. CH. 17, PAR. 6.1 (E. 2)), IN THE EVENT OF ANY SUCH CLAIM (INCLUDING DEATH) OR LOSS OR DAMAGE, OR CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	DEMOLITION PLAN
C2.0	SITE GEOMETRIC PLAN
C3.0	UTILITY PLAN
C4.0	GRADING PLAN

BENCHMARKS

SITE BENCHMARK (NACORS):
 2000R POINT ON THE PROPERTY 100 FEET NORTH-WEST AND 66 FEET WESTERLY OF THE NORTH-WESTERLY CORNER OF CHURCH/BANK TOWER CANOPY OVERHANG.
 ELEVATION=447.85

Sheet C0 to C4 were prepared at or under the direction of:



SCOTT A. DIKALO
 LICENSE EXPIRES: 11/30/2023
 #0440-4419-0002



CALL 48 HOURS BEFORE YOU DIG WITH THE FOLLOWING INFORMATION

COUNTY NAME: DEKALB
 TOWNSHIP RANGE: 200N, 500E
 SECTION NUMBER: 20

NO.	DATE	DESCRIPTION

Scale: As Shown
 Date: 10/27/23
 Drawn by: [Signature]
 Checked by: [Signature]

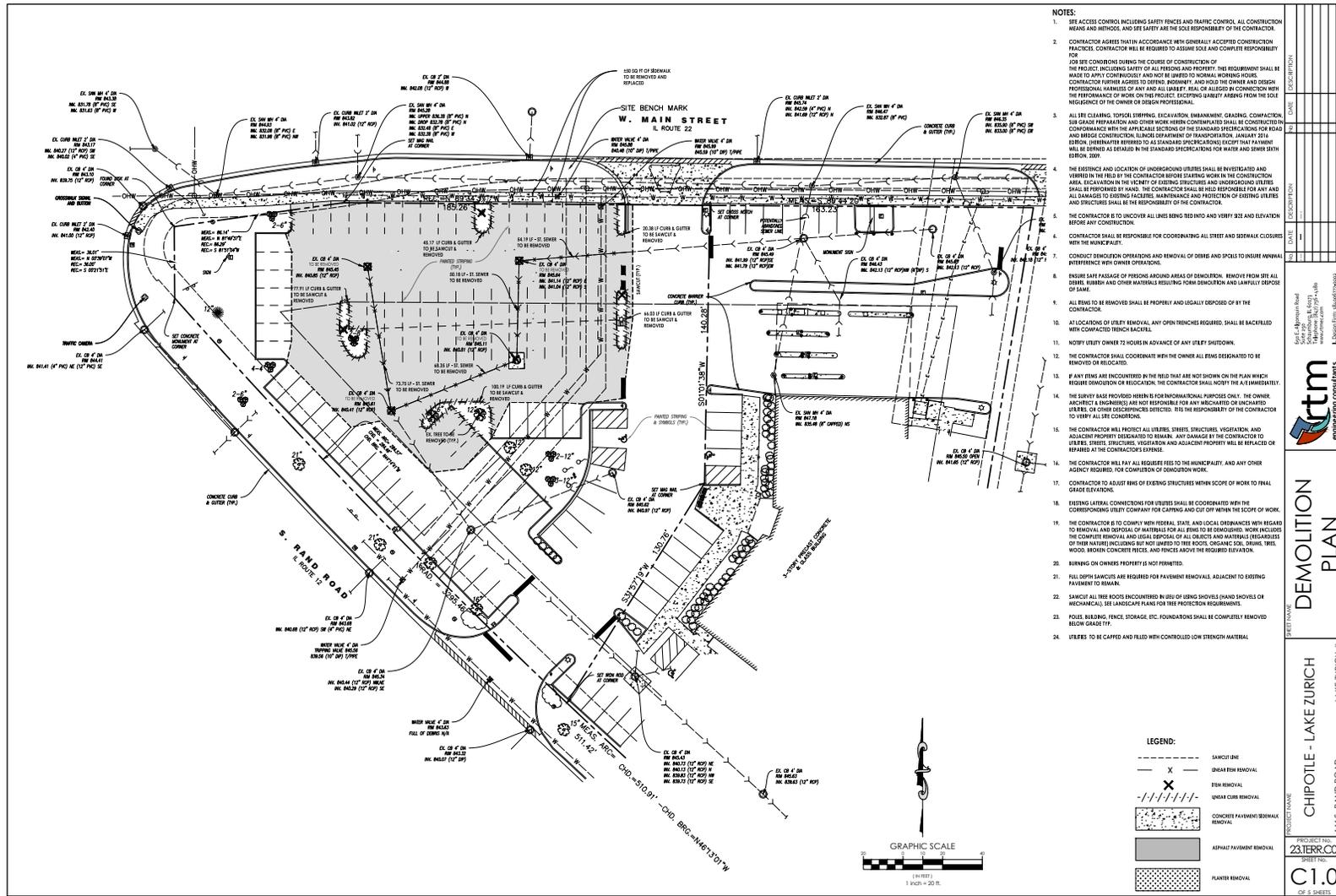


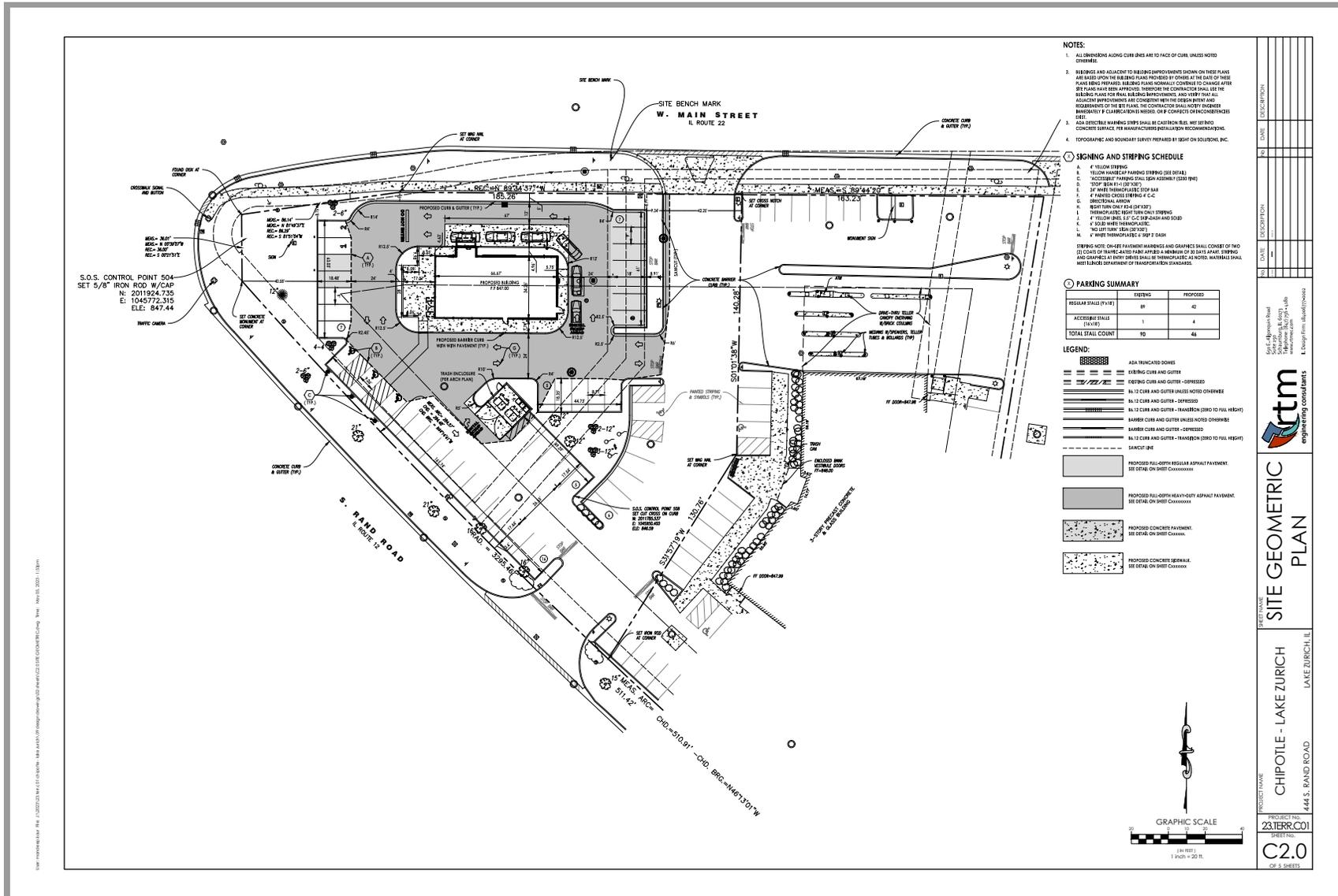
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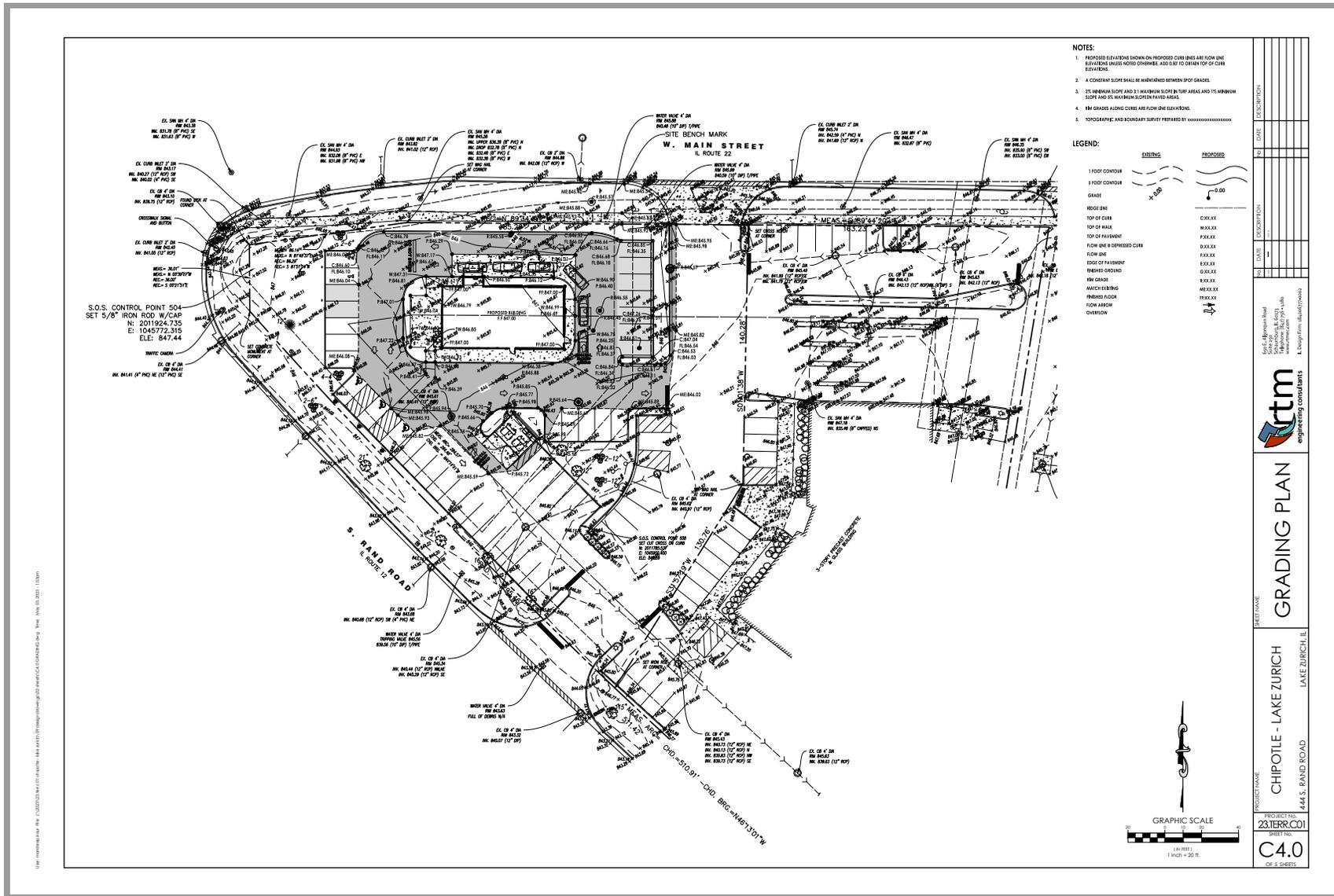
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CHIPOTLE - LAKE ZURICH

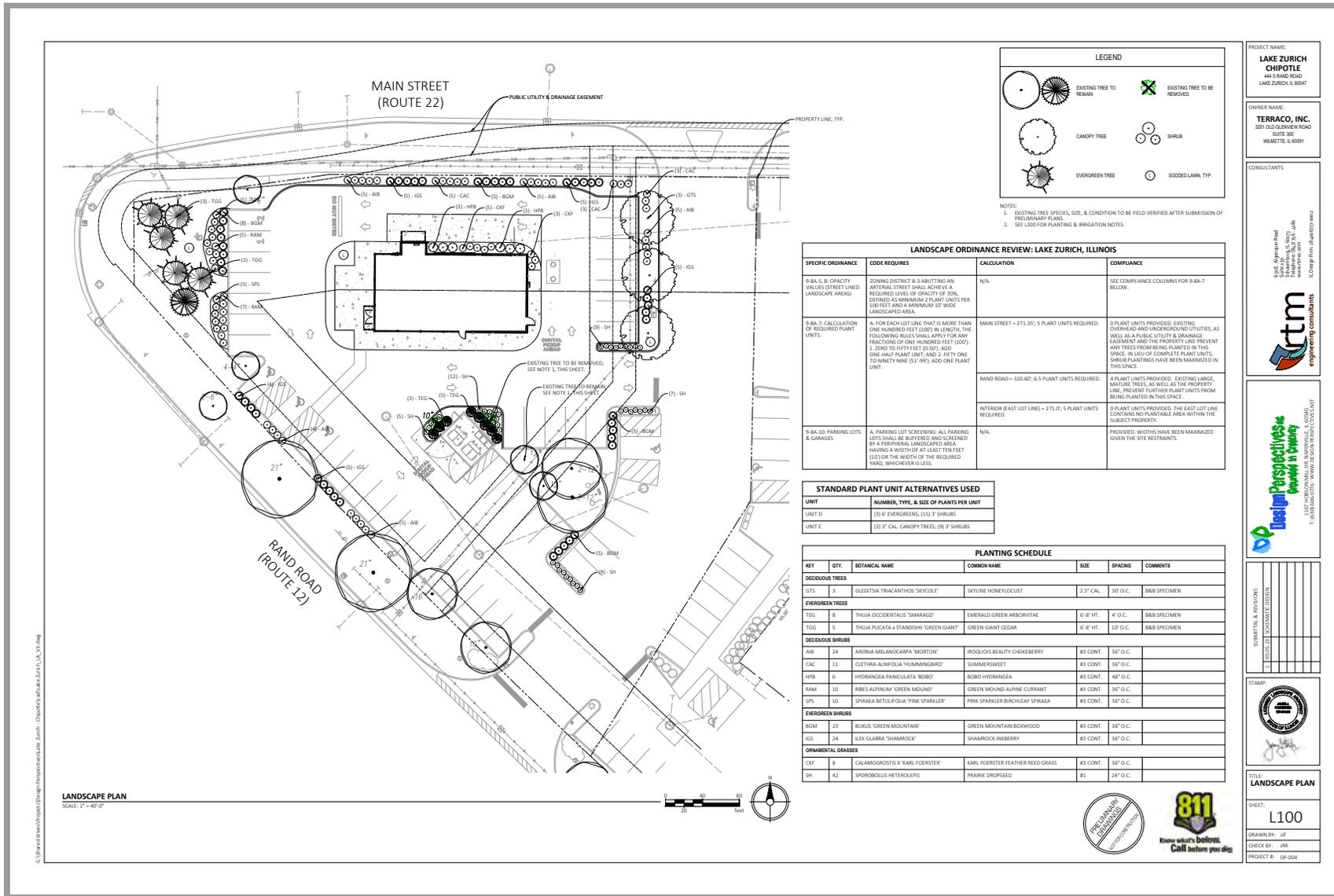
PROJECT NAME:
CHIPOTLE - LAKE ZURICH
 444 S. RAND ROAD

PROJECT NO.:
231TKK-C01
 SHEET NO.:
C0.0
 OF 5 SHEETS









LANDSCAPE PLAN
SCALE: 1" = 40' 0"

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LEGEND

- EXISTING TREE TO REMAIN
- CANOPY TREE
- EVERGREEN TREE
- EXISTING TREE TO BE REMOVED
- SHRUB
- SCOOPEO LAWN, TYP.

- NOTES:
- EXISTING TREE SPECIES, SIZE, & CONDITION TO BE FIELD VERIFIED AFTER SUBMISSION OF PRELIMINARY PLANS.
 - SEE L200 FOR PLANTING & IRRIGATION NOTES.

LANDSCAPE ORDINANCE REVIEW: LAKE ZURICH, ILLINOIS

SPECIFIC ORDINANCE	CODE REQUIRES	CALCULATION	COMPLIANCE
9-BA-5, B: OPACITY VALUES (STREET LINED LANDSCAPE AREAS)	ZONING DISTRICT 1-3 ABUTTING AN ARTERIAL STREET SHALL ACHIEVE A REQUIRED LEVEL OF OPACITY OF 50%, DEFINED AS MINIMUM 2 PLANT UNITS PER 100 FEET AND A MINIMUM 10' WIDE LANDSCAPED AREA.	N/A.	SEE COMPLIANCE COLUMNS FOR 9-BA-7 BELOW.
9-BA-7: CALCULATION OF REQUIRED PLANT UNITS	A. FOR EACH LOT LINE THAT IS MORE THAN ONE HUNDRED FEET (100') IN LENGTH, THE FOLLOWING RULES SHALL APPLY FOR ANY FRACTION OF ONE HUNDRED FEET (100'). 1. ZERO TO FIFTY FEET (0-50'): ADD ONE HALF PLANT UNIT. AND 2. FIFTY ONE TO NINETY NINE (51-99'): ADD ONE PLANT UNIT.	MAIN STREET = 271.35'; 5 PLANT UNITS REQUIRED. RAND ROAD = 335.80'; 6.5 PLANT UNITS REQUIRED. INTERIOR (EAST LOT LINE) = 271.0'; 5 PLANT UNITS REQUIRED.	5 PLANT UNITS PROVIDED. EXISTING OVERHEAD AND UNDERGROUND UTILITIES, AS WELL AS A PUBLIC UTILITY & DRAINAGE EASEMENT AND THE PROPERTY LINE PREVENT ANY TREES FROM BEING PLANTED IN THIS SPACE. IN LIEU OF COMPLETE PLANT UNITS, SHRUB PLANTINGS HAVE BEEN MAXIMIZED IN THIS SPACE. 4 PLANT UNITS PROVIDED. EXISTING LARGE MATING TREES AS WELL AS THE PROPERTY LINE, PREVENT FURTHER PLANT UNITS FROM BEING PLANTED IN THIS SPACE. 5 PLANT UNITS PROVIDED. THE EAST LOT LINE CONTAINS NO PLANTABLE AREA WITHIN THE SUBJECT PROPERTY.
9-BA-10: PARKING LOTS & GARAGES	A. PARKING LOT SCREENING: ALL PARKING LOTS SHALL BE BUFFERED AND SCREENED BY A PERIPHERAL LANDSCAPED AREA HAVING A WIDTH OF AT LEAST TEN FEET (10') OR THE WIDTH OF THE REQUIRED YARD, WHICHEVER IS LESS.	N/A.	PROVIDED. WIDTHS HAVE BEEN MAXIMIZED GIVEN THE SITE RESTRAINTS.

STANDARD PLANT UNIT ALTERNATIVES USED

UNIT	NUMBER, TYPE, & SIZE OF PLANTS PER UNIT
UNIT D	(1) 6' EVERGREEN, (15) 3' SHRUBS
UNIT E	(2) 3" CAL. CANOPY TREES, (9) 3' SHRUBS

PLANTING SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
DECIDUOUS TREES						
GTS	3	GLEDITSIA TRIACANTHOS 'SIGNOLE'	SKYLINE HONEYLOCUST	2.5" CAL.	30' O.C.	8/8 SPECIMEN
EVERGREEN TREES						
TEG	8	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	6' 8" HT.	4' O.C.	8/8 SPECIMEN
TGG	5	THUJA PLUCATA x STANDISHI 'GREEN GIANT'	GREEN GIANT CEDAR	6' 8" HT.	10' O.C.	8/8 SPECIMEN
DECIDUOUS SHRUBS						
AB	24	ARONIA MELANOCARPA 'MORTON'	RODGERS BEAUTY CHOKEBERRY	#3 CONT.	36" O.C.	
CAC	11	CLETHRA ALNFOLIA 'HUMMINGBIRD'	SUMMERSWEET	#3 CONT.	36" O.C.	
HPB	6	HYDRANGEA PANICULATA 'BOBO'	BOBO HYDRANGEA	#3 CONT.	48" O.C.	
RAM	10	RIBES ALPIMUM 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT	#3 CONT.	36" O.C.	
SPS	10	SPRAEA BETULIFOLIA 'PINK SPARKLER'	PINK SPARKLER BIRCHLEAF SPRAEA	#3 CONT.	36" O.C.	
EVERGREEN SHRUBS						
BCM	23	BUXUS 'GREEN MOUNTAIN'	GREEN MOUNTAIN BOXWOOD	#3 CONT.	36" O.C.	
ISS	24	ILEX GLABRA 'SHAMROCK'	SHAMROCK INEBERRY	#3 CONT.	36" O.C.	
ORNAMENTAL GRASSES						
CFK	8	CALAMAGROSTIS x 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#3 CONT.	36" O.C.	
SH	42	SPOROBOLUS HETEROLEPIS	RAIRIE DROPSSEED	#1	24" O.C.	

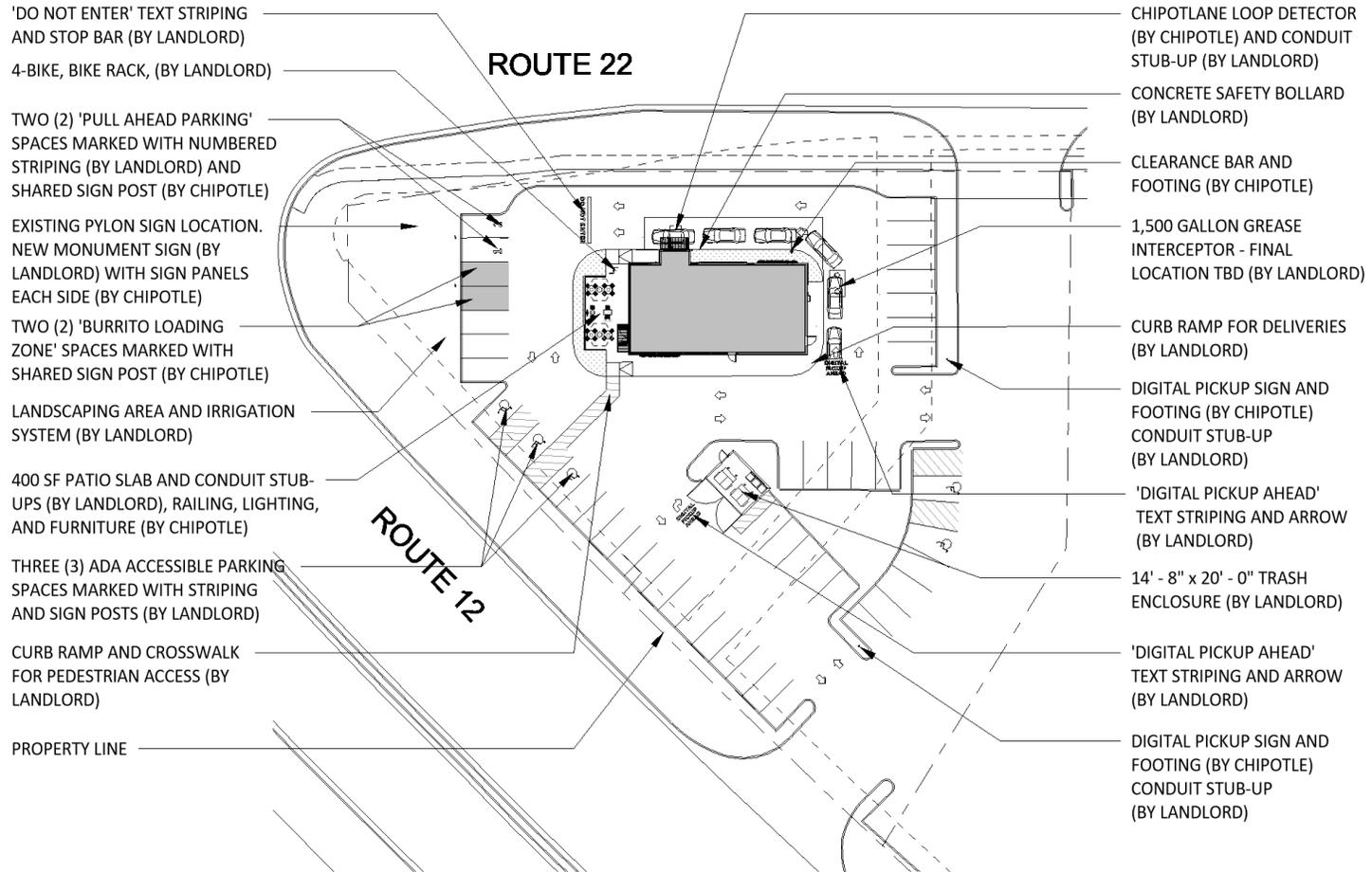
PROJECT NAME:
LAKE ZURICH CHIPOTLE
444 S RAND ROAD
LAKE ZURICH, IL 60047

OWNER NAME:
TERRACO, INC.
3201 OLD GLENVIEW ROAD
SUITE 300
WILMETTE, IL 60091

CONSULTANTS:

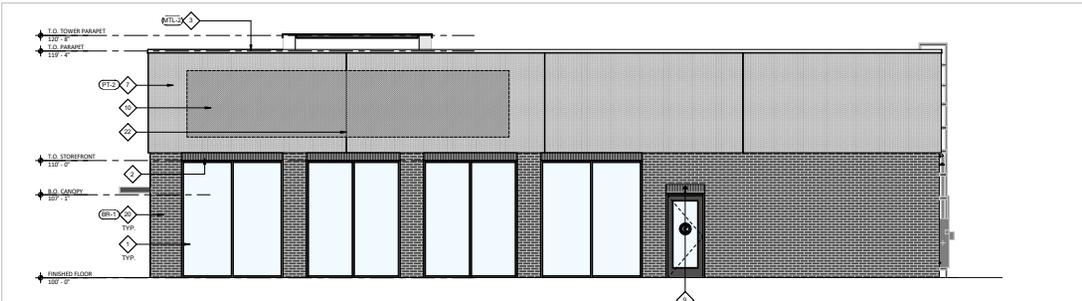
DATE: 1/17/2019
DRAWN BY: JRS
CHECK BY: JRS
PROJECT #: 09-004

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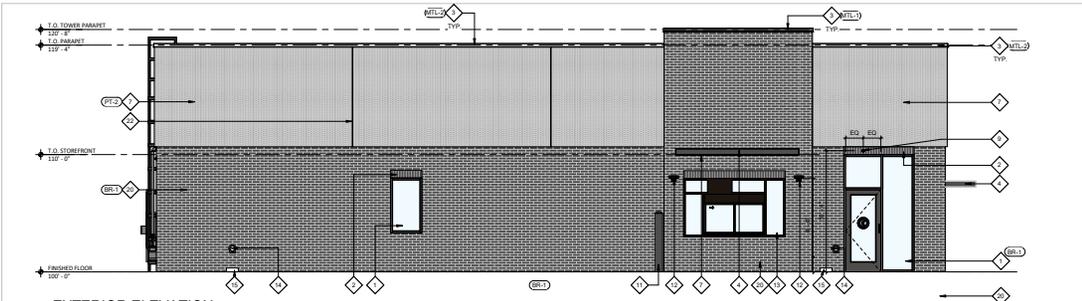


site plan

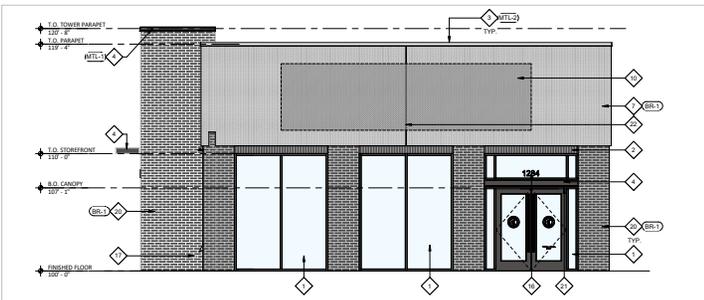
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Page 03



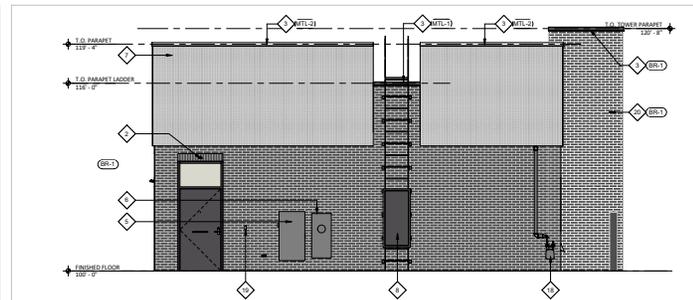
1 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



2 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



3 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



4 EXTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

EXT. ELEV GENERAL NOTES

METAL CANOPY IS AVAILABLE FROM AMERICAN PRODUCTS, INC. (API), PHONE: (815) 925-0244, E-MAIL: API@AMERICANPRO.COM

KEYNOTE LEGEND

- 1 THERMALLY BROKEN ANODIZED ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLAZING - CALLKt AROUND ENTIRE PERIMETER OF OPENING
- 2 FACE BRICK VENEER - SOLDIER COURSE
- 3 24 GAUGE PREFINISHED METAL COPING
- 4 PREFINISHED METAL CANOPY
- 5 ELECTRICAL FUSED DISCONNECT SWITCH
- 6 ELECTRICAL METER
- 7 STUCCO - REFER TO MANUFACTURER'S RECOMMENDATIONS FOR ADDITIONAL INFORMATION
- 8 EXTERIOR ROOF LADDER WITH LOCKING GATE
- 9 EXTERIOR EMERGENCY LIGHT (E2)
- 10 HATCHED AREA INDICATES EXTENTS OF BLOCKING TO BE PROVIDED BY GENERAL CONTRACTOR - PROVIDE ELECTRICAL ACCESS AS REQUIRED - COORDINATE ADDITIONAL REQUIREMENTS WITH TENANT SIGNAGE VENDOR
- 11 8" CONCRETE SAFETY BOLLARD - PAINT KNIGHTS ARMOR
- 12 WALL PACK LIGHT (E3)
- 13 PREFINISHED DARK BRONZE ALUMINUM PASS-THRU WINDOW WITH INTEGRATED INTERIOR AIR CURTAIN, TENSION AND SEALS - CALLKt AROUND ENTIRE PERIMETER OF OPENING
- 14 STAINLESS STEEL COIN TOUNGE OVERFLOW ROOF DRAIN DISCHARGE
- 15 CONCRETE SPLASH BLOCK
- 16 VINYL BUILDING ADDRESS NUMBERS - COORDINATE REQUIREMENTS WITH AUTHORITIES HAVING JURISDICTION
- 17 FROST PROOF WALL HYDRANT
- 18 GAS METER
- 19 DOOR BELL - MOUNT BETWEEN 36" AND 48" ABOVE GRADE
- 20 FACE BRICK VENEER - RUNNING BOND
- 21 LED CHANNEL LIGHT (E4) - 96" IN LENGTH
- 22 STUCCO JOINT - REFER TO MANUFACTURER'S RECOMMENDATION FOR BRACING REQUIREMENTS

EXTERIOR FINISH SCHEDULE

FINISH	MATERIAL	COLOR	REMARKS
BR-1	BRICK VENEER	VELOUR IRONSPOT MANGANESE	
MTL-1	PREFINISHED METAL COPING	PPG #1011-6 "KNIGHT'S ARMOR"	
MTL-2	PREFINISHED METAL COPING	PPG #1012-2 "FOSP"	TO MATCH ADJACENT FINISH
PF-1	PAINT	PPG #1011-6 "KNIGHT'S ARMOR"	SATIN FINISH
PF-2	PAINT	PPG #1012-2 "FOSP"	SATIN FINISH



TERRACO, INC.
3201 OLD GLENVIEW ROAD,
SUITE 300
WILMETTET, IL 60091
JOE GOODMAN
(847) 508-0223

"LAKE ZURICH, IL"
TENANT SHELL
BUILDING
FOR FLOOR 2 & SUITE 22
LAKE ZURICH, IL

NOT FOR CONSTRUCTION

PROJECT NO: 2022-0418
DRAWN BY: TDD
CHECKED BY: D CALDERON

ISSUE	DATE
EXTERIOR ELEVATIONS	04/28/2024

REVISION	DATE

PROJECT LOCATION:
LAKE ZURICH, IL
SHEET NUMBER:
A201
EXTERIOR ELEVATIONS

LOT 1 IN ROUTE 12 AND MAIN RESUBDIVISION, BEING A RESUBDIVISION OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 43 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 12, 2022 AS DOCUMENT [7926089](#), IN LAKE COUNTY, ILLINOIS.

CR W. MAIN STREET AND S. RAND RD. - LAKE ZURICH, IL



STREAMWOOD, IL



STREAMWOOD, IL



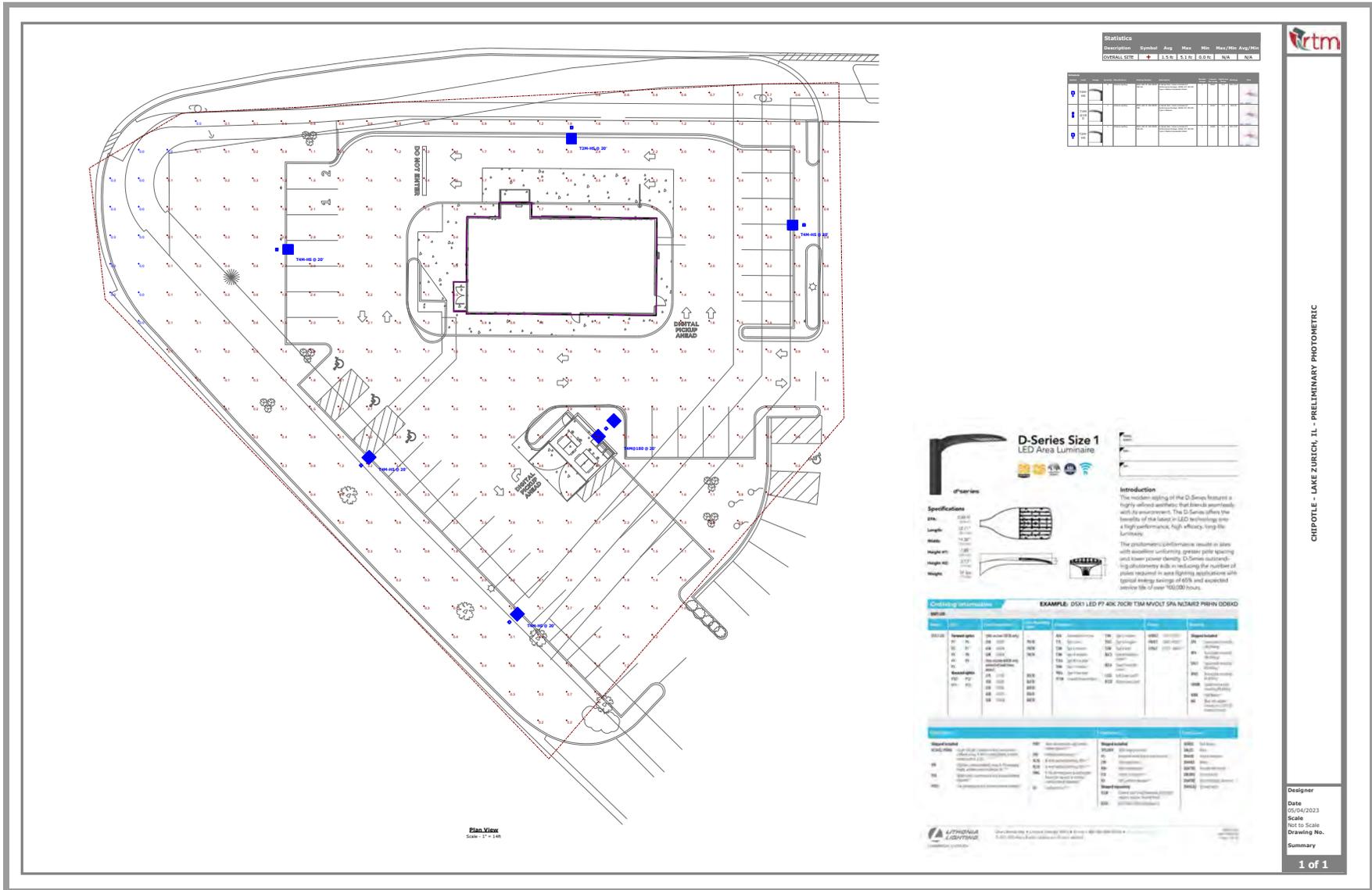
EIFS / METAL COPING:
PPG 1010-2 'FOG'

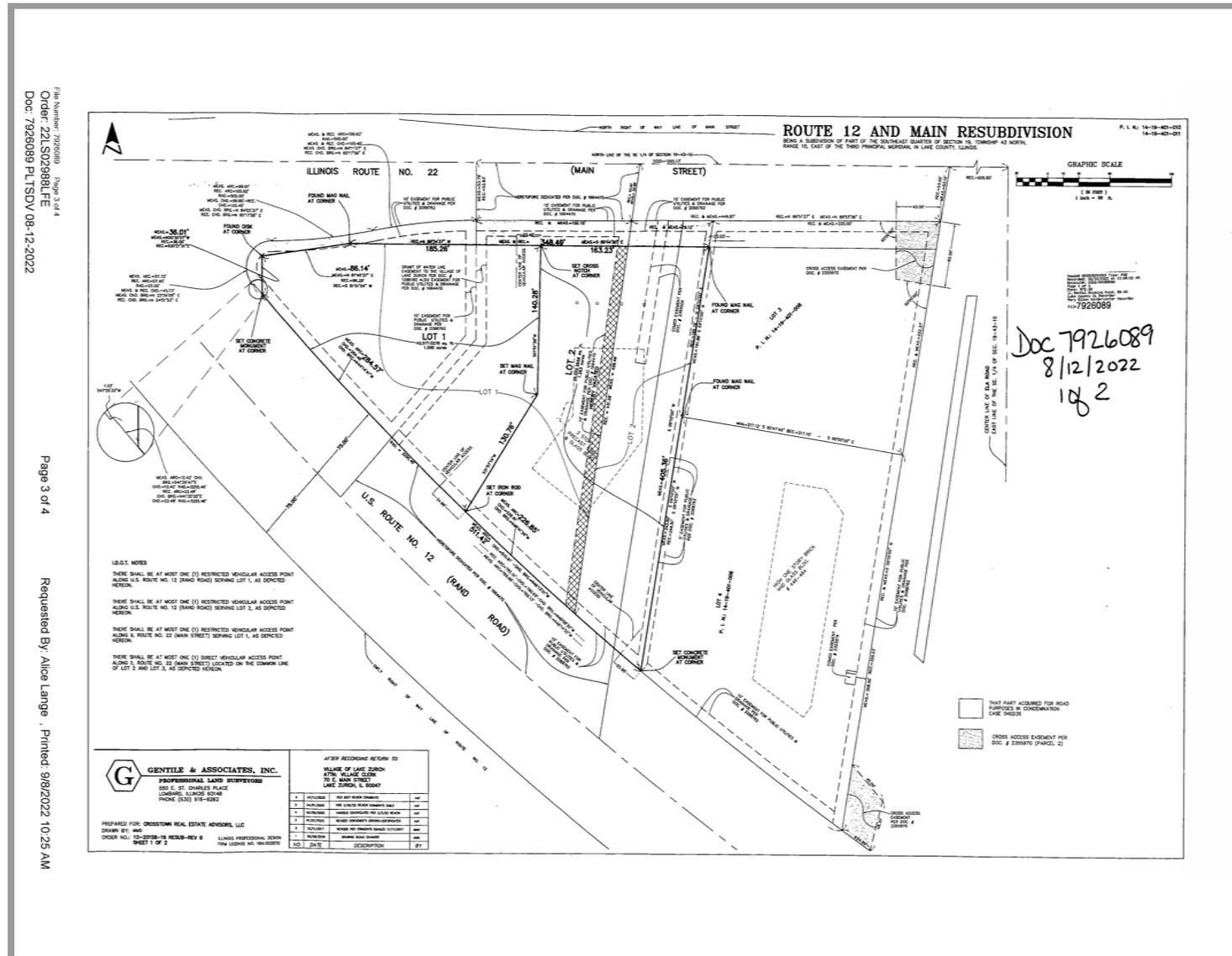


BRICK:
MANGANESE IRONSPOT,
VELOUR

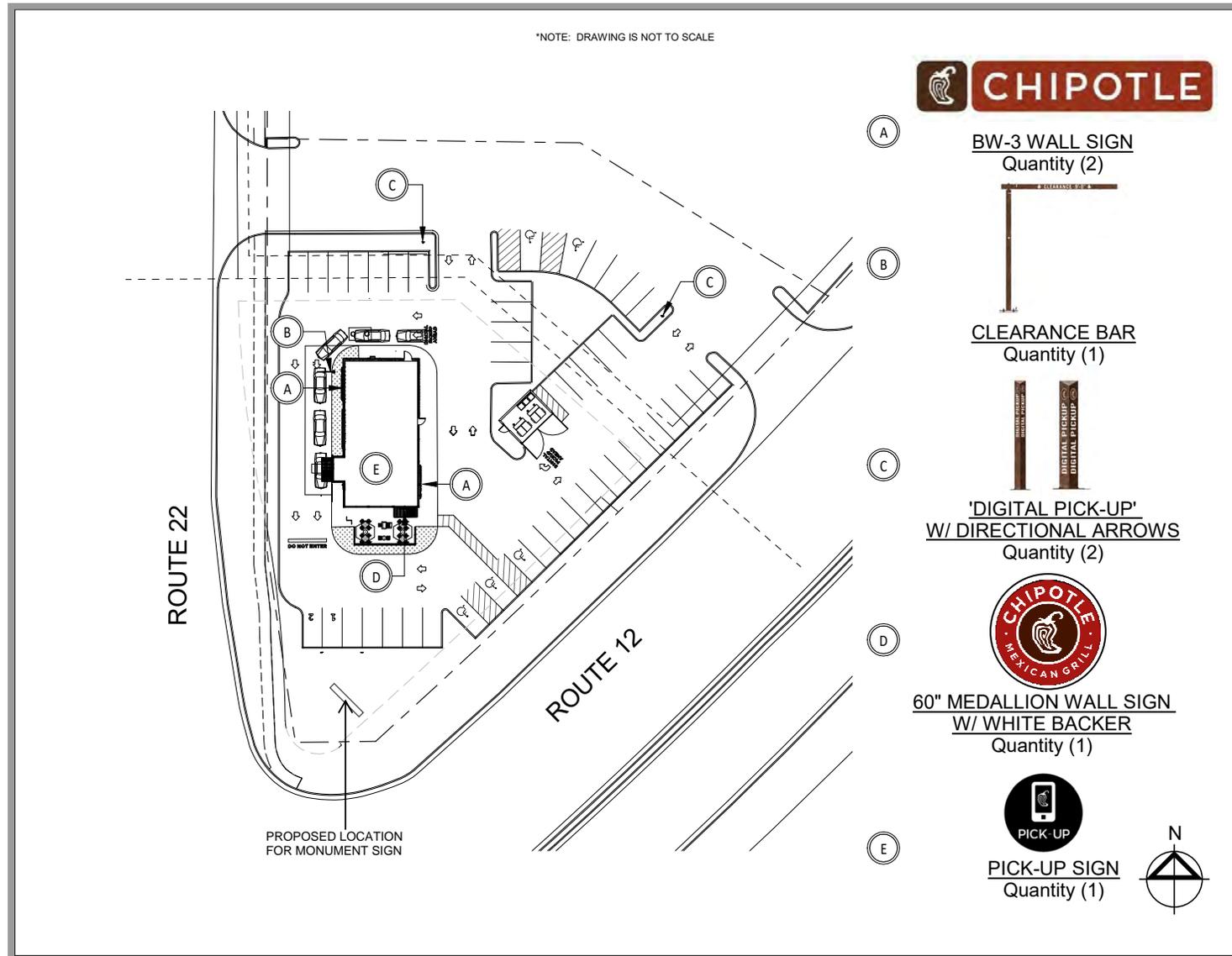


STOREFRONT:
ARCH-FAB 'CHARCOAL'



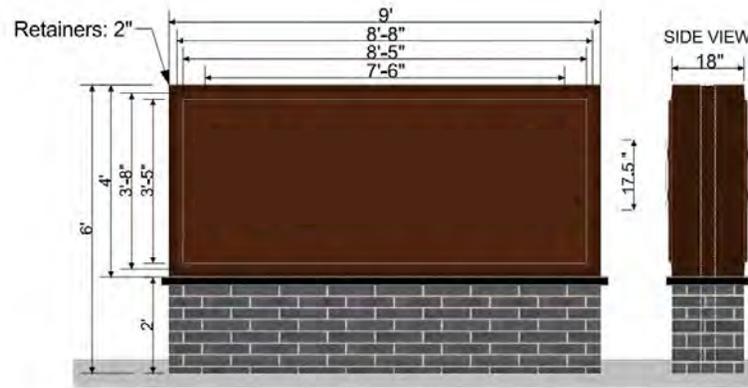


File Number: 7926089 Page 3 of 4
 Order: 221-SO2988LFE
 Doc: 7926089 PLTSDV 08-12-2022
 Page 3 of 4
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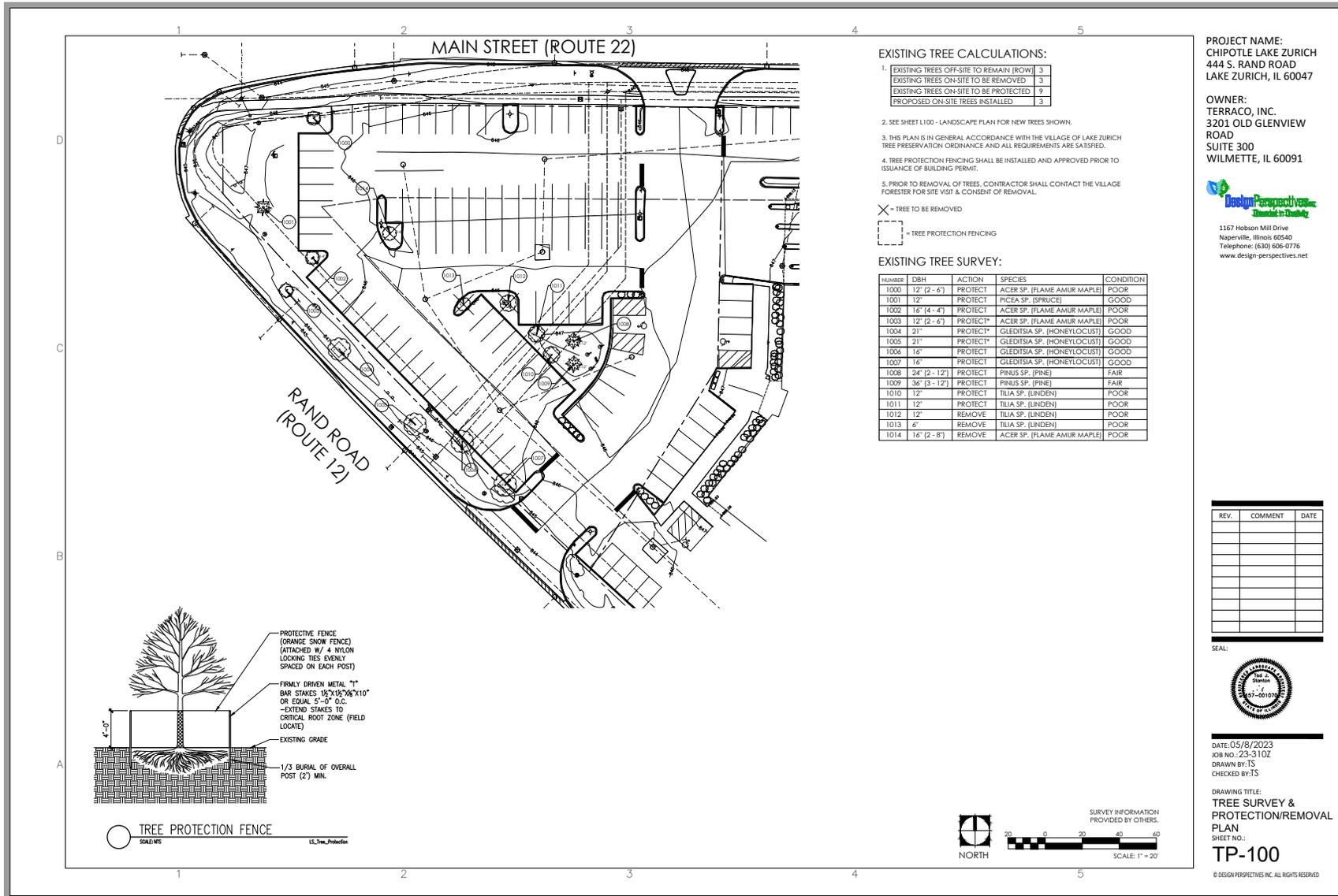


*NOTE: DRAWING IS NOT TO SCALE

EXTERIOR FINISH SCHEDULE			
FINISH	MATERIAL	COLOR	REMARKS
BR-1	4" BRICK VENEER	VELOUR IRONSPOT MAGANESE	



MONUMENT SIGN EXHIBIT
*SUBJECT TO CHANGE



CR W. MAIN STREET AND S. RAND RD. - LAKE ZURICH, IL



vicinity plan

04/28/2023
Page 01



9575 West Higgins Road, Suite 400 | Rosemont, Illinois 60018
p: 847-518-9990 | f: 847-518-9987

MEMORANDUM TO: Joe Goodman
Terraco, Inc.

FROM: Brendan S. May, PE, PTOE
Senior Consultant

Luay R. Aboona, PE, PTOE
Principal

DATE: May 23, 2023

SUBJECT: Parking Study
Proposed Chipotle Restaurant
Lake Zurich, Illinois

This memorandum summarizes the results of a parking study prepared by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed Chipotle restaurant to be located on an outlot parcel within the shopping center located in the southeast corner of the intersection of Main Street with Rand Road in Lake Zurich, Illinois. As proposed, the Chipotle restaurant will be approximately 2,370 square feet and will provide a pick-up lane (Chipotlane). The Chipotle will be located to the northwest corner of the site and will occupy a portion of the parking lot resulting in a net loss of 44 parking spaces located in the northwest corner of the shopping center.

The purpose of this study is to determine the existing parking demand generated by the shopping center and evaluate the adequacy of the existing parking supply in accommodating the parking needs of the proposed restaurant.

Existing Shopping Center Characteristics

The shopping center is located in the southeast quadrant of the intersection of West Main Street (IL Route 22) and South Rand Road (US Route 12). **Figure 1** shows an aerial view of the site in relation to the adjacent roadway system. The shopping center currently has approximately 52,188 square feet of commercial space and provides 262 parking spaces. As of May 2023, approximately 11,944 square feet are occupied with a mix of retail and restaurant uses, such as Orange Theory Fitness, D&J Bistro, Asurion Phone & Tech Repair and Shaggy Paws Pet Grooming. Approximately 40,244 square feet are occupied with office uses, such as Chase Bank, Robert Geraghty Country Financial and Re/Max Suburban – Lake Zurich. There is currently no vacant space within the shopping center.

KLOA, Inc. Transportation and Parking Planning Consultants



Site Location

Figure 1



Proposed Chipotle Characteristics

As proposed, the northwest corner of the shopping center will be redeveloped to provide an approximately 2,370 square foot Chipotle restaurant with a pick-up lane. The proposed Chipotle restaurant will provide 46 parking spaces and the pick-up lane will provide stacking for six vehicles. As a result of the proposed restaurant, approximately 44 parking spaces will be eliminated, resulting in a net parking supply of 218 parking spaces serving the shopping center. The restaurant will generally be open from approximately 11:00 A.M. to 10:00 P.M.

Existing Parking Demand

In order to determine the existing parking demand at the site, KLOA Inc. conducted parking surveys on Thursday and Saturday, May 18 and May 20, respectively from 11:00 A.M. to 8:00 P.M. in half-hour intervals. The results of the surveys are summarized in **Tables 1 and 2**. **Figure 2** shows the existing parking lots were broken down into the zones that were surveyed within the shopping plaza. The following is a description of the parking zones surveyed:

- Zone 1 is the surface parking lot serving the northwestern corner of the shopping center. This parking lot provides approximately 90 parking spaces. This parking lot serves a Chase Bank, Lake Zurich Dental Health, a RE/MAX, and other businesses.
- Zone 2 is the surface parking lot serving the center of the north and south sides of the building containing Chase Bank. This parking lot provides approximately 74 parking spaces. This parking lot serves the same businesses as Zone 1.
- Zone 3 is the surface parking lot serving the building in the southeastern corner of the shopping center. This parking lot provides approximately 98 parking spaces. This parking lot serves a D&J Bistro restaurant, an Asurion Phone & Tech Repair business, and other commercial uses.

Furthermore, to the northeast of the subject shopping center is a commercial building that contains Consume restaurant and Stephens Dentistry. Given that this retail building shares access and is in close proximity of the subject shopping center, the parking lot serving this building was included in the parking occupancy surveys. This parking lot provides approximately 39 parking spaces and serves Consume restaurant and Stephens Dentistry and ATI Physical Therapy.

The following summarizes the results of the parking occupancy surveys for the study area:

- On Thursday, the peak parking demand for the study area was 76 vehicles, occurring at approximately 11:30 A.M. This equates to an occupancy of approximately 25 percent.
- On Saturday, the peak parking demand for the study area was 104 vehicles, occurring at approximately 6:30 P.M. This equates to an occupancy of approximately 35 percent.
- Looking specifically at Lot 1, the peak parking demand on Thursday was 17 vehicles, occurring at 12:30 P.M. This equates to an occupancy of approximately 19 percent.
- Looking specifically at Lot 1, the peak parking demand on Saturday was 10 vehicles occurring between 11:00 A.M. and 12:00 P.M. This equates to an occupancy of approximately 11 percent.



Aerial View of Parking Locations

Figure 2



Table 1
 PARKING OCCUPANCY RESULTS – THURSDAY, MAY 18, 2023

Time	Lot 1	Lot 2	Lot 3	Lot 4	Total
11:00 AM	14	38	20	20	72
11:30 AM	15	42	19	19	76
12:00 PM	16	40	29	18	74
12:30 PM	17	34	27	15	66
1:00 PM	13	33	19	14	60
1:30 PM	11	32	18	16	59
2:00 PM	13	36	17	16	65
2:30 PM	15	35	19	18	68
3:00 PM	14	32	20	20	66
3:30 PM	16	38	19	19	73
4:00 PM	15	36	26	24	75
4:30 PM	13	31	32	26	70
5:00 PM	12	29	44	31	72
5:30 PM	5	22	49	30	57
6:00 PM	3	10	55	19	32
6:30 PM	0	13	59	18	31
7:00 PM	0	18	53	18	36
7:30 PM	1	16	50	23	40
8:00 PM	0	12	44	19	31
Inventory	90	74	98	39	301
Percent Occupied at Peak Hour	19%	57%	60%	79%	25%

Table 2
PARKING OCCUPANCY RESULTS – SATURDAY, MAY 20, 2023

Time	Lot 1	Lot 2	Lot 3	Lot 4	Total
11:00 AM	10	22	28	12	72
11:30 AM	10	21	14	12	57
12:00 PM	10	22	10	20	62
12:30 PM	9	18	11	28	66
1:00 PM	7	23	12	29	71
1:30 PM	5	16	13	27	61
2:00 PM	4	14	16	23	57
2:30 PM	0	1	17	20	38
3:00 PM	0	1	17	15	33
3:30 PM	0	2	17	8	27
4:00 PM	0	2	23	9	34
4:30 PM	0	0	27	9	36
5:00 PM	0	1	32	7	40
5:30 PM	0	3	51	12	66
6:00 PM	0	5	63	18	86
6:30 PM	0	11	76	17	104
7:00 PM	0	12	69	15	96
7:30 PM	0	10	64	17	91
8:00 PM	0	8	55	16	79
Inventory	90	74	98	39	301
Percent Occupied at Peak Hour	11%	31%	78%	74%	35%

Estimated Chipotle Parking Demand

Based on the zoning ordinances in the Village of Lake Zurich Code of Ordinances, the parking requirements for the proposed 2,370 square-foot chipotle restaurant is one parking space per 200 square feet. Using these requirements, the proposed Chipotle will be required to provide 12 parking spaces. Based on the Institute of Transportation Engineers (ITE) *Parking Generation Manual*, 5th Edition, for land use code 930 “Fast Casual Restaurant”, the proposed Chipotle will have a peak parking demand of 24 spaces on a weekday and 21 spaces on a Saturday. As such, in order to provide a conservative analysis, the estimated peak parking demand based on the information published by ITE will be utilized as the estimated peak parking demand of the proposed Chipotle restaurant. This parking was distributed hourly based on information provided by ITE for the corresponding land-use code.

Table 3 shows the hourly distribution for the existing parking demand, the Chipotle generated parking demand and the total projected parking demand for a weekday. **Table 4** shows the hourly distribution for the existing parking demand, the Chipotle generated parking demand, and the total projected parking demand for Saturday. As can be seen from Tables 3 and 4, the peak occupancy for the study area will be as follows:

- On Thursday, the peak parking demand for the study area will be 98 vehicles, occurring at 12:00 P.M. This equates to an occupancy of approximately 38 percent.
- On Saturday, the peak parking demand for the study area was 123 vehicles, occurring at 6:30 P.M. This equates to an occupancy of approximately 48 percent.

Overall, the projected peak parking demand of Chipotle can be accommodated within the proposed 46 parking spaces that will be provided on Lot 1. Furthermore, given that the portion of the parking lot surrounding the proposed Chipotle has a peak parking demand of 17 spaces on a weekday and 10 spaces on a Saturday, the projected parking demand for Lot 1 can be accommodated within the 46 parking spaces proposed to be provided on Lot 1.

Conclusion

Based on the preceding parking evaluation, the following conclusions have been made:

- The subject site currently provides 90 parking spaces. The proposed Chipotle will result in the loss of 44 parking spaces resulting in a projected parking inventory of 46 spaces.
- Based on observations of the parking lot with the current occupancy of the study area, the projected peak parking demand was estimated at 123 vehicles, occurring at 6:30 P.M. on Saturday. This parking demand is accommodated via the existing parking spaces, with approximately 48 percent occupancy.
- The proposed 46 parking spaces proposed within the vicinity of the Chipotle restaurant will be adequate in accommodating the estimated Chipotle parking demand and the existing parking demand for vehicles parked within the subject site.

Table 3
TOTAL PROJECTED PARKING DEMAND - WEEKDAY

Time	Existing Parking Demand	Chipotle Parking Demand	Total Projected Parking Demand
11:00 A.M	72	4	76
11:30 A.M	76	4	80
12:00 P.M	74	24	98
12:30 P.M	66	24	90
1:00 P.M	60	18	78
1:30 P.M	59	18	77
2:00 P.M	65	11	76
2:30 P.M	68	11	79
3:00 P.M	66	7	73
3:30 P.M	73	7	80
4:00 P.M	75	6	81
4:30 P.M	70	6	76
5:00 P.M	72	12	84
5:30 P.M	57	12	69
6:00 P.M	32	19	51
6:30 P.M	31	19	50
7:00 P.M	36	17	53
7:30 P.M	40	17	57
8:00 P.M	31	7	38
Inventory			257
Percent Occupied at Peak			38%

Table 4
TOTAL PROJECTED PARKING DEMAND – SATURDAY

Time	Existing Parking Demand	Chipotle Parking Demand	Total Projected Parking Demand
11:00 A.M	72	6	78
11:30 A.M	57	6	63
12:00 P.M	62	15	77
12:30 P.M	66	15	81
1:00 P.M	71	17	88
1:30 P.M	61	17	78
2:00 P.M	57	21	78
2:30 P.M	38	21	59
3:00 P.M	33	12	45
3:30 P.M	27	12	39
4:00 P.M	34	9	43
4:30 P.M	36	9	45
5:00 P.M	40	13	53
5:30 P.M	66	13	79
6:00 P.M	86	19	105
6:30 P.M	104	19	123
7:00 P.M	96	11	107
7:30 P.M	91	11	102
8:00 P.M	79	9	88
Inventory			257
Percent Occupied at Peak			48%



June 15, 2023

Mr. Tim Verbeke
 Village of Lake Zurich
 505 Telser Road
 Lake Zurich, Illinois 60047

Re: PR23-093
 442 S. Rand Road
 Chipotle Engineering Review #1
 Lake Zurich, IL 60047
 Site Plan

Thank you for your review of the above-referenced project. Please see our responses below in **bold** following each of your review comments.

1. The address they are proposing is 444, the same as the bank building. The new building will need a different address number to avoid confusion in an emergency!

Response: Understood, a new address will be used.

2. The building will require a sprinkler riser room facing the parking lot and not in the drive-through lane.

Response: Acknowledged. Please refer to updated elevations and shell plan in this submittal, which now includes a fire sprinkler room, located on the south elevation.

3. The curb cut radius on each entrance will need to be increased for truck access.

Response: Per the Truck Turning Exhibits included with this submittal, the proposed and existing radii appropriately accommodate the garbage trucks, the aerial fire trucks and the delivery trucks.

4. Provide an aerial fire truck turning template turning into the lot from both entrances.

Response: The aerial fire truck turning templates into the lot from both entrances are included in the Truck Turning Exhibits that are included with this submittal.

5. How will the cars that are parked in the stacking area of the drive-through back up without hitting another vehicle?

Response: The parking area adjacent to the drive-thru has been shifted east and revised to angled parking to allow for a proper width drive aisle along separated from the drive-thru lane. This is now shown on the revised site plan included in this submittal.

National Resources, Local Relationships

Schaumburg, IL | Belleville, IL | Chicago, IL | Dallas, TX | Davenport, IA | Denver, CO | Evansville, IN | Irvine, CA
 Laguna Woods, CA | Milwaukee, WI | Newport Beach, CA | Orlando, FL | Overland Park, KS | Palm Springs, CA
 Seattle, WA | Springfield, IL | Springfield, MO | St. Louis, MO

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6. If public works approves, provide a fire hydrant in the grass area to the east of the trash enclosure.

Response: If approved by public works, tis fire hydrant will be provided accordingly.

Thank you in advance for your review of the enclosed documents. Please do not hesitate to contact our office with any questions, comments, or concerns, or if you should require any additional information.

Sincerely,
RTM Engineering Consultants, LLC.

A handwritten signature in black ink, appearing to read 'Scott DiGilio'.

Scott DiGilio, P.E.
Principal



June 15, 2023

Mr. Sarosh Saher
 Director of Community Development
 Village of Lake Zurich
 505 Telser Road
 Lake Zurich, Illinois 60047

Re: Preliminary Engineering Review #1
 Preliminary Utility Review #1
 442 S. Rand Road
 Chipotle Engineering Review #1
 Lake Zurich, IL 60047

Dear Sarosh,

Thank you for your review of the above-referenced project. Please see our responses below in **bold** following each of your review comments.

General

- 1) Please clarify the address. Village records indicate the address is 442 S Rand Road.
Response: Address is being revised accordingly.
- 2) Please include dates on future submittals for tracking purposes.
Response: Dates have been added accordingly.
- 3) The queue line for drive through service should always be on the property. Lines for drive through service should never extend into the cross access and parking easement.
Response: The parking area adjacent to the drive-thru has been shifted east and revised to angled parking to allow for a proper width drive aisle along separated from the drive-thru lane. This is now shown on the revised site plan included in this submittal.
- 4) We request that the Applicant address all comments in a response letter and submit the appropriate revisions for further review and final approval by the Village.
Response: Understood and being compiled to with this submittal.
- 5) The developer is required to provide verification and/or submit documentation of approval or sign off letters from all agencies other than the Village of Lake Zurich that exercise jurisdiction over this development (for example IDOT, IEPA, SMC. Please submit a copy of all approvals received to-date and list any approvals pending in the response letter, including but not limited to:
Response: Permits will be required and obtained from IDOT and Lake County Public Works during the final engineering phase of this project.

National Resources, Local Relationships

Schaumburg, IL | Belleville, IL | Chicago, IL | Dallas, TX | Davenport, IA | Denver, CO | Evansville, IN | Irvine, CA
 Laguna Woods, CA | Milwaukee, WI | Newport Beach, CA | Orlando, FL | Overland Park, KS | Palm Springs, CA
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- 6) It is the property owner's responsibility to ensure compliance with the 2010 ADA standards for Accessible Design and the Illinois Accessibility Code and subsequent amendments.
Response: Understood and will be in compliance accordingly.
- 7) An Engineer's Opinion of Probable Cost (EOPC) has been submitted for the proposed site improvements.
Response: Noted
- 8) An AutoTurn exhibit should be provided to confirm maneuverability of fire and garbage trucks on the site. The Fire Department should confirm that the AutoTurn movements are adequate for their operations.
Response: Truck Turning Exhibits are included with this submittal for aerial fire trucks, garbage trucks and delivery trucks.
- 9) A traffic study is required to evaluate the potential impacts the proposed development may have on the adjacent highways and area.
Response: Please refer to the Traffic Impact Study included in this submittal. A parking Impact study was also provided.

There are two existing vehicular access points to the site, both right-in / right-out only, as left-turns (one driveway off W. Main Street and one driveway off Rand Road). Both also provide access to the Village Square shopping center. Chipotle is proposing to keep both existing driveways into the site, and not modify any curbs. There is existing pedestrian access along W. Main Street.

Our current site has access directly from Rand Road, which has several major shopping centers along both sides, which was strategically designed to carry higher traffic volumes. Rand Road also provides three through lanes in each direction.

We see Chipotle as a "supportive use" to the community, as customers are already on the road coming to this area for other things, such as Costco, Home Depot, and Target – all of which are much larger draws than Chipotle – so Chipotle will not increase the traffic flow. This site was picked by Chipotle to help support the community of Lake Zurich, so our customers would not have to travel far. Chipotle has looked at their internal database and assessed the customer frequencies for all nearby Chipotles (listed below), and those customer numbers have already been accounted for in the proposal of this site.

Nearby Chipotle restaurants this proposed location are:

3.7 mi (6min)	20505 Rand Rd, Suite 400, Kildeer IL – NO Chipotlane
6.0 mi (11min)	781 E. Dundee Rd. Palatine, IL 60074 – YES Chipotlane
10.6 mi (19min)	5006 NW Hwy St A., Crystal Lake, IL 60014 – NO Chipotlane

- 10) Lake Zurich Details should be included in the plans with nonapplicable details crossed out.
Response: The Lake Zurich details will be added accordingly with the next submittal of Final Engineering Plans.
- 11) The Village of Lake Zurich and Manhard Consulting shall be listed as additionally insured during construction.



Response: Understood and will be added in the specifications with the next submittal of Final Engineering Plans.

Boundary and Topographic Survey

- 12) Please revise easement alignment for water main through the site so that it is centered within the 20' easement. The centerline of the water main is currently shown 2.5' from the easement line. If it is aligned this way, repair work would likely occur outside of the easement.

Response: This easement will be revised accordingly once the during the final engineering phase of this project.

Sheet C 1.0 Demolition and Removal Plan

- 13) The storm sewer being removed and replaced is tied to existing storm sewer. What are the upstream off-site implications while the storm sewer line is being replaced?

Response: The proposed storm sewer will be constructed prior to any existing storm sewer removal. Once the proposed storm sewer is activated, the existing storm sewer can then be removed causing no disruption of any upstream off-site storm sewers.

- 14) It is recommended that the entire parking lot be removed and replaced or at least the HMA surface course be milled. Unnecessary cold joints may reduce the lifespan of the proposed pavement.

Response: The existing on-site pavement to remain is now called out for the surface course to be milled and overlaid as shown on the Site Geometric Plan included with this submittal.

- 15) It appears the on site sidewalk, driveway apron, and offsite sidewalk are hatched to be removed. Please clarify if this is indeed the intention.

Response: The existing concrete hatch was mislabeled in the legend. This hatch was intended to be existing concrete to remain. This has been corrected on the Site Geometric Plan included with this submittal.

Sheet C 2.0 Geometric Plan

- 16) Please submit pavement cross sections with structural numbers meeting the Lake Zurich commercial parking lot development ordinance section 10-6-20.

Response: These will be included in our next submittal of Final Engineering Plans.

- 17) The proposed driveway apron has PCC Sidewalk hatching. Is the intent to remove and replace the driveway? If so, IDOT commercial driveway detail shall be applicable in its design and construction.

Response: The existing concrete hatch for this driveway apron was mislabeled in the legend. This hatch was intended to be existing concrete to remain. Therefore, no IDOT commercial detail is required since this driveway apron is not being replaced. The hatching label has been corrected on the Site Geometric Plan included with this submittal.



18) The heavy-duty pavement strip patch shown on the NE drive lane shall be a consistent width with a minimum 2' wide so that a plate compactor may compact the asphalt layers constructed.

Response: This pavement strip has been widened accordingly as shown on the Site Geometric Plan included with this submittal.

19) The heavy-duty pavement should extend to all areas that the garbage truck is anticipated to drive over. This should be confirmed by the AutoTurn exhibit.

Response: The heavy-duty pavement has been extended to include the areas of the truck routes per the Truck Turning Exhibits and as shown on the Site Geometric Plan all included with this submittal.

Sheet C3.0 Utility Plan

20) Sanitary sewer connection is proposed in IDOT ROW. An IDOT permit will be needed prior to this work being performed.

Response: Understood.

21) The sanitary monitoring manhole shall be located less than 10' from the building.

Response: This will be revised accordingly with the next submittal of Final Engineering Plans.

22) Sanitary sewer invert changes greater than 1' shall be constructed with external drops per the Lake Zurich Details.

Response: Typically, this requirement is 2'. If 1' is the requirement, this will be revised accordingly with the next submittal of Final Engineering Plans.

23) Sanitary services shall be minimum 6" SDR 26 PVC.

Response: Understood and will be revised with the next submittal of Final Engineering Plans.

24) Storm sewer crossings over the water service shall maintain a vertical clearance of 18". The storm sewer should be constructed of water main quality pipe for 10' either side of the water service crossing.

Response: Understood. The storm sewer will be designed with watermain quality pipes per IEPA requirements for these crossings with the next submittal of Final Engineering Plans.

25) All utility trenches within 2' of any structural curbs, pavements, buildings etc. shall be backfilled with CA-6 trench backfill per applicable Lake Zurich ordinances.

Response: Understood. This will be included in the specifications accordingly with the next submittal of Final Engineering Plans

26) Village preference is for watermain connections to be performed by pressure connections.

Response: A pressure connection will be included with the next submittal of Final Engineering Plans.

27) Contractor to contact Public Works 48 hours in advance when scheduling water service disconnect or water service interruption for possible conflict adjustments.

Response: Understood. This will be included in the specifications with the next submittal of Final Engineering Plans.



- 28) Per Ordinance 11-1-8 roof drainage shall be accomplished by downspouts splashing at grade and not tie directly into the storm sewer. Depending on the proposed roof material, this may be waived by the Village.
Response: We are requesting this requirement be waived by the Village. If disconnected from the storm sewer, the roof drains will shoot water unsafely at cars in the pick-up lane from the force of water due to the head on these roof drains.
- 29) If waived, 6" roof drains shall be tied into structure to avoid blind connections into pipes.
Response: If waived, structures will be added accordingly to eliminate blind connections.
- 30) Connection fees will be determined by domestic service size requirement. This size should be determined by WSFU calculations.
Response: Noted
- 31) A Plumber riser diagram shall be submitted. RPZ backflow prevention is required on both the domestic and fire suppression sides of the water service.
Response: Acknowledged. The Plumber riser diagram will be provided in the final construction drawings.
- 32) RPZ's shall each have their own dedicated floor drain.
Response: Acknowledged. This will be addressed and shown in the final construction drawings.
- 33) RPZs shall be tested on an annual basis and results remitted to the Village of Lake Zurich.
Response: Acknowledged. This information will be passed along.
- 34) Plans must be submitted to Lake County for their assessment of their sewer connection fee.
Response: Understood
- 35) A ½-inch conduit for the exterior remote reader wire must be installed. Conduit needs to be within 18-inches of the meter and terminate flush on the exterior side wall.
Response: Acknowledged. This will be addressed and shown in the final construction drawings.
- Village shall be present for all crossings of existing water, storm, or sanitary mains.
Response: Noted and will be included in the specifications with the next submittal of Final Engineering Plans.
- 36) A full diameter flush and chlorination of the service is required. Water service will require Village to operate valve to fill.
Response: Noted and will be included in the specifications with the next submittal of Final Engineering Plans.
- 37) Village shall be contacted a minimum 48 hours in advance of any requested water valve operation.
Response: Noted and will be included in the specifications with the next submittal of Final Engineering Plans.



38) Curb and gutter is shown on easement line, water main is not centered in easement. A water main break may affect the curb and gutter where shown. It is recommended that curb and gutter be installed minimum 4' away from the centerline of the water main. It is currently offset by ~3'.

Response: The curb and gutter along the east parking row has been relocated east to provide the minimum 4' separation from the existing watermain as shown on the Site Geometric Plan included with this submittal.

Sheet C4.0 Grading Plan

39) It is unclear based on the removal plan and geometric plan whether the existing sidewalk is proposed to be removed and replaced. If the existing sidewalk is to remain it appears to have non-compliant cross slopes and curb ramp. It is the developer's responsibility to upgrade the non-compliant sidewalk and construct new sidewalk along the frontage of S Rand Road.

Response: The only public sidewalk exists on Main Street (Rt. 22). The existing concrete hatch for this sidewalk was mislabeled in legend. This hatch was intended to be existing concrete to remain. The hatching label has been corrected on the Site Geometric Plan included with this submittal. It appears this sidewalk meets ADA slope requirements and therefore is not proposed to be replaced. If any areas are found to be non-compliant, this can be revised accordingly during the Final Engineering phase of this project.

40) It is unclear where stormwater will drain on the west side of the building where pavement parking stalls match existing. Please clarify with drainage arrows or ridge lines where storm water is proposed to drain.

Response: This area will be regraded to properly drain with the next submittal of Final Engineering Plans.

41) Parking lots and curbs should be designed to drain at minimum 1%. 0.5% should be considered the absolute minimum.

Response: Noted. This will be revised accordingly with the next submittal of Final Engineering Plans.

42) Any portions of reverse pitched curb should be identified on the plan.

Response: Noted. This will be revised accordingly with the next submittal of Final Engineering Plans.

43) The applicant should confirm that all existing handicap stalls to remain meet current ADA standards and are sloped less than 2% in every direction.

Response: Understood, agree and confirmed that slopes meet ADA standards.

44) A curb ramp for deliveries is denoted on the architectural site plan exhibit, however the grading plan does not appear to show a depressed ramp at the southeast corner of the building.



Response: This curb ramp has been added accordingly as shown on the Site Geometric Plan included with this submittal.

Stormwater Management

45) It appears that the proposed development will be classified as a "Minor Development" per the WDO. The stormwater narrative and plan should include the items listed in 400.04, including all overland flow paths and storm sewer calculations (inlet capacity, ponding depth, storm sewer sizing, etc.) that show conformance with Sections 506.01 and 506.03.

Response: Understood. These items will be included with the next submittal of Final Engineering Plans.

46) Per Section 300.06, redevelopment of previously developed sites shall maintain existing storage volume and shall not increase the rate of runoff from the site. The applicant shall provide supporting data and calculations to ensure the site design either provides a watershed benefit and there is adequate downstream capacity. The submittal should, at a minimum, include quantitative calculations, delineation of existing and proposed tributary areas for the points of discharge, comparison of existing and proposed runoff rates, location of overland flow routes, inlet capacity and ponding depth for storm sewer inlets, etc. It should be confirmed that the redirection of flow to the storm sewer will not impact the downstream storm sewer.

Response: This information and calculations will be provided during the final engineering phase of this project.

Thank you in advance for your review of the enclosed documents. Please do not hesitate to contact our office with any questions, comments, or concerns, or if you should require any additional information.

Sincerely,
RTM Engineering Consultants, LLC.

A handwritten signature in black ink, appearing to read 'Scott DiGilio'.

Scott DiGilio, P.E.
Principal



June 15, 2023

Mr. Tim Verbeke
 Community Development Department
 Building and Zoning Division
 505 Telser Road
 Lake Zurich, Illinois 60047

Re: Zoning Review
 442 S. Rand Road
 Chipotle Engineering Review #1
 Lake Zurich, IL 60047

Thank you for your review of the above-referenced project. Please see our responses below in **bold** following each of your review comments.

Modification requested through the PUD:

- Outdoor dining/seating
- Drive-thru
- Setback along Route 22 to be 29 feet
- Reduction in parking spaces
- Reduction in plant unit count

Zoning:

- 1) B-3 Regional Shopping Business District only the zoning lot along Route 22 would require a setback variance or modification. The encroachment into the Rand Road/Route 22 setback would be allowable due to precedent set along Rand Road and Route 22.

Response: Acknowledged. This is the variance we are applying for.

- 2) Minimum Yards Per Code for B-3:
 - Route 22 (Main Street): 50 Feet – Requesting 29 Feet

Response: When designing our site and configuration of the Chipotle design, we considered the prototypical store design (which is immediately recognizable to our consumers) and the size and irregular shape of our site. We considered street access, and prioritized keeping and reusing existing conditions, such as the entrance and exit points. We needed to design a safe onsite traffic flow and ensure fast and efficient service. We also paid attention to other existing conditions, and a large one was the utility easement. This led to our drive-thru and bypass lane to be on the north end of our property, and ultimately bringing our building closer to that property line as well. With this design, we are able to avoid potential queuing problems and bottlenecks and really provide the ability of vehicles to maneuver around the site, ensuring smooth traffic circulation.

National Resources, Local Relationships

Schaumburg, IL | Belleville, IL | Chicago, IL | Dallas, TX | Davenport, IA | Denver, CO | Evansville, IN | Irvine, CA
 Laguna Woods, CA | Milwaukee, WI | Newport Beach, CA | Orlando, FL | Overland Park, KS | Palm Springs, CA
 Seattle, WA | Springfield, IL | Springfield, MO | St. Louis, MO

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Use: Drive Thru – Eating and drinking places.

Response: Correct. We are a Quick-Serve Restaurant, also proposing outdoor seasonal dining, which will be protected by patio railings (fixed). Please refer to the Site Plan included in this submittal for layout.

Current Parking:

- 3) Required Parking Spaces: 207
 Based on Retail Building Area: 11,944 feet
 1 space for 200 square feet resulting in 60 parking spaces
 Based on Office Building Area: 40,244 feet
 1 space for 275 square feet resulting in 147 parking spaces

Response: Acknowledged. Please refer to the Parking Study included in this submittal.

Proposed Parking:

- 4) (22 required) Lot 1: 28 parking spaces + 3 ADA Parking Spaces + 4 Pick-up designated Spaces = 28 parking spaces. Therefore, there would be an excess of 6 parking spaces
 Six parking spaces are in direct conflict with the access aisle, plus an ADA parking space with no direct access to a building.

Response: Please refer to the Parking Study as well as the updated Site Plan included in this submittal. Per the Parking Study, the peak parking demand on Thursday was 17 vehicles (occurring at 12:30pm) and 10 vehicles on Saturday during peak hours between 11am-12pm). There is cross access parking within all of the Lots owned by Applicant. We currently have proposed 44 parking spaces within our property (Lot 1), 4 of which are ADA accessible and another 4 that are designated for Chipotle parking only (furthest spaces from the other buildings).

- 5) (147 required) Lot 2: 74 parking spaces
 Office Building Area: 40,244 feet
 1 space for 275 square feet would result in 147 required parking spaces. Therefore, there would be a deficiency of 73 parking spaces on the proposed plan.
 Lot 3: No parking noted.

Response: Please refer to the Parking Study included in this submittal.

- 6) (60 required) Lot 4: 93 parking spaces
 Retail Building Area: 11,944 feet
 1 space for 200 square feet resulting in 60 parking spaces. Therefore, there would be an excess of 33 parking spaces.

Response: Please refer to the Parking Study included in this submittal.



- 7) Total Parking Required: 229
 Total Parking Proposed: 195 + 11 ADA Parking Spaces + 4 Pick-up designated Spaces
 This would require a modification to the zoning code or an enlargement to the parking lot.

Response: Please refer to the Parking Study included in this submittal.

Additional Comments for the Proposed Parking:

- a. All lots that are owned by the Applicant share cross access parking.
- b. Total Spaces provided is 219
- c. Almost 50% of Chipotle Business is through the Chipotlane
- d. Square Footage of the Office Building should account for approximately 15% loss factor, making usable square footage 34,207 SF.
- e. Peak Parking Demand for all lots (including Consume/ATI Building) with proposed Chipotle would only be 48% occupied.

Access:

- 8) Lot 1 is the only lot that has access to both Route 22 and Rand Road.

Response: Acknowledged.

- 9) Lot 2 is only accessible from Rand Road. It will require a cross-access agreement to access Route 22.

Response: Acknowledged.

- 10) Lot 3 – no information is provided.

Response: Acknowledged.

- 11) Lot 4 is not accessible from either Rand Road or Route 22 and will require a cross-access agreement to access the lot.

Response: Acknowledged.

Site Plan:

- 12) Geometric Plan (Page 3 of 9)
 Drive thru windows require 8 vehicles stacking – currently proposing 6 vehicles stacking. (if using the window as a pickup window without an ordering menu board), provide justification for reduced stacking requirements).

Response: In the most current Operations Study on the Chipotlane Pick-Up Window (at various locations) completed in 2022, there are 136 average daily Chipotlane Customers, 25 of which are during peak hours. The queue length is 4 cars or less approximately 98% of the time, and exceeds 4 cars for approximately 15minutes a day – high volumes can get up to 4-5 cars max. The average time at the service window is 1:13 (6:13 is the nationwide fast-food drive-thru average service time). And when ordering online, the system has a buffer, so it does not allow for more than



10 orders to be made during any 15-min. interval for Online orders. For those orders, some are for Chipotlane, Pick-up in store, and Order Ahead. Please refer to the attached Operations Study and Chipotlane By Numbers.

Also, please note that food delivery services are directed NOT to use the Chipotlane and rather park at the "Burrito Loading" designated parking spaces.

Exterior Appearance:

13) Exterior building materials in conjunction with approved materials in the B-3 District.

Response: Acknowledged. Please refer to updated Elevations which introduced a third exterior material element, Nichiha Architectural Wall Panel: Vintagewood Series - which achieves the refined look of wood panels and adds warmth, contrast, and shape to the proposed Shell Building, while still maintaining the Chipotle corporate look.

Lighting:

14) The maximum foot-candle on the property is 5.1 fc. The property is in substantial conformance.

Response: Acknowledged. We will continue to comply with the code.

Landscaping:

15) A reduction in plant units is requested through the PUD.

Response: Acknowledged.

Signage:

16) Proposed signage is in accordance with sign code.

Response: Acknowledged. We will continue to comply with the code.

Traffic Study:

17) A traffic study will be required due to the intensity of the use. (This question was raised by a trustee at the Courtesy Review. If not providing one, provide justification in the response)

Response: Please refer to the Traffic Impact Study included in this submittal. A parking Impact study was also provided.

There are two existing vehicular access points to the site, both right-in / right-out only, as left-turns (one driveway off W. Main Street and one driveway off Rand Road). Both also provide access to the Village Square shopping center. Chipotle is proposing



to keep both existing driveways into the site, and not modify any curbs. There is existing pedestrian access along W. Main Street.

Our current site has access directly from Rand Road, which has several major shopping centers along both sides, which was strategically designed to carry higher traffic volumes. Rand Road also provides three through lanes in each direction.

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Nearby Chipotle restaurants this proposed location are:

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6.0 mi (11min)	781 E. Dundee Rd. Palatine, IL 60074 – YES Chipotle
10.6 mi (19min)	5006 NW Hwy St A., Crystal Lake, IL 60014 – NO Chipotle

Thank you in advance for your review of the enclosed documents. Please do not hesitate to contact our office with any questions, comments, or concerns, or if you should require any additional information.

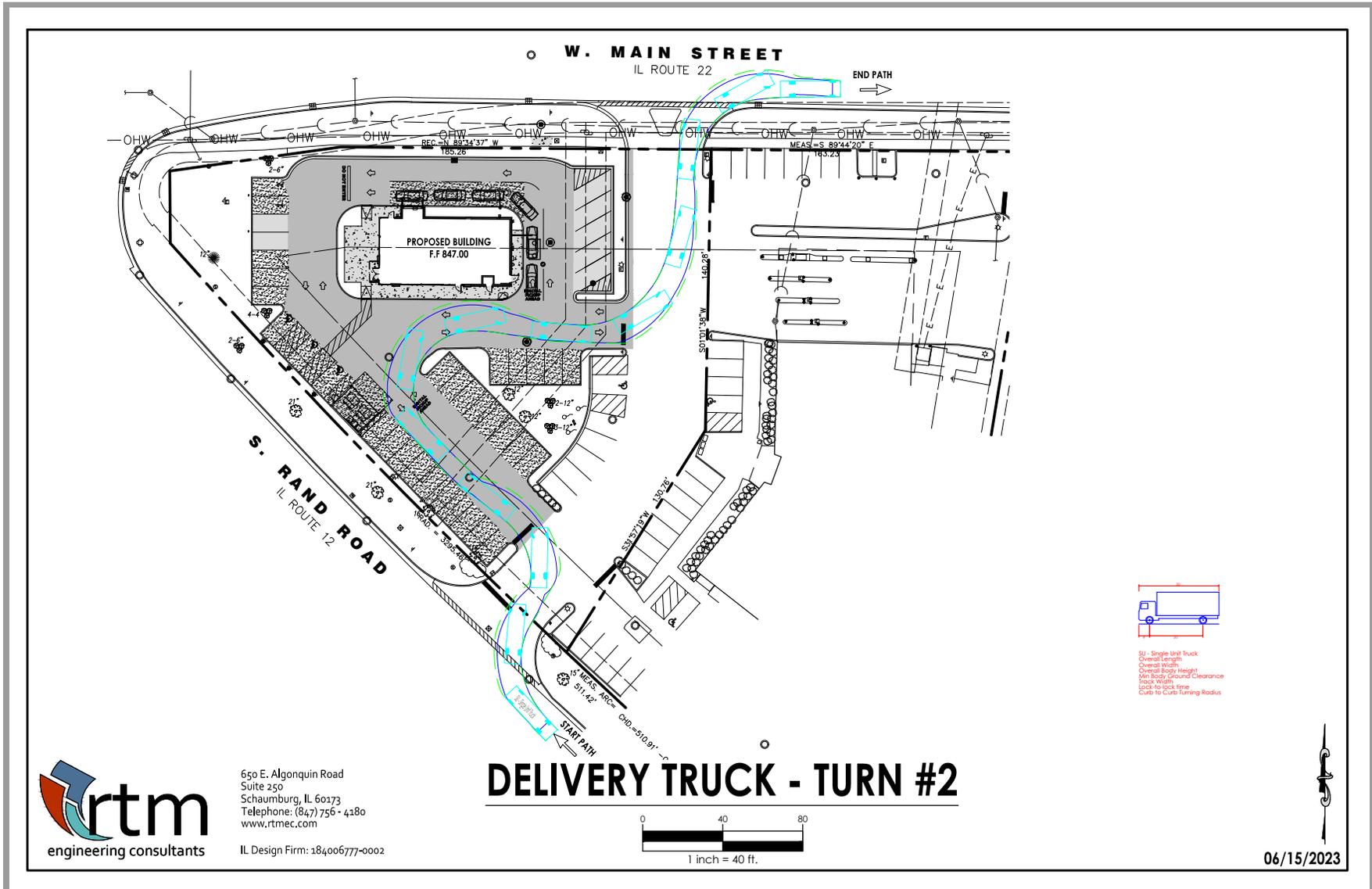
Sincerely,

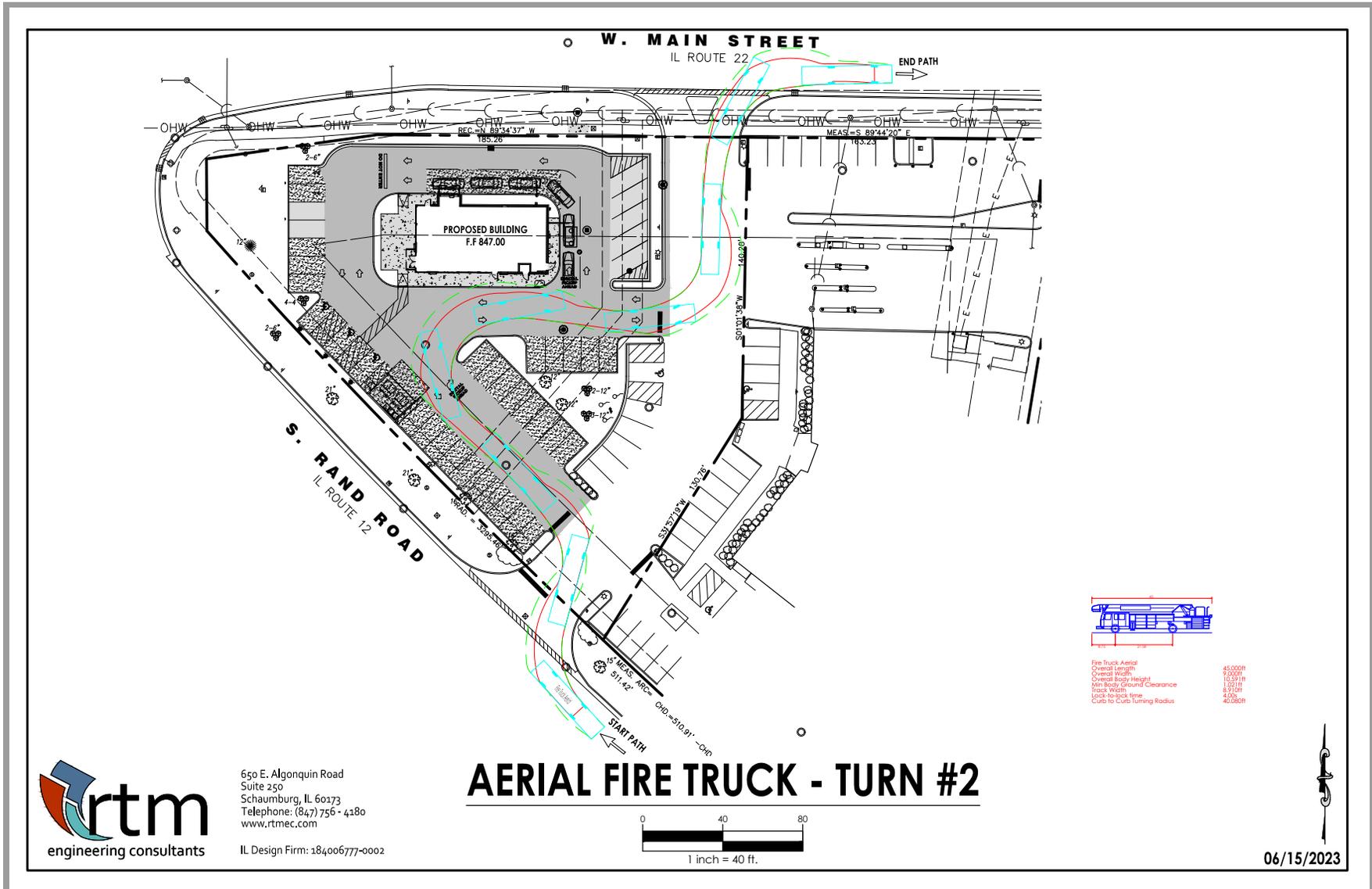
RTM Engineering Consultants, LLC.

A handwritten signature in black ink, appearing to read 'Scott DiGilio'.

Scott DiGilio, P.E.

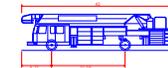
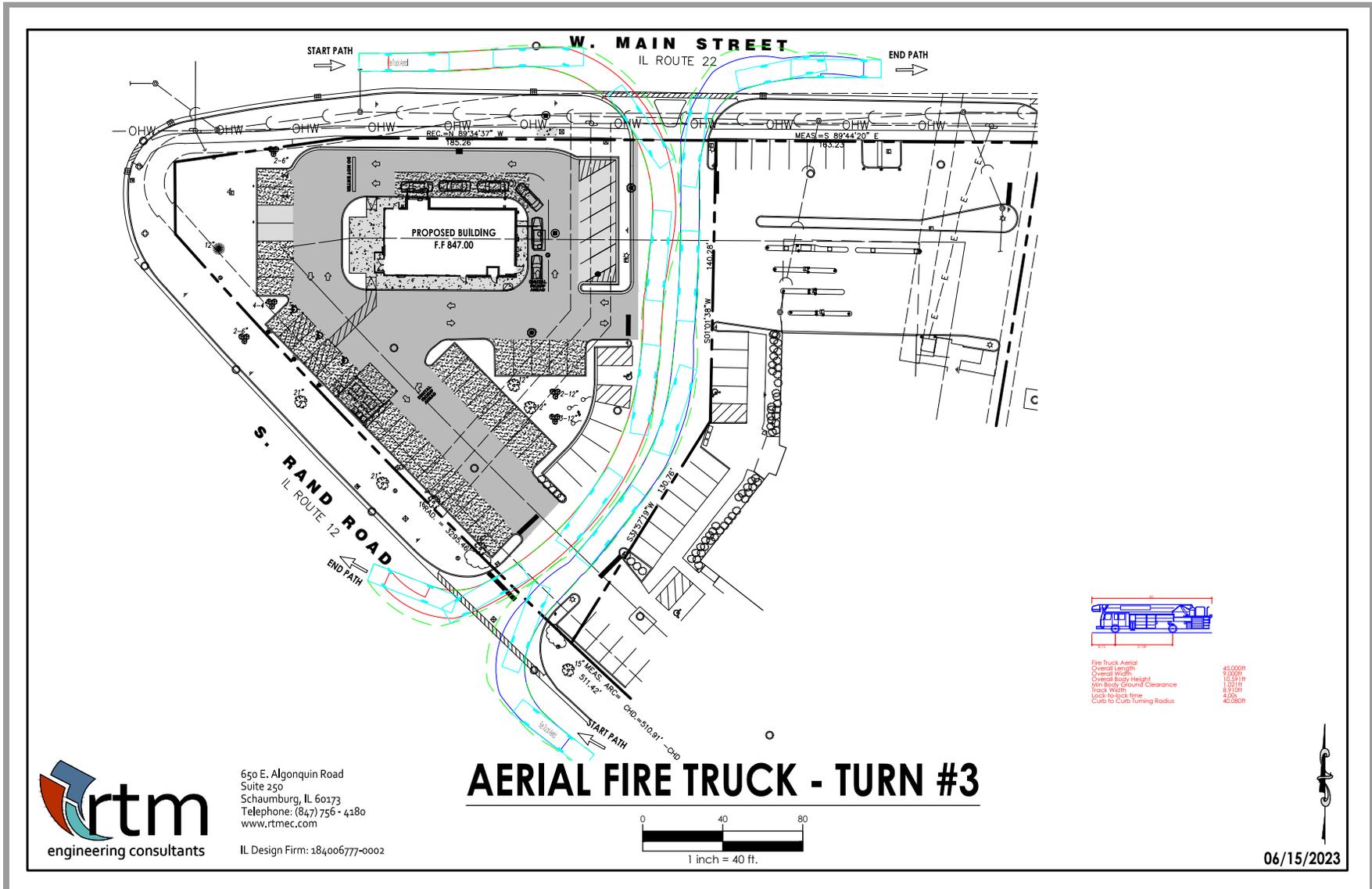
Principal





650 E. Algonquin Road
Suite 250
Schaumburg, IL 60173
Telephone: (847) 756-4180
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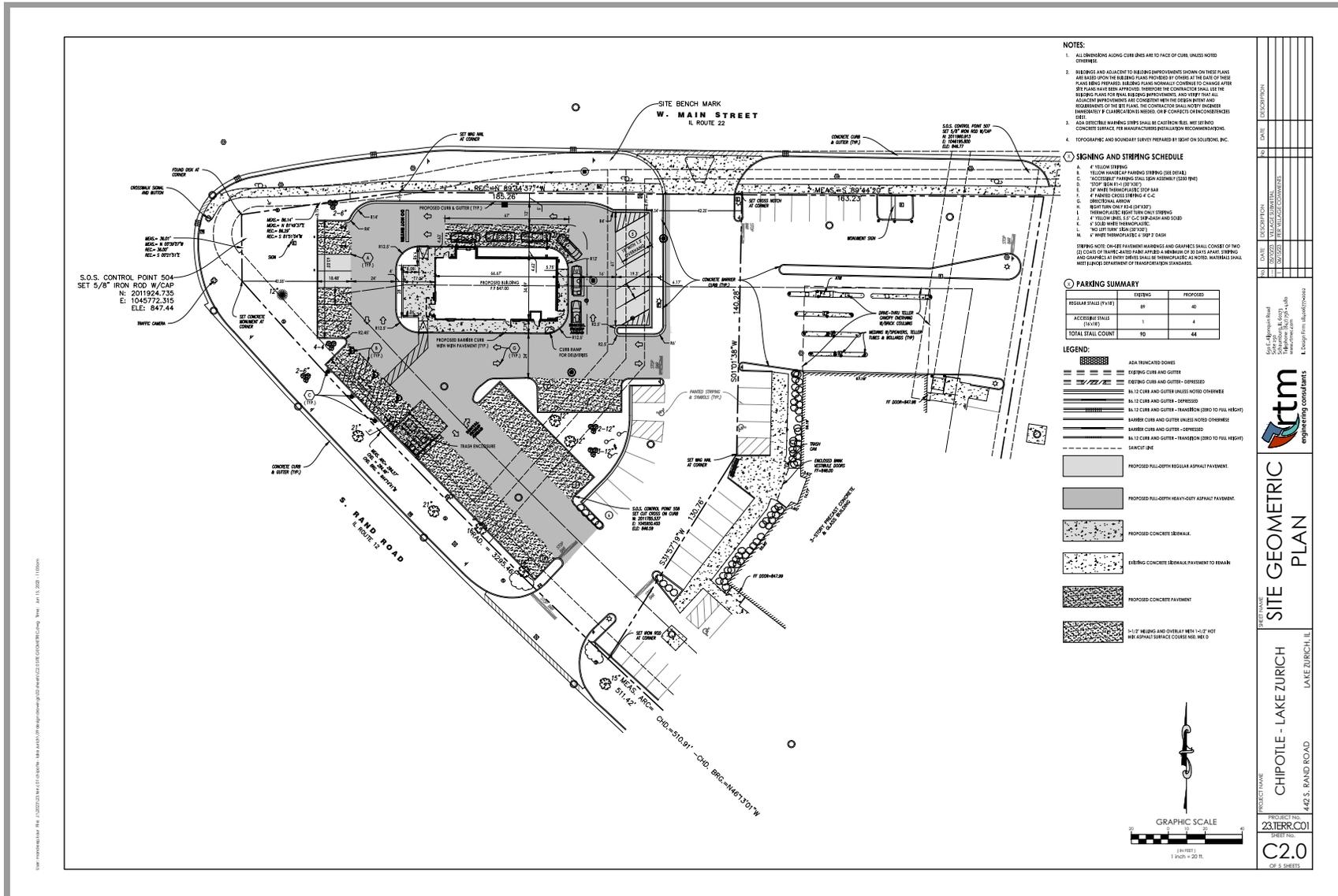
IL Design Firm: 184006777-0002



Fire Truck Aerial	45.000'
Overall Length	32.000'
Overall Width	10.000'
Overall Body Height	13.000'
Min Body Ground Clearance	1.000'
Track Width	6.000'
Lock-to-lock time	4.000
Curb to Curb Turning Radius	40.000'



650 E. Algonquin Road
Suite 250
Schaumburg, IL 60173
Telephone: (847) 756-4280
www.rtmec.com
IL Design Firm: 184006777-0002



- NOTES:**
1. ALL DIMENSIONS ALONG CURB LINES ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.
 2. SIGNING AND ADJUSTMENT TO SIGNING SPECIFICATIONS SHOWN ON THESE PLANS ARE BASED UPON THE SIGNING PLANS PROVIDED BY OWNER AT THE DATE OF THESE PLANS BEING PREPARED. THE SIGN PLANS NORMALLY COVERED TO CHANGE AFTER SIXTY DAYS HAVE BEEN APPROVED. THEREFORE THE CONTRACTOR SHALL USE THE SIGNING PLANS FOR FINAL SIGNING PROVISIONS AND VERIFY THAT ALL SIGNING IMPROVEMENTS ARE CONSIDERED WITH THE DESIGN DETAIL AND DIMENSIONS OF THE SITE LINES. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF CLARIFICATIONS NEEDED. ON P. CONTACTS OR DISCREPANCIES EXIST.
 3. ADA DIRECTIONAL WARNING STRIPS SHALL BE CAST IN CONCRETE. SEE DETAIL AND NO CONCRETE SURFACE PER MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
 4. TOPOGRAPHIC AND BOUNDARY SURVEY PREPARED BY BENTON & BOWLEN, INC.

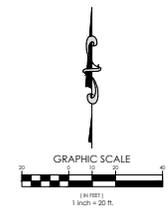
- ① SIGNING AND STRIPING SCHEDULE**
- A. F. YELLOW STRIPING
 - B. YELLOW HAND CAP PARKING STRIPING (SEE DETAIL)
 - C. ACCIDENT PREVENTION STRIPING (SEE DETAIL)
 - D. STOP SIGN 18" X 24"
 - E. 24" WHITE THERMOPLASTIC STOP BAR
 - F. 4" WHITE CONCRETE STRIPING C.C.C.
 - G. BICOLORED ALUMINUM
 - H. BICOLORED THERMOPLASTIC
 - I. THERMOPLASTIC: 18" X 24" ONLY (SEE DETAIL)
 - J. 4" YELLOW WHEEL STRIPING (SEE DETAIL)
 - K. 4" SOLID WHITE THERMOPLASTIC
 - L. NO LETTER SIGN (SEE DETAIL)
 - M. 4" WHITE THERMOPLASTIC "T" (SEE DETAIL)

STRIPING NOTES: QUANTITY FURNISHING MATERIALS AND GRAPHICS SHALL COMPLY WITH THE (2) COATS OF TRAFFIC-CASTED PAVEMENT APPLIED AT A MINIMUM OF 30 DAYS APART. STRIPING AND GRAPHICS AT CURB LINES SHALL BE THERMOPLASTIC UNLESS NOTED. MAXIMUMS SHALL MEET ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS.

① PARKING SUMMARY

REGULAR STATUS (V-18)	EXISTING	PROPOSED
REGULAR STATUS (V-18)	81	40
ACCESSIBLE SPACES (V-18)	1	4
TOTAL STALL COUNT	82	44

- LEGEND:**
- ADA TRUNCATED CONES
 - STRIPING CURB AND GUTTER
 - STRIPING CURB AND GUTTER - DEPRESSED
 - 1/2" CURB AND GUTTER UNLESS NOTED OTHERWISE
 - 1/2" CURB AND GUTTER - DEPRESSED
 - 1/2" CURB AND GUTTER - TRANSITION (20" TO FULL HEIGHT)
 - BARBER CURB AND GUTTER UNLESS NOTED OTHERWISE
 - BARBER CURB AND GUTTER - DEPRESSED
 - 1/2" CURB AND GUTTER - TRANSITION (20" TO FULL HEIGHT)
 - SAW-CUT LINE
 - PROPOSED FULL-DEPTH REGULAR ASPHALT PAVEMENT
 - PROPOSED FULL-DEPTH HEAVY-DUTY ASPHALT PAVEMENT
 - PROPOSED CONCRETE SIDEWALK
 - EXISTING CONCRETE SIDEWALK PAVEMENT TO REMAIN
 - PROPOSED CONCRETE PAVEMENT
 - 1-1/2" WEARING AND OVERLAY WITH 1-1/2" HOT MIX ASPHALT SURFACE COURSE NO. 10, 10B, D

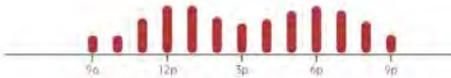


DATE	DESCRIPTION

SHEET NAME: **SITE GEOMETRIC PLAN**
 PROJECT NAME: **CHIPOTLE - LAKE ZURICH**
 442 S. RAND ROAD
 LAKE ZURICH, IL
 PROJECT NO.: **231TKR.CO1**
C2.0
 OF 5 SHEETS



Chipotle by the Numbers

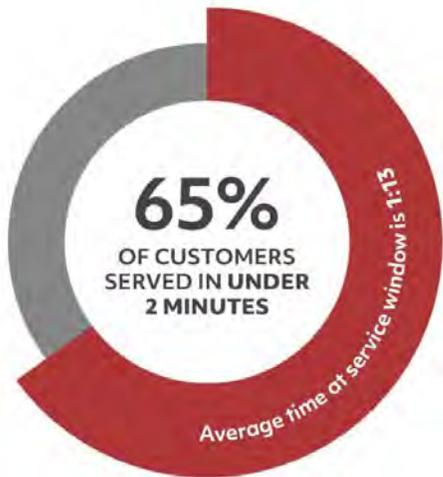


25 AVERAGE CHIPOTLANE CUSTOMERS during peak hour



AVERAGE SERVICE TIME
(6:13 is the nationwide fast food drive-thru average service time)

Service time data from the 2022 Intouch Insight Drive-Thru Study



Average of **2 CUSTOMERS**
in Chipotle at a time



The queue length is 4 cars or less **APPROXIMATELY 98%** of the time,
and exceeds 4 cars for **APPROXIMATELY 15 MINUTES A DAY**





OPERATIONS STUDY
VARIOUS LOCATIONS

CHIPOTLANE PICK-UP WINDOW OPERATIONS

PREPARED BY GPD GROUP FOR: CHIPOTLE MEXICAN GRILL
NOVEMBER 2022



DRAFT OPERATIONS STUDY
Chipotle Pick-Up Window

Various Locations
Prepared For:



Prepared By:

GPD Group
520 South Main Street
Suite 2531
Akron, OH 44311

November 2022

Prepared By:

Curtis J. Leibel
Curtis Leibel, P.E., RSP₂
Ohio Registration No. 81305
Certification No. 105

Prepared
Under The Responsible
Charge of:

Michael A. Hobbs
Michael A. Hobbs, P.E., PTOE
Ohio Registration No. 68713
Certification No. 1346



November 11, 2022

Date





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I. Executive Summary:

This Operations Study is being prepared at the request of Chipotle Mexican Grill in association with the Chipotlane pick-up window which has been implemented across the country by Chipotle Mexican Grill. The purpose of this Operations Study is to analyze the operational characteristics of the Chipotlane pick-up window to determine the typical volumes, queue lengths and service times associated with this new configuration. This study will analyze the operation of six (6) existing Chipotlanes at high-volume locations with two (2) restaurants in the Los Angeles, California area, two (2) restaurants in the Boston, Massachusetts area, and two (2) restaurants in the Columbus, Ohio area.

A mobile pick-up window has been implemented at select Chipotle locations, referred to as a Chipotlane. These windows were first introduced in 2019 and allow customers to pick up an order without having to park their vehicle and walk into the restaurant. This pick-up window is only available to those customers who have placed a prior order via the Chipotle mobile application **or Chipotle's website**. Since orders are not placed on a menu board and payment is made through the mobile application or website in advance, Chipotle should be able to process vehicles far more efficiently than fast-food restaurants.

For this study video recording devices were deployed at the six (6) Chipotle locations to capture the operational characteristics of the Chipotlane pick-up window. Multiple cameras were installed at each location to provide views from both the front and rear of the building to ensure that the pick-up window and full vehicular queue were able to be seen at all times. These cameras were deployed and captured videos for all hours of operation over four (4) continuous days. GPD Group personnel then reviewed over 270 hours of video footage to document the operational characteristics of each Chipotlane being analyzed. The overall findings from this analysis are summarized on the following page.





Chipotle by the Numbers

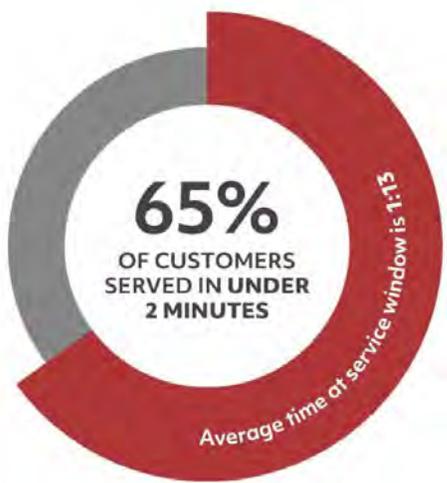


25 AVERAGE CHIPOTLANE CUSTOMERS during peak hour



AVERAGE SERVICE TIME
(6:13 is the nationwide fast food drive-thru average service time)

Service time data from the 2022 Intouch Insight Drive-Thru Study



Average of **2 CUSTOMERS** in Chipotle at a time



The queue length is 4 cars or less **APPROXIMATELY 98%** of the time, and exceeds 4 cars for **APPROXIMATELY 15 MINUTES A DAY**





II. Purpose:

This Operations Study is being prepared at the request of Chipotle Mexican Grill in association with the Chipotle pick-up window which has been implemented across the country by Chipotle Mexican Grill. The purpose of this Operations Study is to analyze the operational characteristics of the Chipotle pick-up window to determine the typical volumes, queue lengths and service times associated with this new configuration. This study will analyze the operation of six (6) existing Chipotles at high-volume locations with two (2) restaurants in the Los Angeles, California area, two (2) restaurants in the Boston, Massachusetts area, and two (2) restaurants in the Columbus, Ohio area.

III. Project Setting:

Costa Mesa, CA Chipotle Location

The first Chipotle Mexican Grill location evaluated for this study is in the City of Costa Mesa, CA at 468 E. 17th Street. This Chipotle has one (1) access point located along E. 17th Street and is located along a commercial corridor and is surrounded by large residential developments. It is currently open seven days a week from 10:30 AM – 10:00 PM. See Figure 1 for an aerial photograph of the Costa Mesa Chipotle location.

Foothill Ranch, CA Chipotle Location

The second Chipotle Mexican Grill location is in the City of Lake Forest, CA at 26592 Towne Center Drive, Suite 120. This location has three (3) access points to an internal drive. This Chipotle location is located in the Towne Center Plaza the surrounding developments are primarily residential with some commercial developments to the east. This location is currently open seven days a week from 10:30 AM – 10:00 PM. See Figure 2 for an aerial photograph of the Foothill Chipotle location.

Hanover, MA Chipotle Location

The third Chipotle Mexican Grill location is in the City of Hanover, MA at 1773 Washington Street. This location has two (2) access points to an internal drive (serving the Chipotle and adjacent parcel). This Chipotle is located within Hanover Crossing along a primarily commercial corridor surrounded by residential developments. This location is currently open seven days a week from 10:45 AM – 10:00 PM. See Figure 3 for an aerial photograph of the Hanover Chipotle location.





Norwich, CT Chipotle Location

The fourth Chipotle Mexican Grill location is in the City of Norwich, CT at 30 Salem Turnpike. This location has two (2) access points, one along Salem Turnpike and another along Surrey Lane. This Chipotle is located along a primarily commercial corridor surrounded by residential developments. This location is currently open seven days a week from 10:45 AM – 10:00 PM. See Figure 4 for an aerial photograph of the Hanover Chipotle location.

Pickerington, OH Chipotle Location

The fifth Chipotle Mexican Grill location is in the City of Pickerington at 1291 Hill Road N. (State Route 256) on the northwest quadrant of the Hill Road N. / Stonecreek Drive intersection. This Chipotle location has four (4) access points, one (1) to each adjacent parcel to the north and south and two (2) to an internal shopping center drive to the west. It is currently open seven days a week from 10:45 AM – 10:00 PM. See Figure 5 for an aerial photograph of the Pickerington Chipotle location.

Obetz, OH Chipotle Location

The sixth Chipotle Mexican Grill location is in the City of Obetz at 5051 Groveport Road on the southwest quadrant of the Alum Creek Drive / Groveport Road intersection. This location has two (2) access points to an internal drive (serving the Chipotle and adjacent parcel) that connects to both Alum Creek Drive and Groveport Road. Alum Creek Drive is a major north-south corridor connecting I-270 to the north of the Chipotle location to a major warehousing and distribution hub to the south. This location is currently open seven days a week from 10:45 AM – 10:00 PM. See Figure 6 for an aerial photograph of the Pickerington Chipotle location.

Chipotle Description

A mobile pick-up window has been implemented at select Chipotle locations, referred to as a Chipotle lane. These windows were first introduced in 2019 and allow customers to pick up an order without having to park their vehicle and walk into the restaurant. Unlike traditional fast-food restaurants, the Chipotle lane does not function as a typical drive-thru lane as customers cannot place an order at a menu board or the pick-up window. This pick-up window is only available to those customers who have placed a prior order via the **Chipotle mobile application or Chipotle's website**. **Since the Chipotle lane is designed for pick-up only**, the vehicular demand, queues and service times would be expected to be lower than that of a fast-food restaurant which derives a high percentage of sales from impulsive pass-by traffic.

Additionally, since orders are not placed at a menu board and payment is made through the mobile application or website in advance, Chipotle should be able to process vehicles far more efficiently than fast-food restaurants as well.





Data Collection

For this study, Cummins Consulting Services, Tri-State Traffic Data, and Quality Counts, LLC deployed video recording devices at the six (6) Chipotle locations to capture the operational characteristics of the Chipotle pick-up window. Multiple cameras were installed at each location to provide views from both the front and rear of the building to ensure that the pick-up window and full vehicular queue were able to be seen at all times. These cameras were deployed and captured videos for all hours of operation over four (4) continuous days from Wednesday, July 13th through Saturday, July 16th, 2022, for the sites located within the Los Angeles and Boston areas, and four (4) continuous days from Wednesday, August 3rd through Saturday, August 6th, 2022, for the sites located within the Columbus area. The following images provide an example of the camera views that were recorded:



Camera angle facing southwest (view of the window queue of the Costa Mesa Chipotle)



Camera angle facing northeast (view from the front of the Foothill Ranch Chipotle)





Camera angle facing south (view from the front of the Obetz Chipotle)

IV. Data Analysis:

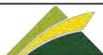
Analysis Methodology

GPD Group personnel reviewed over 270 hours of video footage to document the operational characteristics of each Chipotlane being analyzed as part of this study. The below image is a screenshot from the analysis spreadsheet created to log the data:

Restaurant Location: 468 East 17th Street, Costa Mesa, CA 92627							
Data Collection Date: Saturday, July 16, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:43:11 AM	1	10:43:11 AM	10:45:09 AM	0:00:00	0:01:58	0:01:58
Vehicle 2	11:10:47 AM	1	11:10:47 AM	11:11:09 AM	0:00:00	0:00:22	0:00:22
Vehicle 3	11:19:25 AM	1	11:19:25 AM	11:20:20 AM	0:00:00	0:00:55	0:00:55
Vehicle 4	11:23:53 AM	1	11:23:53 AM	11:24:09 AM	0:00:00	0:00:16	0:00:16
Vehicle 5	11:47:51 AM	1	11:47:51 AM	11:53:29 AM	0:00:00	0:05:38	0:05:38
Vehicle 6	11:48:27 AM	2	11:53:37 AM	11:54:40 AM	0:05:10	0:01:03	0:06:13
Vehicle 7	11:55:22 AM	1	11:55:22 AM	11:56:28 AM	0:00:00	0:01:06	0:01:06
Vehicle 8	11:56:14 AM	2	11:56:37 AM	11:57:30 AM	0:00:21	0:00:53	0:01:16
Vehicle 9	12:00:26 PM	1	12:00:26 PM	12:01:57 PM	0:00:00	0:01:31	0:01:31
Vehicle 10	12:12:54 PM	1	12:12:54 PM	12:13:09 PM	0:00:00	0:00:15	0:00:15

As shown in the above image, data recorded for each vehicle utilizing the Chipotlane pick-up window includes the time in which the vehicle entered the queue, the queue position for that vehicle, the time the vehicle arrived at the pick-up window, and the time the vehicle left the pick-up window. Time durations were then calculated to determine the total time the vehicle was in the queue (the time it took from entering the queue until leaving the pick-up window) and the amount of time they were at the pick-up window itself. It should be noted that the time entered the queue and time arrived at the window are the same when the arriving vehicle was the only vehicle in the queue at that time. See the following appendices for complete data sheets:

- Appendix A – Costa Mesa, CA Data
- Appendix B – Foothill Ranch, CA Data
- Appendix C – Hanover, MA Data
- Appendix D – Norwich, CT Data
- Appendix E – Pickerington, OH Data
- Appendix F – Obetz, OH Data





Costa Mesa, CA Chipotle Data Analysis

The data collected in the spreadsheets discussed above was then analyzed to look at the various factors that impact the operation and efficiency of the pick-up window. The first category that was investigated was vehicular volume. Table 1 shows the number of vehicles that used the Costa Mesa Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page provides a graphical representation of this data.

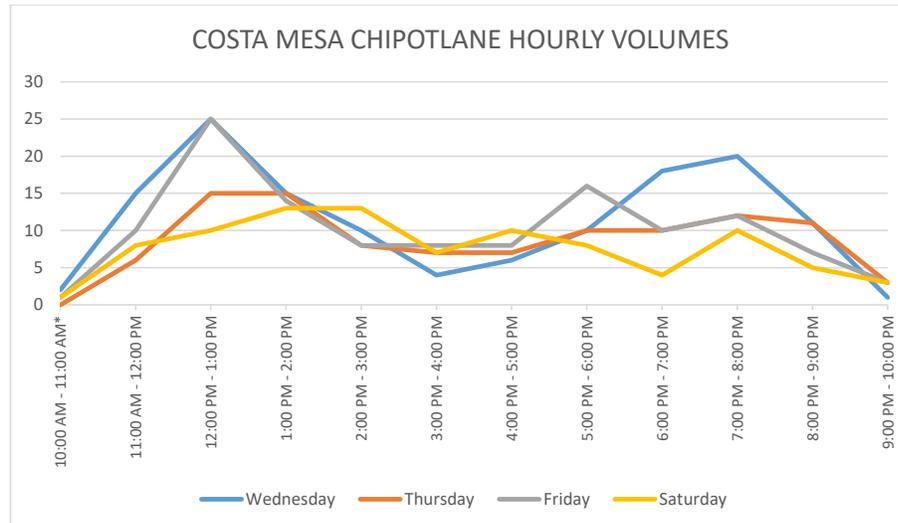
Table 1: Costa Mesa Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	2	0	1	1	1
11:00 AM - 12:00 PM	15	6	10	7	10
12:00 PM - 1:00 PM	24	15	25	10	19
1:00 PM - 2:00 PM	15	15	13	13	14
2:00 PM - 3:00 PM	10	8	8	13	10
3:00 PM - 4:00 PM	4	7	8	7	7
4:00 PM - 5:00 PM	6	7	8	10	8
5:00 PM - 6:00 PM	10	10	15	8	11
6:00 PM - 7:00 PM	18	10	10	4	11
7:00 PM - 8:00 PM	20	12	12	10	14
8:00 PM - 9:00 PM	11	11	7	5	9
9:00 PM - 10:00 PM	1	3	3	3	3
Total	136	104	120	91	113
Average	12	9	10	8	9
Maximum	24	15	25	13	19

* Chipotle operating hours begin at 10:30 AM

It should be noted that a total of 4 vehicles (1 on Wednesday, 2 on Friday and 1 on Saturday) were observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance as they were typically seen parking their vehicles and walking into the restaurant afterward. These vehicles were not included in the analysis.





As shown in Table 1 and the above graph, the data collected on Wednesday, July 13th reflects the highest daily volume (136) as well as the highest hourly volume (24). While the Chipotle was found to be well utilized, these volumes are only about one-fifth of the daily drive-thru volume of an average fast-food restaurant (approximately 750) and about one-third of the peak hourly volume (approximately 75). Over the entire day, the Chipotle was found to average between 1 and 19 vehicles per hour but was generally found to experience higher demand between 11:00 AM and 2:00 PM which confirmed the expectation that this restaurant would see higher usage during the lunch hours due to being located on a major commercial corridor surrounded by residential development.

Also included in the data collection was the number of vehicles in the pick-up lane queue, including the vehicle at the pick-up window. Table 2 on the following page shows the maximum queue length experienced at the Costa Mesa Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

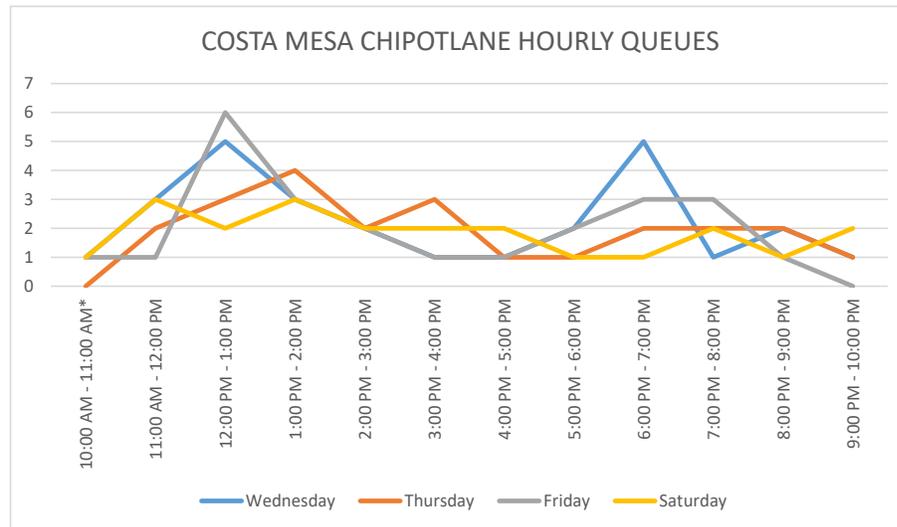




Table 2: Costa Mesa Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	1	0	1	1	1
11:00 AM - 12:00 PM	3	2	1	3	3
12:00 PM - 1:00 PM	5	3	6	2	6
1:00 PM - 2:00 PM	3	4	3	3	4
2:00 PM - 3:00 PM	2	2	2	2	2
3:00 PM - 4:00 PM	1	3	1	2	3
4:00 PM - 5:00 PM	1	1	1	2	2
5:00 PM - 6:00 PM	2	1	2	1	2
6:00 PM - 7:00 PM	5	2	3	1	5
7:00 PM - 8:00 PM	1	2	3	2	3
8:00 PM - 9:00 PM	2	2	1	1	2
9:00 PM - 10:00 PM	1	1	1	2	2
Maximum	5	4	6	3	6

* Chipotle operating hours begin at 10:30 AM



As shown in Table 2 and the graph above, the data indicates that the typical maximum queue length is three (3) vehicles while there was a single instance where the queue length reached six (6) vehicles between 12:00 PM and 1:00 PM on Friday, July 16th. The maximum queue for each day was found to occur between 12:00 PM and 2:00 PM which is consistent with the periods that experience the highest demand at this location.





When assessing the observed maximum queue length, it's also important to note the duration of the maximum queue lengths as well. While the queue was observed to be longer during the peak periods, it likely only extended back that far for a limited amount of time within each of those hours. The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which is the case of the Costa Mesa location, which is 690 minutes per day. Table 3 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Table 3: Costa Mesa Utilization Summary

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	0.30%	0.00%	0.68%	0.00%	0.24%
5 Vehicles or More (Minutes per Day)	02:05	00:00	04:42	00:00	01:41

As shown in Table 3, the queue was observed to only extend beyond four (4) vehicles for under two (2) minutes per day over the four (4) days studied.

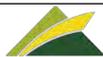
The final component which was analyzed as part of this study is the amount of time it takes a vehicle to proceed through a Chipotle pick-up lane and receive their order. Wait times at a pick-up window can be broken down into two separate components; the amount of time waiting in the queue to get to the pick-up window (time in queue) and the amount of time spent at the pick-up window (time at the window). These two durations added together then represent the total service time. Table 4 below shows the average service times as defined above, broken down by the day of the week.

Table 4: Costa Mesa Service Time Summary

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	00:17	00:16	00:40	00:11	00:21
Time at Window	00:40	00:48	01:06	01:06	00:55
Total Service Time	00:57	01:04	01:46	01:17	01:16

As shown in Table 4, the average service time varied between 57 seconds and 1 minute and 46 seconds depending on the day of the week, but overall averaged under two (2) minutes which is extremely fast for a drive-thru.

A typical fast food restaurant drive-thru lane has four points of delay; placing the order, paying for the order, waiting for the order to be cooked and receiving the order. Chipotle derives its efficiency from the fact that it has





eliminated three (3) actions that contribute to the overall service time – placing the order, making the payment and waiting for food to be cooked.

All of these factors help contribute to the relatively low service times shown in the above table, all of which are significantly less than the average service times experienced at a traditional fast-food restaurant, based on the 2022 Intouch Insight Drive-Thru Study. This study sent shoppers through ten (10) different fast food restaurant brands' drive-thru's between June and July of 2022, with a total of 1,537 drive-thru shops completed nationwide. This study found that the average time it took a vehicle to wait in the queue, place the order, pay for and receive the ordered food was 6 minutes and 13 seconds.

Foothill Ranch, CA Chipotle Data Analysis

Table 5 shows the number of vehicles that used the Foothill Ranch Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page that provides a graphical representation of this data.

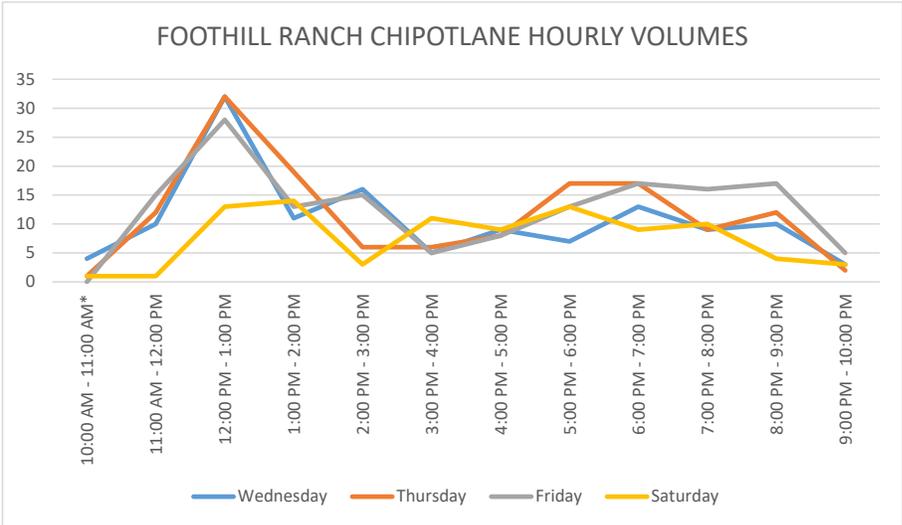
Table 5: Foothill Ranch Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	4	1	0	1	2
11:00 AM - 12:00 PM	10	12	15	1	10
12:00 PM - 1:00 PM	32	32	27	13	26
1:00 PM - 2:00 PM	11	19	13	14	14
2:00 PM - 3:00 PM	15	6	14	3	10
3:00 PM - 4:00 PM	5	6	5	11	7
4:00 PM - 5:00 PM	9	8	8	9	9
5:00 PM - 6:00 PM	7	17	12	13	12
6:00 PM - 7:00 PM	13	17	17	9	14
7:00 PM - 8:00 PM	9	9	16	10	11
8:00 PM - 9:00 PM	10	12	17	4	11
9:00 PM - 10:00 PM	3	2	5	3	3
Total	128	141	149	91	127
Average	11	12	13	8	11
Maximum	32	32	27	14	26

* Chipotle operating hours begin at 10:30 AM

Similar to what was observed in Costa Mesa a total of 4 vehicles (1 on Wednesday and 3 on Friday) were observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance and these vehicles were not included in the analysis.





As shown in Table 5 and the above graph, the data collected on Friday, July 16th reflects the highest daily volume (149), but the highest hourly volume of (32) occurred on Wednesday and Thursday. Over the entire day, the Chipotlane was found to average between 2 and 26 vehicles per hour, but was generally found to experience higher demand between 11:00 AM and 2:00 PM which confirmed the expectation that this restaurant would see higher usage during the lunch hours due to being located in a busy shopping area.

Table 6 on the following page shows the maximum queue length experienced at the Foothill Ranch Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

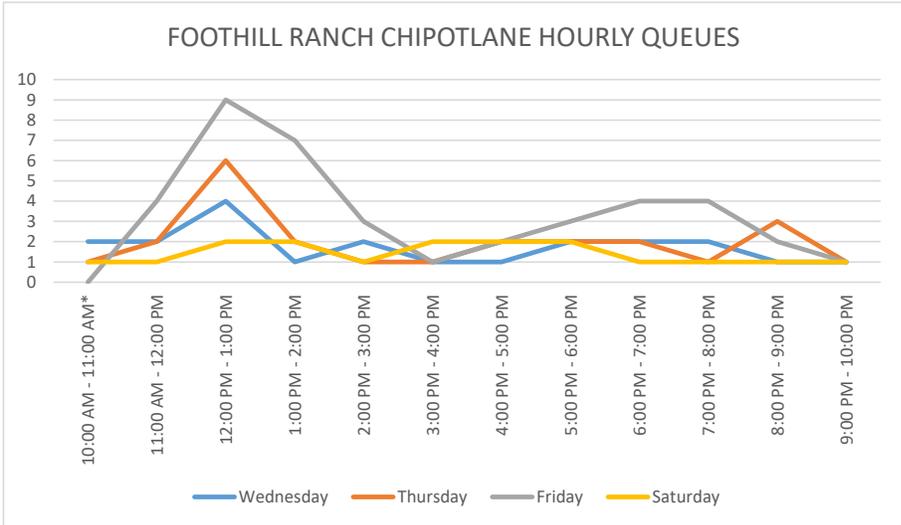




Table 6: Foothill Ranch Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	2	1	0	1	2
11:00 AM - 12:00 PM	2	2	4	1	4
12:00 PM - 1:00 PM	4	6	9	2	9
1:00 PM - 2:00 PM	1	2	7	2	7
2:00 PM - 3:00 PM	1	1	3	1	3
3:00 PM - 4:00 PM	1	1	1	2	2
4:00 PM - 5:00 PM	1	2	2	2	2
5:00 PM - 6:00 PM	2	2	3	2	3
6:00 PM - 7:00 PM	2	2	4	1	4
7:00 PM - 8:00 PM	2	1	4	1	4
8:00 PM - 9:00 PM	1	3	2	1	3
9:00 PM - 10:00 PM	1	1	1	1	1
Maximum	4	6	9	2	9

* Chipotle operating hours begin at 10:30 AM



As shown in Table 6 and the graph above, the data indicates that the typical maximum queue length is two (2) vehicles while there was a single instance where the queue length reached nine (9) vehicles between 12:00 PM and 1:00 PM on Friday, July 16th. The maximum queue for each day was found to occur between 12:00 PM and 1:00 PM which is consistent with the periods that experience the highest demand at this location.





The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which is the case of the Foothill Ranch location, which is 690 minutes per day. Table 7 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	0.00%	0.56%	5.75%	0.00%	1.58%
5 Vehicles or More (Minutes per Day)	00:00	03:53	39:42	00:00	10:54

As shown in Table 7, the queue was observed to only extend beyond four (4) vehicles for approximately eleven (11) minutes per day over the course of the four (4) days studied.

Table 8 below shows the average service times as defined above, broken down by the day of the week.

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	00:09	00:25	02:07	00:04	00:41
Time at Window	00:40	00:46	01:29	00:33	00:52
Total Service Time	00:49	01:11	03:36	00:37	01:33

As shown in Table 8, the average service time varied between 49 seconds and 3 minutes and 36 seconds depending on the day of the week, but overall averaged under two (2) minutes.

Hanover, MA Chipotle Data Analysis

Table 9 shows the number of vehicles that used the Hanover Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page that provides a graphical representation of this data.





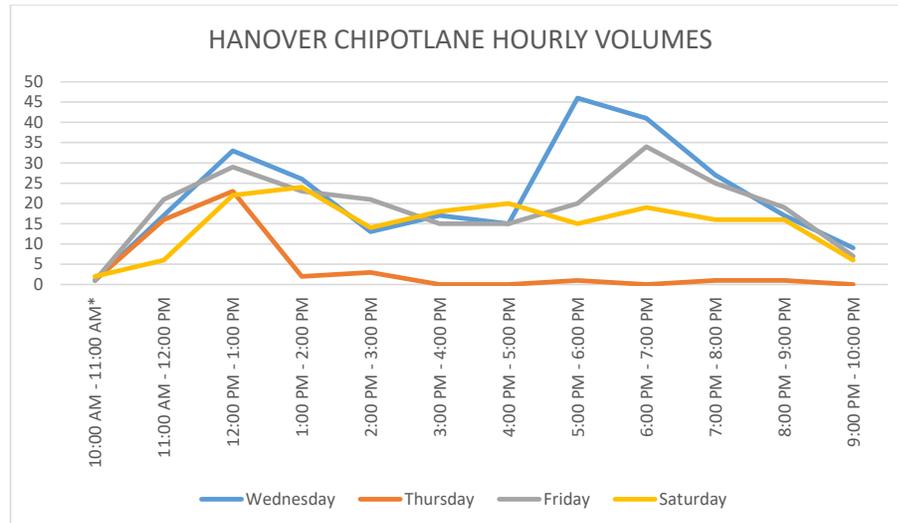
Table 9: Hanover Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	1	1	1	2	1
11:00 AM - 12:00 PM	17	16	21	6	15
12:00 PM - 1:00 PM	33	23	29	22	27
1:00 PM - 2:00 PM	26	2	23	24	19
2:00 PM - 3:00 PM	13	3	21	14	13
3:00 PM - 4:00 PM	17	0	15	18	13
4:00 PM - 5:00 PM	15	0	15	19	12
5:00 PM - 6:00 PM	46	1	20	15	21
6:00 PM - 7:00 PM	41	0	33	19	23
7:00 PM - 8:00 PM	26	1	25	16	17
8:00 PM - 9:00 PM	17	1	19	16	13
9:00 PM - 10:00 PM	9	0	7	6	6
Total	261	48	229	177	179
Average	22	4	19	15	15
Maximum	46	23	33	24	27

* Chipotle operating hours begin at 10:45 AM

Similar to what was previously observed at the other Chipotle locations, a total of three (3) vehicles (one (1) on Thursday, Friday, and Saturday) were observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance and these vehicles were not included in the analysis.





As shown in Table 9 and the above graph, the data collected on Wednesday, July 13th reflects the highest daily volume (261) as well as the highest hourly volume (46). Over the entire day, the Chipotle was found to average between 1 and 27 vehicles per hour, but was generally found to experience higher demand between 11:00 AM - 2:00 PM and 5:00 PM – 9:00 PM which confirmed the expectation that this restaurant would see higher usage during the lunch hours due to being located on a busy commercial corridor and in close proximity to a highway system. Additionally, a restaurant would see higher usage during the evening hours due to the proximity to residential land uses.

Table 10 on the following page shows the maximum queue length experienced at the Hanover Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

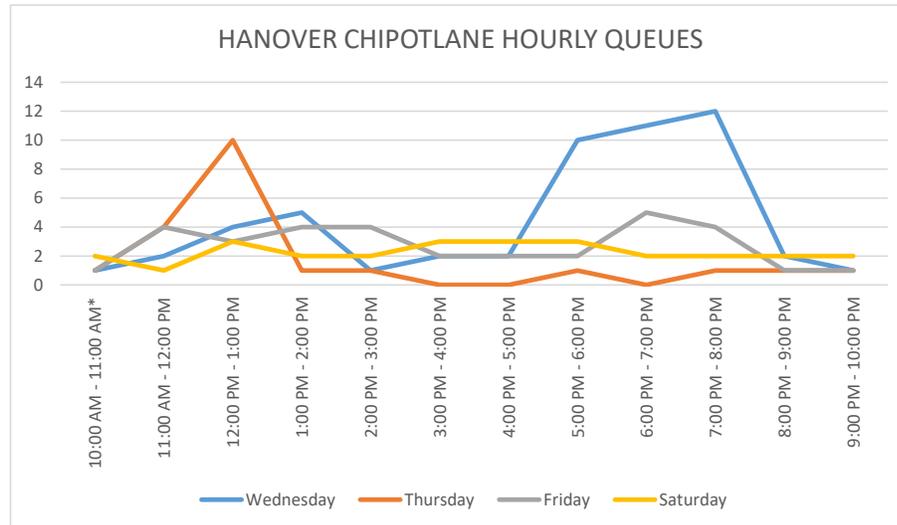




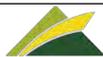
Table 10: Hanover Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	1	1	1	1	1
11:00 AM - 12:00 PM	2	4	4	1	4
12:00 PM - 1:00 PM	4	10	3	3	10
1:00 PM - 2:00 PM	5	1	4	2	5
2:00 PM - 3:00 PM	1	1	4	2	4
3:00 PM - 4:00 PM	2	0	2	3	3
4:00 PM - 5:00 PM	2	0	2	3	3
5:00 PM - 6:00 PM	10	1	2	3	10
6:00 PM - 7:00 PM	11	0	5	2	11
7:00 PM - 8:00 PM	12	1	4	2	12
8:00 PM - 9:00 PM	2	1	1	2	2
9:00 PM - 10:00 PM	1	1	1	2	2
Maximum	12	10	5	3	12

* Chipotle operating hours begin at 10:45 AM



As shown in Table 10 and the graph above, the data indicates that the typical maximum queue length is three (3) vehicles while there was a single instance where the queue length reached twelve (12) vehicles between 7:00 PM and 8:00 PM on Wed, July 13th. The maximum queue for each day was found to occur between 11:00 AM – 2:00 PM and 5:00 PM - 8:00 PM which is consistent with the periods that experience the highest demand at this location.





The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which for the Hanover location, is 675 minutes per day. Table 11 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Table 11: Hanover Utilization Summary

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	14.83%	4.44%	0.01%	0.00%	4.84%
5 Vehicles or More (Minutes per Day)	100:06	29:58	00:39	00:00	32:40

As shown in Table 11, the queue was observed to only extend beyond four (4) vehicles for under thirty-three (33) minutes over the course of the four (4) days studied.

Table 12 below shows the average service times as defined above, broken down by the day of the week.

Table 12: Hanover Service Time Summary

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	03:08	04:49	00:30	00:15	02:10
Time at Window	00:58	01:30	00:50	00:47	01:01
Total Service Time	04:06	06:19	01:20	01:02	03:11

As shown in Table 12, the average service time varied between 1 minute and 2 seconds and 6 minutes and 19 seconds depending on the day of the week, but overall averaged just over three (3) minutes.

Norwich, CT Chipotle Data Analysis

Table 13 shows the number of vehicles that used the Norwich Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page that provides a graphical representation of this data.



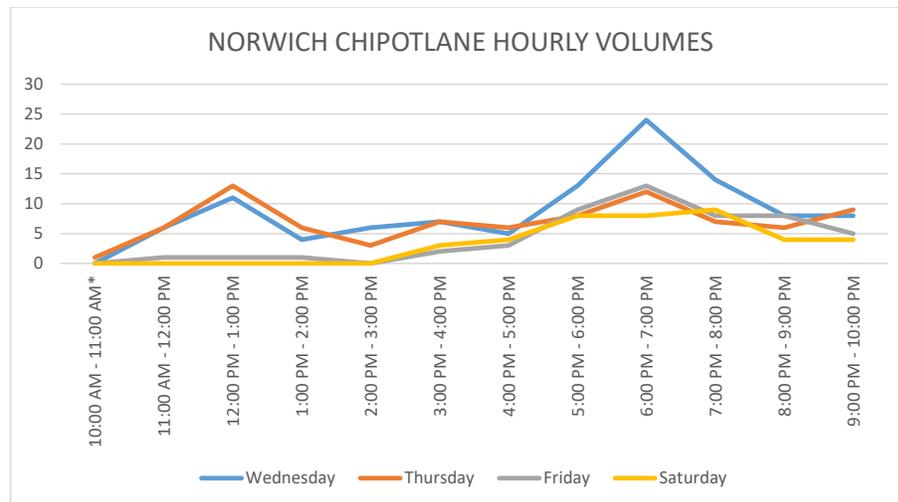


Table 13: Norwich Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	0	1	0	0	0
11:00 AM - 12:00 PM	5	6	1	0	3
12:00 PM - 1:00 PM	11	13	1	0	6
1:00 PM - 2:00 PM	4	6	1	0	3
2:00 PM - 3:00 PM	6	3	0	0	2
3:00 PM - 4:00 PM	7	7	2	3	5
4:00 PM - 5:00 PM	5	6	3	4	5
5:00 PM - 6:00 PM	13	8	9	8	10
6:00 PM - 7:00 PM	24	12	11	8	14
7:00 PM - 8:00 PM	14	7	8	9	10
8:00 PM - 9:00 PM	8	6	8	4	7
9:00 PM - 10:00 PM	8	9	5	4	7
Total	105	84	49	40	70
Average	9	7	4	4	6
Maximum	24	13	11	9	14

* Chipotle operating hours begin at 10:45 AM

Similar to what was previously observed at the other Chipotle locations a total of 1 vehicle (Friday) was observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance and these vehicles were not included in the analysis.





As shown in Table 13 and the above graph, the data collected on Wednesday, July 13th reflects the highest daily volume (105) as well as the highest hourly volume (24). Over the entire day, the Chipotle was found to average between 0 and 14 vehicles per hour, but was generally found to experience higher demand between 5:00 PM and 10:00 PM which confirmed the expectation that this restaurant would see higher usage during the evening hours due to the close proximity of residential land uses.

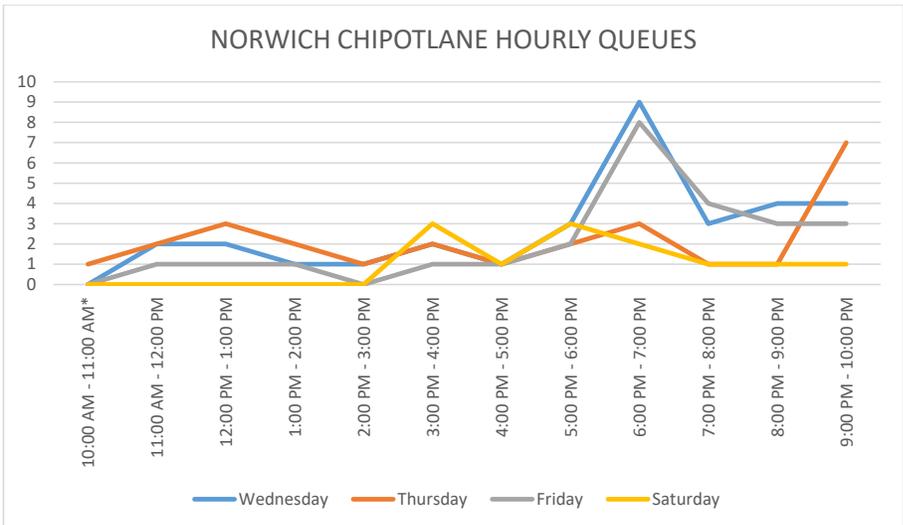
Table 14 on the following page shows the maximum queue length experienced at the Norwich Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

Table 14: Norwich Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	0	1	0	0	1
11:00 AM - 12:00 PM	2	2	1	0	2
12:00 PM - 1:00 PM	2	3	1	0	3
1:00 PM - 2:00 PM	1	2	1	0	2
2:00 PM - 3:00 PM	1	1	0	0	1
3:00 PM - 4:00 PM	2	2	1	3	3
4:00 PM - 5:00 PM	1	1	1	1	1
5:00 PM - 6:00 PM	3	2	2	3	3
6:00 PM - 7:00 PM	9	3	8	2	9
7:00 PM - 8:00 PM	3	1	4	1	4
8:00 PM - 9:00 PM	4	1	3	1	4
9:00 PM - 10:00 PM	4	7	3	1	7
Maximum	9	7	8	3	9

* Chipotle operating hours begin at 10:45 AM





As shown in Table 14 and the graph above, the data indicates that the typical maximum queue length is two (2) vehicles while there was a single instance where the queue length reached twelve (9) vehicles between 6:00 PM and 7:00 PM on Wed, July 13th. The maximum queue for each day was found to occur between 5:00 PM and 10:00 PM which is consistent with the periods that experience the highest demand at this location.

The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which is the case of the Norwich location, is 675 minutes per day. Table 15 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Table 15: Norwich Utilization Summary

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	5.69%	2.99%	2.69%	0.00%	2.84%
5 Vehicles or More (Minutes per Day)	38:26	20:09	18:11	00:00	19:10

As shown in Table 15, the queue was observed to only extend beyond four (4) vehicles for approximately nineteen (19) minutes per day over the course of the four (4) days studied.

Table 16 below shows the average service times as defined above, broken down by the day of the week.





Table 16: Norwich Service Time Summary

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	02:52	01:41	03:31	00:19	02:05
Time at Window	02:18	02:02	02:44	01:06	02:02
Total Service Time	05:10	03:43	06:15	01:25	04:07

As shown in Table 16, the average service time varied between 3 minutes and 43 seconds and 6 minutes and 15 seconds depending on the day of the week, but overall averaged around four (4) minutes.

Pickerington, OH Chipotle Data Analysis

Table 17 shows the number of vehicles that used the Pickerington Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page that provides a graphical representation of this data.

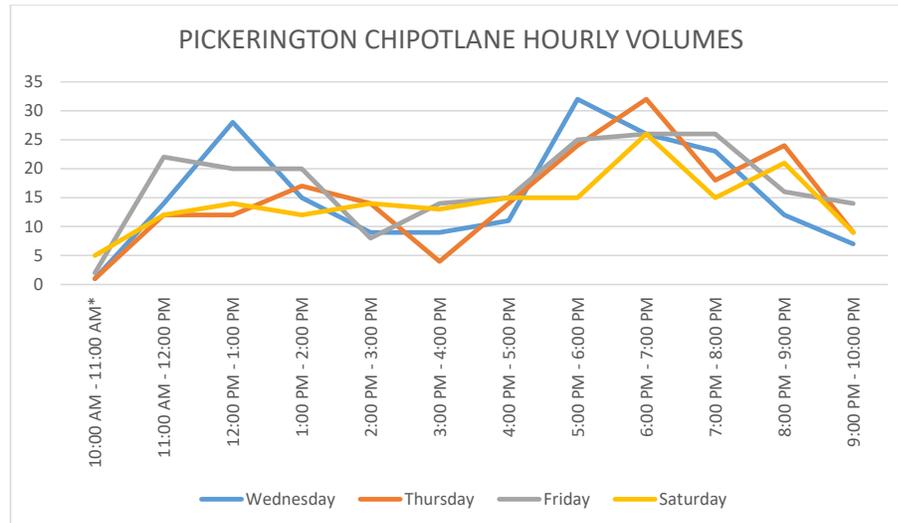
Table 17: Pickerington Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	1	1	2	5	2
11:00 AM - 12:00 PM	14	12	22	12	15
12:00 PM - 1:00 PM	28	12	20	14	19
1:00 PM - 2:00 PM	15	16	20	12	16
2:00 PM - 3:00 PM	9	14	8	14	11
3:00 PM - 4:00 PM	9	4	14	13	10
4:00 PM - 5:00 PM	11	14	15	15	14
5:00 PM - 6:00 PM	32	24	25	15	24
6:00 PM - 7:00 PM	26	32	26	26	28
7:00 PM - 8:00 PM	23	18	26	15	21
8:00 PM - 9:00 PM	12	24	16	21	18
9:00 PM - 10:00 PM	7	9	14	9	10
Total	187	180	208	171	187
Average	16	15	17	14	16
Maximum	32	32	26	26	28

* Chipotle operating hours begin at 10:45 AM

Similar to what was previously observed at the other Chipotle locations a total of 1 vehicle (Thursday) was observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance and these vehicles were not included in the analysis.





As shown in Table 17 and the above graph, the data collected on Friday, August 5th reflects the highest daily volume (208), but the highest hourly volume of (32) was experienced on both Wednesday and Thursday. Over the entire day, the Chipotlane was found to average between 2 and 28 vehicles per hour, but was generally found to experience higher demand between 5:00 PM and 8:00 PM which confirmed the expectation that this restaurant would see higher usage during the evening hours due to the proximity to residential development.

Table 18 on the following page shows the maximum queue length experienced at the Pickerington Chipotlane, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

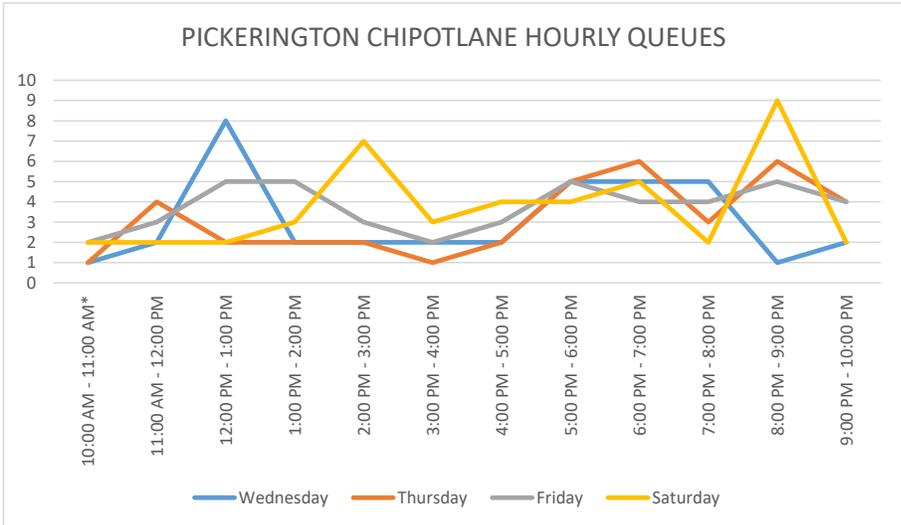




Table 18: Pickerington Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	1	1	2	2	2
11:00 AM - 12:00 PM	2	4	3	2	4
12:00 PM - 1:00 PM	8	2	5	2	8
1:00 PM - 2:00 PM	2	2	5	3	5
2:00 PM - 3:00 PM	2	2	3	7	7
3:00 PM - 4:00 PM	2	1	2	3	3
4:00 PM - 5:00 PM	2	2	3	4	4
5:00 PM - 6:00 PM	5	5	5	4	5
6:00 PM - 7:00 PM	5	6	4	5	6
7:00 PM - 8:00 PM	5	3	4	2	5
8:00 PM - 9:00 PM	1	6	5	9	9
9:00 PM - 10:00 PM	2	4	4	2	4
Maximum	8	6	5	9	9

* Chipotle operating hours begin at 10:45 AM



As shown in Table 18 and the graph above, the data indicates that the typical maximum queue length is two (2) vehicles while there was a single instance where the queue length reached twelve (9) vehicles between 8:00 PM and 9:00 PM on Sat, August 6th. The maximum queue for each day was found to occur between 5:00 PM and 9:00 PM which is consistent with the periods that experience the highest demand at this location.





The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which is the case of the Foothill Ranch location, which is 690 minutes per day. Table 19 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Table 19: Pickerington Utilization Summary

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	1.80%	2.04%	2.51%	4.82%	2.79%
5 Vehicles or More (Minutes per Day)	12:09	13:46	16:58	32:31	18:51

As shown in Table 19, the queue was observed to only extend beyond four (4) vehicles for approximately nineteen (19) minutes per day over the course of the four (4) days studied.

Table 20 below shows the average service times as defined above, broken down by the day of the week.

Table 20: Pickerington Service Time Summary

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	01:10	00:53	01:47	01:55	01:26
Time at Window	01:19	01:21	01:47	01:42	01:32
Total Service Time	02:29	02:14	03:34	03:37	02:58

As shown in Table 20, the average service time varied between 2 minutes and 14 seconds and 3 minutes and 37 seconds depending on the day of the week, but overall averaged under three (3) minutes.

Obetz, OH Chipotle Data Analysis

Table 21 shows the number of vehicles that used the Obetz Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also provided on the following page that provides a graphical representation of this data.



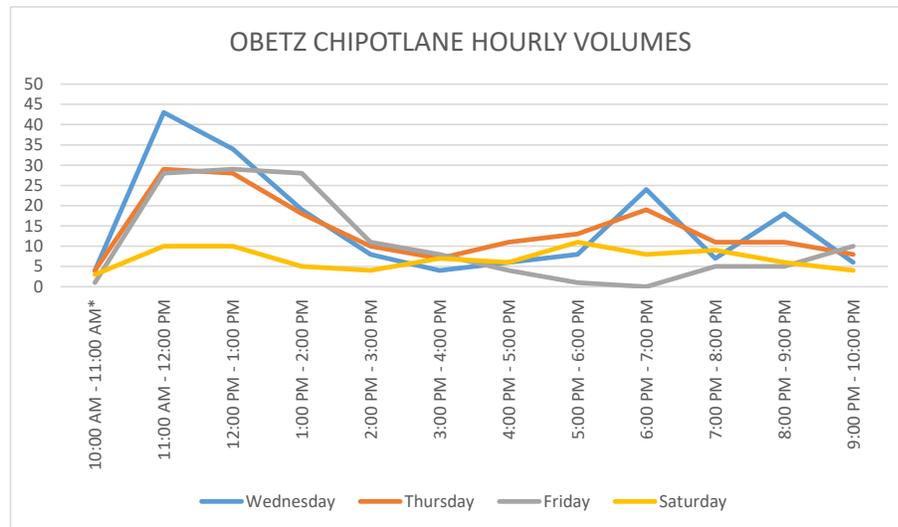


Table 21: Obetz Volume Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Average
10:00 AM - 11:00 AM*	4	4	1	3	3
11:00 AM - 12:00 PM	43	29	27	10	27
12:00 PM - 1:00 PM	33	28	28	10	25
1:00 PM - 2:00 PM	19	18	27	5	17
2:00 PM - 3:00 PM	8	10	10	4	8
3:00 PM - 4:00 PM	4	7	8	7	7
4:00 PM - 5:00 PM	6	11	4	6	7
5:00 PM - 6:00 PM	8	13	1	11	8
6:00 PM - 7:00 PM	24	19	0	8	13
7:00 PM - 8:00 PM	7	11	5	9	8
8:00 PM - 9:00 PM	18	11	5	6	10
9:00 PM - 10:00 PM	6	8	10	4	7
Total	180	168	126	83	140
Average	15	14	11	7	12
Maximum	43	29	28	11	27

* Chipotle operating hours begin at 10:45 AM

Similar to what was previously observed at the other Chipotle locations a total of 3 vehicles (1 on Wednesday, 1 on Thursday, and 1 on Friday) were observed entering the pick-up window queue but then leaving the queue without receiving an order at the pick-up window. It is assumed that these patrons were not aware that orders must be placed in advance and these vehicles were not included in the analysis.





As shown in Table 21 and the above graph, the data collected on Wednesday, August 3rd reflects the highest daily volume (180), as well as the highest hourly volume (43). Over the entire day, the Chipotle was found to average between 3 and 27 vehicles per hour, but was generally found to experience higher demand between 11:00 AM and 2:00 PM which confirmed the expectation that this restaurant would see higher usage during the lunch hours due to the proximity to the interstate and nearby distribution hub.

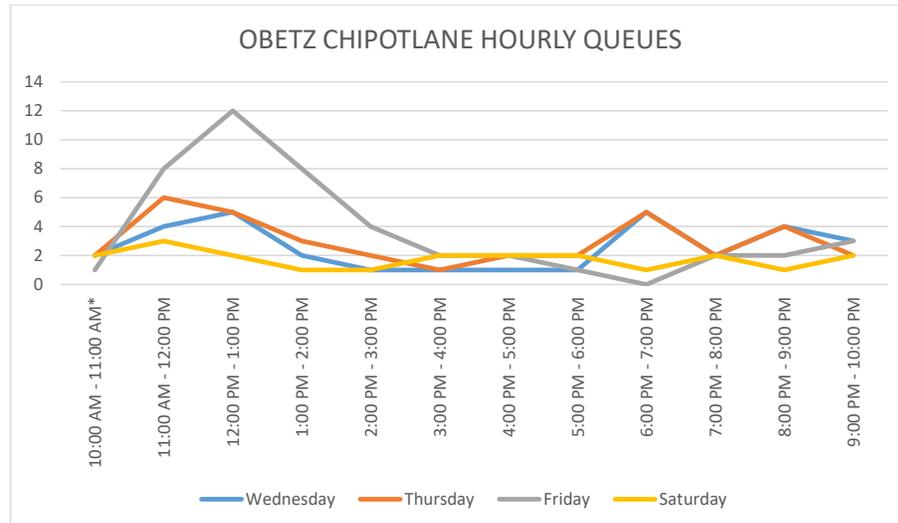
Table 22 on the following page shows the maximum queue length experienced at the Obetz Chipotle, broken down by the day of the week as well as the hour of the day. A line graph is also shown on the following page that provides a graphical representation of the below table.

Table 22: Obetz Queue Length Summary

Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
10:00 AM - 11:00 AM*	2	2	1	2	2
11:00 AM - 12:00 PM	4	6	8	3	8
12:00 PM - 1:00 PM	5	5	12	2	12
1:00 PM - 2:00 PM	2	3	8	1	8
2:00 PM - 3:00 PM	1	2	4	1	4
3:00 PM - 4:00 PM	1	1	2	2	2
4:00 PM - 5:00 PM	1	2	2	2	2
5:00 PM - 6:00 PM	1	2	1	2	2
6:00 PM - 7:00 PM	5	5	0	1	5
7:00 PM - 8:00 PM	2	2	2	2	2
8:00 PM - 9:00 PM	4	4	2	1	4
9:00 PM - 10:00 PM	3	2	3	2	3
Maximum	5	6	12	3	12

* Chipotle operating hours begin at 10:45 AM



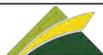


As shown in Table 22 and the graph above, the data indicates that the typical maximum queue length is either four (4) or five (5) vehicles while there was a single instance where the queue length reached twelve (12) vehicles between 12:00 PM and 1:00 PM on Friday, August 5th. The maximum queue for each day was found to occur between 11:00 AM and 1:00 PM which is again consistent with the periods that experience the highest demand at this location. It should be noted that upon reviewing Friday, August 6th video footage of this location it appeared that this location was redirecting in-store pick-ups to the Chipotle between 12:00 PM and 1:00 PM, hence the longer queue during that timeframe.

The duration in which the queue was five (5) vehicles or larger was quantified and compared to the total amount of time that the pick-up window is in operation, which is the case of the Foothill Ranch location, which is 675 minutes per day. Table 23 below shows the percentage of total operating time in which the queue length was four (4) vehicles or less.

Table 23: Obetz Utilization Summary

Queue Length	Wednesday	Thursday	Friday	Saturday	Average
5 Vehicles or More (Percentage)	0.05%	1.18%	10.75%	100%	1.95%
5 Vehicles or More (Minutes per Day)	00:20	8:00	72:33	00:00	13:11





As shown in Table 23, the queue was observed to only extend beyond four (4) vehicles for approximately thirteen (13) minutes per day over the course of the four (4) days studied.

Table 24 below shows the average service times as defined above, broken down by the day of the week.

Table 24: Obetz Average Service Time Summary

Average Service Times	Wednesday	Thursday	Friday	Saturday	Average
Time in Queue	00:50	00:59	04:11	00:13	01:33
Time at Window	01:10	01:01	01:51	01:21	01:20
Total Service Time	02:00	02:00	06:02	01:34	02:53

As shown in Table 24, the average service time varied between 1 minute and 34 seconds and 6 minutes and 2 seconds depending on the day of the week, but overall averaged under three (3) minutes.

All Chipotle Data Analysis

The total number of Chipotle trips observed at the six (6) Chipotle sites (twenty-four (24) total days of operations) was 3,256, which is more than double the number of data points used in the 2022 Intouch Insight Drive-Thru Study. An analysis of all 3,256 Chipotle trips found the average time in the queue of one minute twenty seconds, the average time at the window to be one minute and thirteen seconds with a total average service time of two minutes and thirty-three seconds. This total service time is nearly 60% less than the average service time provided in the 2022 Intouch Insight Drive-Thru Study of six minutes and thirteen seconds.

Furthermore, it should be noted that 74% of the observed Chipotle customers were in the queue waiting to get to the pick-up window for less than one minute, 64% were at the pick-up window for less than one minute and 65% of users had a total service time of less than two minutes.

V. Data Comparison

GPD group performed the initial Chipotle Operations Study in 2019 that included the same restaurants in Pickerington and Obetz that were included in this study. The results of the 2019 study are being compared to the results of the 2022 data to determine whether any operational characteristics have changed since 2019, considering a global pandemic occurred between the two sets of data. This comparison will include frequency of usage, average and maximum vehicle queue, and average and maximum service time between the different years.





It should be noted that the hours of operation at both locations have changed since the 2019 study was performed. In 2019, the Pickerington location operated seven days a week from 10:45 AM – 11:00 PM, while the Obetz location operated seven days a week from 10:45 AM – 12:00 AM while both stores currently operate from 10:45 AM – 10:00 PM. For the purpose of this comparison, only the data collected in 2019 between 10:45 AM – 10:00 PM was considered.

Pickerington, OH Chipotle Data Comparison

Table 25 below shows the 2019 and 2022 total number of vehicles that used the Pickerington Chipotle, broken down by the day of the week.

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total	187	180	208	171	187
Average	16	15	17	14	16
Maximum	32	32	26	26	28
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total	184	217	192	164	189
Average	16	19	17	15	17
Maximum	32	37	34	25	32

As shown in Table 25, the data comparison shows that a similar number of vehicles are utilizing the Pickerington location between 2019 and 2022.

Table 26 on the following page, shows the average maximum queue length experienced at the Pickerington Chipotle, broken down by the day.

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
Maximum	8	6	5	9	9
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
Maximum	6	7	6	6	7





As shown in Table 26, the maximum queue length experienced at the Pickerington location increased between 2019 and 2022. However, the maximum queue length is still significantly below what a typical fast-food restaurant would experience during peak service times.

Table 27 below shows the average total service times, broken down by the day of the week.

Table 27: Pickerington Service Time Comparison Summary

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total Service Time	02:29	02:14	03:35	03:39	02:58
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total Service Time	1:50	1:54	1:34	2:24	1:55

As shown in Table 27, the average total service time over the four days of data collection shows an increase in total service time. However, the 2 minute and 58 second average service time is still significantly quicker than what is experienced at a typical fast-food restaurant during peak service times.

Obetz, OH Chipotle Data Comparison

Table 28 below shows the 2019 and 2022 total number of vehicles that used the Obetz Chipotle, broken down by the day of the week.

Table 28: Obetz Volume Comparison Summary

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total	180	168	126	83	140
Average	15	14	11	7	12
Maximum	43	29	28	11	27
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total	153	159	159	88	140
Average	14	14	14	8	13
Maximum	28	28	28	13	28





As shown in Table 28, the data comparison shows that a similar number of vehicles are utilizing the Obetz location between 2019 and 2022.

Table 29 below, shows the average maximum queue length experienced at the Obetz Chipotle, broken down by the day.

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
Maximum	5	6	12	3	12
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Maximum
Maximum	3	5	5	4	5

As shown in Table 29, the maximum queue length experienced at the Obetz location has increased between 2019 and 2022. However, the maximum queue length is still significantly below what a typical fast-food restaurant would experience during peak service times.

Table 30 below shows the average total service times at the Obetz location, broken down by the day of the week.

2022 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total Service Time	02:00	02:00	06:02	01:34	02:53
2019 Data					
Timeframe	Wednesday	Thursday	Friday	Saturday	Average
Total Service Time	1:01	1:30	1:35	1:18	1:21

As shown in Table 30, the average total service time over the four days of data collection shows an increase in total service time. However, the 2 minute and 53 second average service time is still significantly quicker than what is experienced at a typical fast-food restaurant during peak service times.





VI. Summary of Findings:

This Operations Study is being prepared at the request of Chipotle Mexican Grill in association with the Chipotle pick-up window which has been implemented across the country by Chipotle Mexican Grill. The purpose of this Operations Study is to analyze the operational characteristics of the Chipotle pick-up window to determine the typical volumes, queue lengths and service times associated with this new configuration. This study will analyze the operation of six (6) existing Chipotles at high-volume locations with two (2) restaurants in the Los Angeles, California area, two (2) restaurants in the Boston, Massachusetts area, and two (2) restaurants in the Columbus, Ohio area.

In Summary,

1. The Chipotle at the Costa Mesa, CA location was found to experience a peak daily volume of 136 vehicles as well as a peak hourly volume of 24 vehicles with an hourly average volume between 1 and 19 vehicles. Additionally, the average service time over the four (4) days of operations was found to be under two (2) minutes.
2. The Chipotle at the Foothill Ranch, CA location was found to experience a peak daily volume of 149 vehicles as well as a peak hourly volume of 32 vehicles with an hourly average volume between 2 and 26 vehicles. Additionally, the average service time over the four (4) days of operations was found to be under two (2) minutes.
3. The Chipotle at the Hanover, MA location was found to experience a peak daily volume of 261 vehicles as well as a peak hourly volume of 46 vehicles with an hourly average volume between 1 and 27 vehicles. Additionally, the average service time over the four (4) days of operations was found to be just over three (3) minutes.
4. The Chipotle at the Norwich, CT location was found to experience a peak daily volume of 105 vehicles as well as a peak hourly volume of 24 vehicles with an hourly average volume between 0 and 14 vehicles. Additionally, the average service time over the four (4) days of operations was found to be around four (4) minutes.
5. The Chipotle at the Pickerington, OH location was found to experience a peak daily volume of 208 vehicles as well as a peak hourly volume of 32 vehicles with an hourly average volume between 2 and 28 vehicles. Additionally, the average service time





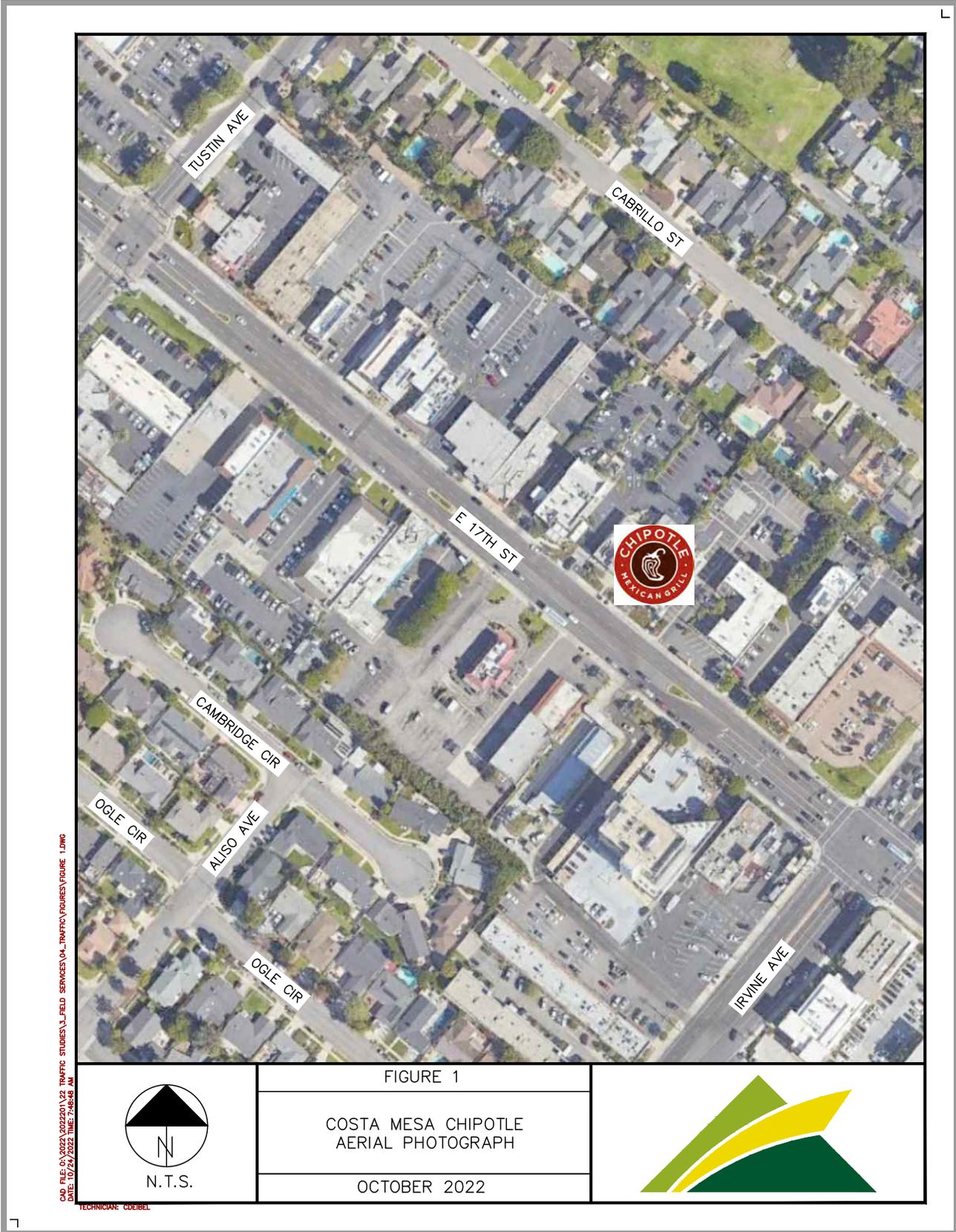
over the four (4) days of operations was found to be under three (3) minutes.

6. The Chipotlane at the Obetz, OH location was found to experience a peak daily volume of 180 vehicles as well as a peak hourly volume of 43 vehicles with an hourly average volume between 3 and 27 vehicles. Additionally, the average service time over the four (4) days of operations was found to be under three (3) minutes.
7. The total number of Chipotlane trips observed at the six (6) Chipotle sites (twenty-four (24) total days of operations) was 3,256, which is over double the number of data points used in the 2022 Intouch Insight Drive-Thru Study. An analysis of all 3,256 Chipotlane trips found the average time in the queue of one minute twenty seconds, the average time at the window to be one minute and thirteen seconds with a total average service time of two minutes and thirty-three seconds. This total service time is nearly 60% less than the average service time provided in the 2022 Intouch Insight Drive-Thru Study of 6 minutes and thirteen seconds for a typical fast-food restaurant.
8. GPD group performed a Chipotlane operations study in 2019 that included the same two (2) locations in the State of Ohio. The results of the 2019 study were compared to the results of this study to compare the operational characteristics between the 2019 data and the 2022 data.
9. When comparing the 2019 volumes and 2022 volumes at both Pickerington and Obetz locations it was observed that the number of customers that use the Chipotlane at each location remained consistent between the two data sets. Additionally, the 2022 data does show an increase in the maximum queue length and average service time at both locations when compared to the 2019 data set.





FIGURES

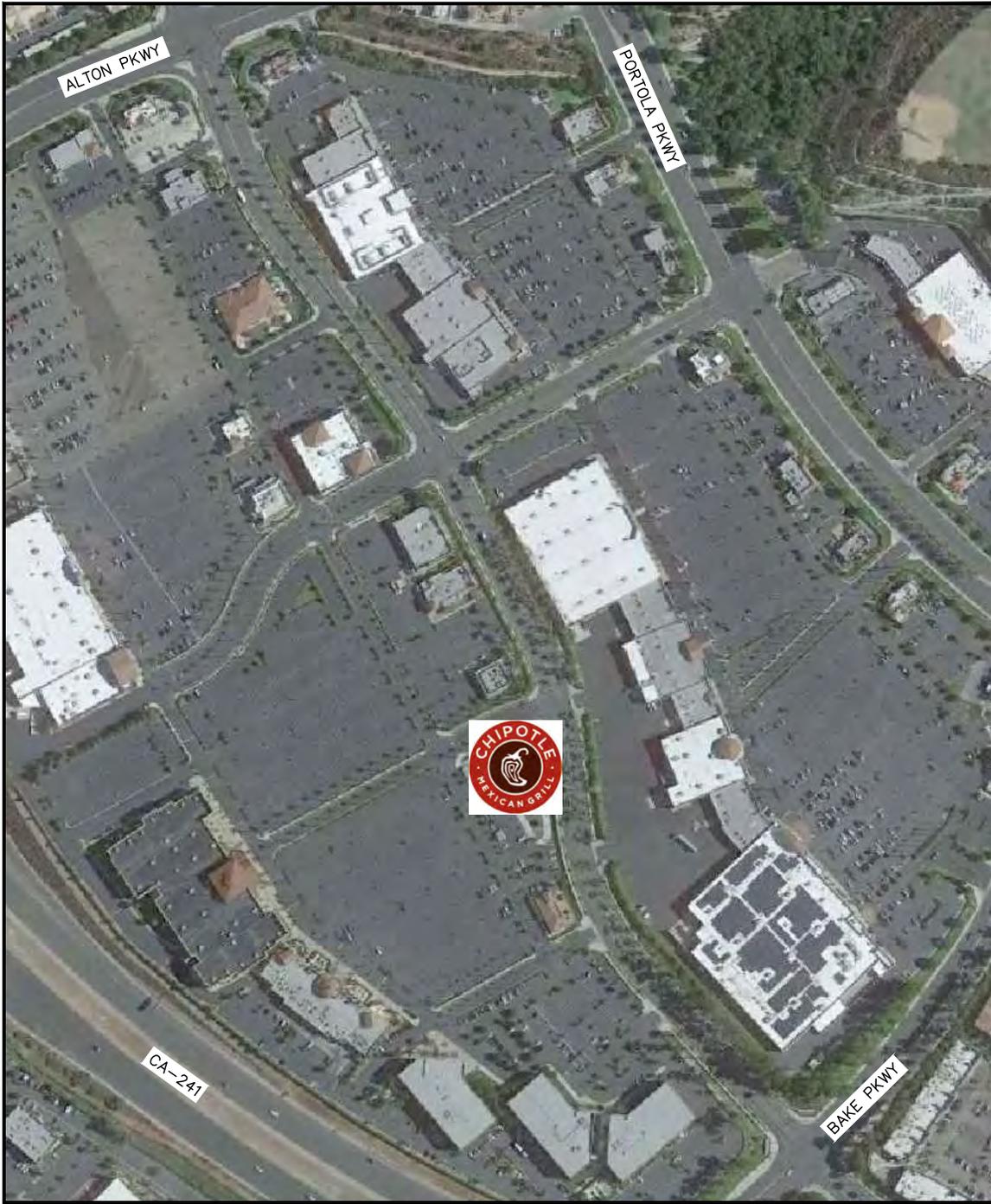


CAD FILE: CA\2022\202201\127 TRAFFIC STUDIES\1_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE_1.DWG
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 TECHNICIAN: CDEBEL



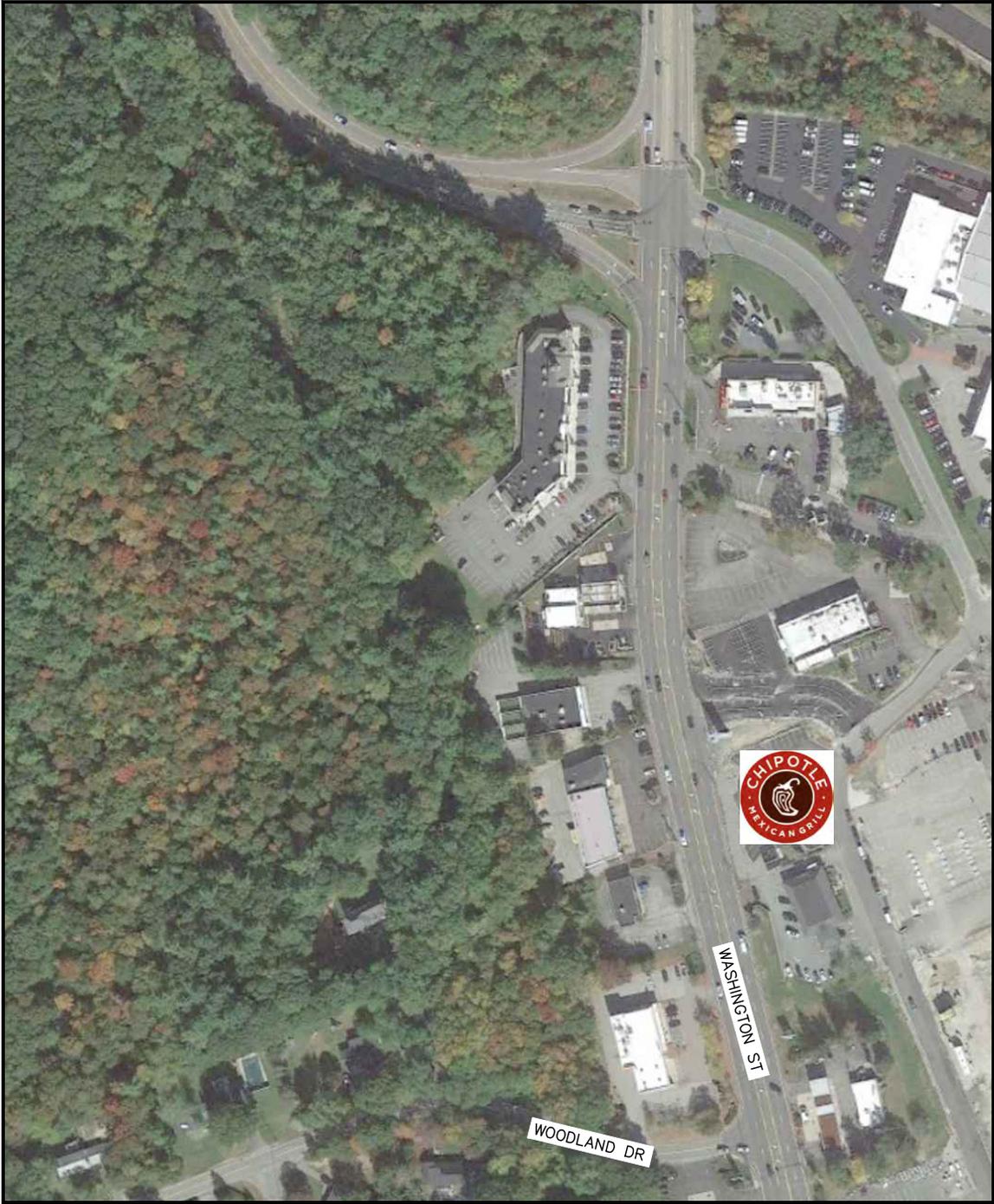
FIGURE 1
 COSTA MESA CHIPOTLE
 AERIAL PHOTOGRAPH
 OCTOBER 2022





CAD FILE: CA\2022\202210\22 TRAFFIC STUDIES\4_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE 2.DWG
 DATE: 10/24/2022 TIME: 7:48:57 AM
 TECHNICIAN: CDEBEL

 N.T.S.	<p>FIGURE 2</p> <p>FOOTHILL RANCH CHIPOTLE AERIAL PHOTOGRAPH</p> <p>OCTOBER 2022</p>	
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CAD FILE: G:\2022\2022201\12 TRAFFIC STUDIES\1_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE 3.DWG
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 TECHNICIAN: CDEIBEL



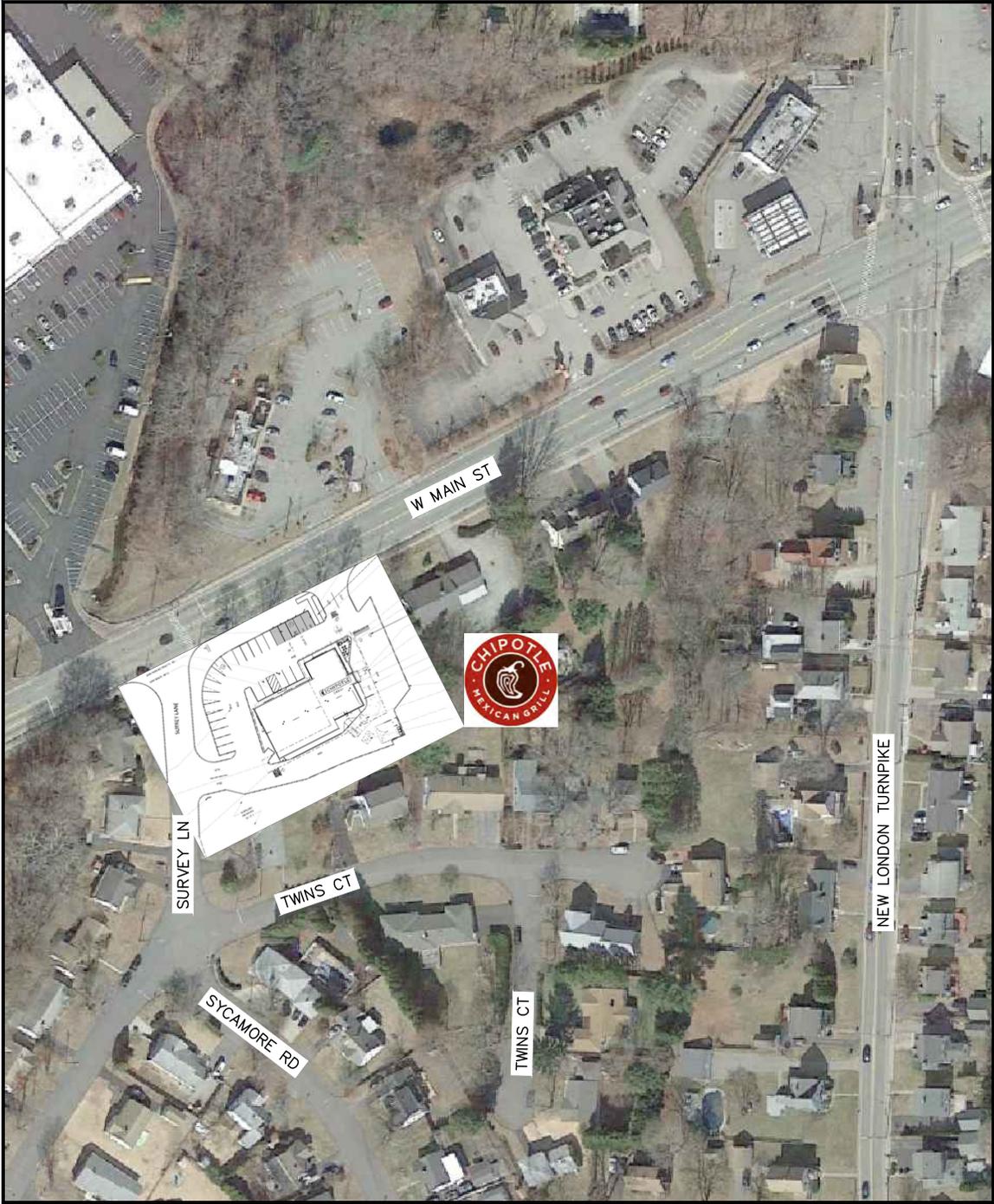
N.T.S.

FIGURE 3

HANOVER CHIPOTLE
AERIAL PHOTOGRAPH

OCTOBER 2022





CAD FILE: CA_2022_2022201\12_TRAFFIC STUDIES\1_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE 4.DWG
 DATE: 10/24/2022 TIME: 7:48:17 AM
 TECHNICIAN: CDEIBEL

 N.T.S.	FIGURE 4 NORWICH CHIPOTLE AERIAL PHOTOGRAPH OCTOBER 2022	
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CAD FILE: C:\2022\20221012\TRAFFIC STUDIES\1_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE 5.DWG
 DATE: 10/24/2022 TIME: 7:48:25 AM
 TECHNICIAN: CDEIBEL



N.T.S.

FIGURE 5

PICKERINGTON CHIPOTLE
AERIAL PHOTOGRAPH

OCTOBER 2022





CAD FILE: CA\2022\202210\22 TRAFFIC STUDIES\4_FIELD SERVICES\04_TRAFFIC FIGURES\FIGURE 6.DWG
 DATE: 10/24/2022 TIME: 7:48:32 AM
 TECHNICIAN: CDEBEL



N.T.S.

FIGURE 6

OBETZ CHIPOTLE
AERIAL PHOTOGRAPH

OCTOBER 2022



APPENDIX A
COSTA MESA, CA CHIPOTLANE DATA

Restaurant Location: 468 East 17th Street, Costa Mesa, CA 92627							
Data Collection Date: Wednesday, July 13, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:55:40 AM	1	10:55:40 AM	10:56:18 AM	0:00:00	0:00:38	0:00:38
Vehicle 2	10:58:41 AM	1	10:58:41 AM	10:59:23 AM	0:00:00	0:00:42	0:00:42
Vehicle 3	11:00:35 AM	1	11:00:35 AM	11:00:59 AM	0:00:00	0:00:24	0:00:24
Vehicle 4	11:03:55 AM	1	11:03:55 AM	11:04:09 AM	0:00:00	0:00:14	0:00:14
Vehicle 5	11:04:19 AM	1	11:04:19 AM	11:04:41 AM	0:00:00	0:00:22	0:00:22
Vehicle 6	11:08:16 AM	1	11:08:16 AM	11:09:54 AM	0:00:00	0:01:38	0:01:38
Vehicle 7	11:23:29 AM	1	11:23:29 AM	11:24:17 AM	0:00:00	0:00:48	0:00:48
Vehicle 8	11:24:22 AM	1	11:24:22 AM	11:24:46 AM	0:00:00	0:00:24	0:00:24
Vehicle 9	11:31:19 AM	1	11:31:19 AM	11:31:43 AM	0:00:00	0:00:24	0:00:24
Vehicle 10	11:39:49 AM	1	11:39:49 AM	11:40:19 AM	0:00:00	0:00:30	0:00:30
Vehicle 11	11:40:46 AM	1	11:40:46 AM	11:41:13 AM	0:00:00	0:00:27	0:00:27
Vehicle 12	11:45:56 AM	1	11:45:56 AM	11:46:23 AM	0:00:00	0:00:27	0:00:27
Vehicle 13	11:50:07 AM	1	11:50:07 AM	11:52:26 AM	0:00:00	0:02:19	0:02:19
Vehicle 14	11:50:15 AM	2	11:52:35 AM	11:53:52 AM	0:02:20	0:01:17	0:03:37
Vehicle 15	11:50:56 AM	3	11:54:00 AM	11:54:25 AM	0:03:04	0:00:25	0:03:29
Vehicle 16	11:52:44 AM	3	11:54:34 AM	11:56:21 AM	0:01:50	0:01:47	0:03:37
Vehicle 17	11:56:11 AM	2	11:56:30 AM	11:58:20 AM	0:00:19	0:01:50	0:02:09
Vehicle 18	12:03:57 PM	1	12:03:57 PM	12:04:29 PM	0:00:00	0:00:32	0:00:32
Vehicle 19	12:09:45 PM	1	12:09:45 PM	12:10:31 PM	0:00:00	0:00:46	0:00:46
Vehicle 20	12:10:22 PM	1	12:10:22 PM	12:11:36 PM	0:00:00	0:01:14	0:01:14
Vehicle 21	12:27:49 PM	1	12:27:49 PM	12:28:23 PM	0:00:00	0:00:34	0:00:34
Vehicle 22	12:30:32 PM	1	12:30:32 PM	12:31:28 PM	0:00:00	0:00:56	0:00:56
Vehicle 23	12:31:18 PM	2	12:31:35 PM	12:36:18 PM	0:00:17	0:04:43	0:05:00
Vehicle 24	12:31:56 PM	3	12:36:24 PM	12:37:33 PM	0:04:28	0:01:09	0:05:37
Vehicle 25	12:33:32 PM	3	12:37:39 PM	12:38:17 PM	0:04:07	0:00:38	0:04:45
Vehicle 26	12:34:29 PM	4	12:38:25 PM	12:38:37 PM	0:03:56	0:00:12	0:04:08
Vehicle 27	12:34:34 PM	5	12:38:43 PM	12:39:25 PM	0:04:09	0:00:42	0:04:51
Vehicle 28	12:37:55 PM	4	12:39:31 PM	12:40:01 PM	0:01:36	0:00:30	0:02:06
Vehicle 29	12:38:01 PM	5	12:40:09 PM	12:40:47 PM	0:02:08	0:00:38	0:02:46
Vehicle 30	12:40:03 PM	2	12:40:54 PM	12:41:28 PM	0:00:51	0:00:34	0:01:25
Vehicle 31	12:41:54 PM	1	12:41:54 PM	12:42:22 PM	0:00:00	0:00:28	0:00:28
Vehicle 32	12:42:47 PM	1	12:42:47 PM	12:43:47 PM	0:00:00	0:01:00	0:01:00
Vehicle 33	12:43:35 PM	2	12:43:53 PM	12:44:17 PM	0:00:18	0:00:24	0:00:42
Vehicle 34	12:46:52 PM	1	12:46:52 PM	12:47:41 PM	0:00:00	0:00:49	0:00:49
Vehicle 35	12:49:01 PM	1	12:49:01 PM	12:49:29 PM	0:00:00	0:00:28	0:00:28
Vehicle 36	12:49:06 PM	2	12:49:43 PM	12:50:17 PM	0:00:37	0:00:34	0:01:11
Vehicle 37	12:49:07 PM	3	12:50:26 PM	12:50:50 PM	0:01:19	0:00:24	0:01:43
Vehicle 38	12:54:45 PM	1	12:54:45 PM	12:55:28 PM	0:00:00	0:00:43	0:00:43
Vehicle 39	12:56:02 PM	1	12:56:02 PM	12:57:02 PM	0:00:00	0:01:00	0:01:00
Vehicle 40	12:59:21 PM	1	12:59:21 PM	12:59:40 PM	0:00:00	0:00:19	0:00:19
Vehicle 41	12:59:59 PM	1	12:59:59 PM	1:02:00 PM	0:00:00	0:02:01	0:02:01
Vehicle 42	1:01:33 PM	2	1:02:05 PM	1:02:21 PM	0:00:32	0:00:16	0:00:48
Vehicle 43	1:01:44 PM	3	1:02:28 PM	1:03:00 PM	0:00:44	0:00:32	0:01:16
Vehicle 44	1:11:32 PM	1	1:11:32 PM	1:11:58 PM	0:00:00	0:00:26	0:00:26
Vehicle 45	1:12:13 PM	1	1:12:13 PM	1:13:03 PM	0:00:00	0:00:50	0:00:50
Vehicle 46	1:16:52 PM	1	1:16:52 PM	1:17:37 PM	0:00:00	0:00:45	0:00:45
Vehicle 47	1:18:20 PM	1	1:18:20 PM	1:18:34 PM	0:00:00	0:00:14	0:00:14
Vehicle 48	1:21:55 PM	1	1:21:55 PM	1:23:47 PM	0:00:00	0:01:52	0:01:52
Vehicle 49	1:23:19 PM	2	1:23:53 PM	1:25:04 PM	0:00:34	0:01:11	0:01:45
Vehicle 50	1:25:48 PM	1	1:25:48 PM	1:26:15 PM	0:00:00	0:00:27	0:00:27
Vehicle 51	1:30:23 PM	1	1:30:23 PM	1:31:39 PM	0:00:00	0:01:16	0:01:16
Vehicle 52	1:33:53 PM	1	1:33:53 PM	1:34:23 PM	0:00:00	0:00:30	0:00:30
Vehicle 53	1:41:55 PM	1	1:41:55 PM	1:42:20 PM	0:00:00	0:00:25	0:00:25
Vehicle 54	1:46:19 PM	1	1:46:19 PM	1:47:08 PM	0:00:00	0:00:49	0:00:49
Vehicle 55	1:54:04 PM	1	1:54:04 PM	1:54:31 PM	0:00:00	0:00:27	0:00:27
Vehicle 56	1:59:23 PM	1	1:59:23 PM	1:59:39 PM	0:00:00	0:00:16	0:00:16
Vehicle 57	2:06:48 PM	1	2:06:48 PM	2:07:36 PM	0:00:00	0:00:48	0:00:48
Vehicle 58	2:12:56 PM	1	2:12:56 PM	2:13:19 PM	0:00:00	0:00:23	0:00:23
Vehicle 59	2:14:28 PM	1	2:14:28 PM	2:14:39 PM	0:00:00	0:00:11	0:00:11
Vehicle 60	2:33:14 PM	1	2:33:14 PM	2:33:48 PM	0:00:00	0:00:34	0:00:34
Vehicle 61	2:33:23 PM	2	2:33:56 PM	2:34:21 PM	0:00:33	0:00:25	0:00:58
Vehicle 62	2:34:29 PM	1	2:34:29 PM	2:34:54 PM	0:00:00	0:00:25	0:00:25
Vehicle 63	2:39:50 PM	1	2:39:50 PM	2:39:59 PM	0:00:00	0:00:09	0:00:09
Vehicle 64	2:49:19 PM	1	2:49:19 PM	2:50:18 PM	0:00:00	0:00:59	0:00:59
Vehicle 65	2:49:58 PM	2	2:50:22 PM	2:52:27 PM	0:00:24	0:02:05	0:02:29
Vehicle 66	2:53:03 PM	1	2:53:03 PM	2:53:26 PM	0:00:00	0:00:23	0:00:23
Vehicle 67	3:02:59 PM	1	3:02:59 PM	3:03:27 PM	0:00:00	0:00:28	0:00:28
Vehicle 68	3:10:55 PM	1	3:10:55 PM	3:11:33 PM	0:00:00	0:00:38	0:00:38
Vehicle 69	3:21:15 PM	1	3:21:15 PM	3:21:29 PM	0:00:00	0:00:14	0:00:14
Vehicle 70	3:36:02 PM	1	3:36:02 PM	3:39:26 PM	0:00:00	0:03:24	0:03:24
Vehicle 71	4:00:04 PM	1	4:00:04 PM	4:00:37 PM	0:00:00	0:00:33	0:00:33

Vehicle 72	4:09:31 PM	1	4:09:31 PM	4:09:56 PM	0:00:00	0:00:25	0:00:25
Vehicle 73	4:26:28 PM	1	4:26:28 PM	4:26:52 PM	0:00:00	0:00:24	0:00:24
Vehicle 74	4:32:09 PM	1	4:32:09 PM	4:32:35 PM	0:00:00	0:00:26	0:00:26
Vehicle 75	4:41:53 PM	1	4:41:53 PM	4:42:18 PM	0:00:00	0:00:25	0:00:25
Vehicle 76	4:57:26 PM	1	4:57:26 PM	4:57:46 PM	0:00:00	0:00:20	0:00:20
Vehicle 77	5:05:03 PM	1	5:05:03 PM	5:06:14 PM	0:00:00	0:01:11	0:01:11
Vehicle 78	5:05:07 PM	2	5:06:22 PM	5:06:37 PM	0:01:15	0:00:15	0:01:30
Vehicle 79	5:14:05 PM	1	5:14:05 PM	5:14:24 PM	0:00:00	0:00:19	0:00:19
Vehicle 80	5:21:38 PM	1	5:21:38 PM	5:21:58 PM	0:00:00	0:00:20	0:00:20
Vehicle 81	5:24:29 PM	1	5:24:29 PM	5:24:53 PM	0:00:00	0:00:24	0:00:24
Vehicle 82	5:42:14 PM	1	5:42:14 PM	5:42:30 PM	0:00:00	0:00:16	0:00:16
Vehicle 83	5:43:21 PM	1	5:43:21 PM	5:43:31 PM	0:00:00	0:00:10	0:00:10
Vehicle 84	5:53:22 PM	1	5:53:22 PM	5:54:50 PM	0:00:00	0:01:28	0:01:28
Vehicle 85	5:59:44 PM	1	5:59:44 PM	6:00:43 PM	0:00:00	0:00:59	0:00:59
Vehicle 86	5:59:51 PM	2	6:00:51 PM	6:01:00 PM	0:01:00	0:00:09	0:01:09
Vehicle 87	6:00:31 PM	3	6:01:09 PM	6:01:22 PM	0:00:38	0:00:13	0:00:51
Vehicle 88	6:00:31 PM	4	6:01:30 PM	6:01:39 PM	0:00:59	0:00:09	0:01:08
Vehicle 89	6:00:38 PM	5	6:01:47 PM	6:01:58 PM	0:01:09	0:00:11	0:01:20
Vehicle 90	6:06:48 PM	1	6:06:48 PM	6:07:06 PM	0:00:00	0:00:18	0:00:18
Vehicle 91	6:08:07 PM	1	6:08:07 PM	6:09:39 PM	0:00:00	0:01:32	0:01:32
Vehicle 92	6:16:59 PM	1	6:16:59 PM	6:17:19 PM	0:00:00	0:00:20	0:00:20
Vehicle 93	6:18:55 PM	1	6:18:55 PM	6:19:10 PM	0:00:00	0:00:15	0:00:15
Vehicle 94	6:21:48 PM	1	6:21:48 PM	6:22:12 PM	0:00:00	0:00:24	0:00:24
Vehicle 95	6:23:29 PM	1	6:23:29 PM	6:23:49 PM	0:00:00	0:00:20	0:00:20
Vehicle 96	6:31:06 PM	1	6:31:06 PM	6:31:19 PM	0:00:00	0:00:13	0:00:13
Vehicle 97	6:32:40 PM	1	6:32:40 PM	6:33:50 PM	0:00:00	0:01:10	0:01:10
Vehicle 98	6:38:43 PM	1	6:38:43 PM	6:38:52 PM	0:00:00	0:00:09	0:00:09
Vehicle 99	6:43:27 PM	1	6:43:27 PM	6:43:46 PM	0:00:00	0:00:19	0:00:19
Vehicle 100	6:46:18 PM	1	6:46:18 PM	6:46:27 PM	0:00:00	0:00:09	0:00:09
Vehicle 101	6:50:13 PM	1	6:50:13 PM	6:50:27 PM	0:00:00	0:00:14	0:00:14
Vehicle 102	6:53:15 PM	1	6:53:15 PM	6:53:44 PM	0:00:00	0:00:29	0:00:29
Vehicle 103	6:56:56 PM	1	6:56:56 PM	6:57:25 PM	0:00:00	0:00:29	0:00:29
Vehicle 104	6:59:06 PM	1	6:59:06 PM	6:59:44 PM	0:00:00	0:00:38	0:00:38
Vehicle 105	7:00:22 PM	1	7:00:22 PM	7:00:47 PM	0:00:00	0:00:25	0:00:25
Vehicle 106	7:01:20 PM	1	7:01:20 PM	7:01:32 PM	0:00:00	0:00:12	0:00:12
Vehicle 107	7:01:40 PM	1	7:01:40 PM	7:01:55 PM	0:00:00	0:00:15	0:00:15
Vehicle 108	7:02:35 PM	1	7:02:35 PM	7:02:55 PM	0:00:00	0:00:20	0:00:20
Vehicle 109	7:10:59 PM	1	7:10:59 PM	7:11:17 PM	0:00:00	0:00:18	0:00:18
Vehicle 110	7:14:51 PM	1	7:14:51 PM	7:15:16 PM	0:00:00	0:00:25	0:00:25
Vehicle 111	7:24:36 PM	1	7:24:36 PM	7:25:59 PM	0:00:00	0:01:23	0:01:23
Vehicle 112	7:25:12 PM	1	7:25:12 PM	7:25:39 PM	0:00:00	0:00:27	0:00:27
Vehicle 113	7:25:57 PM	1	7:25:57 PM	7:26:31 PM	0:00:00	0:00:34	0:00:34
Vehicle 114	7:28:04 PM	1	7:28:04 PM	7:28:17 PM	0:00:00	0:00:13	0:00:13
Vehicle 115	7:29:12 PM	1	7:29:12 PM	7:29:41 PM	0:00:00	0:00:29	0:00:29
Vehicle 116	7:30:00 PM	1	7:30:00 PM	7:30:26 PM	0:00:00	0:00:26	0:00:26
Vehicle 117	7:31:26 PM	1	7:31:26 PM	7:31:36 PM	0:00:00	0:00:10	0:00:10
Vehicle 118	7:31:45 PM	1	7:31:45 PM	7:31:53 PM	0:00:00	0:00:08	0:00:08
Vehicle 119	7:32:28 PM	1	7:32:28 PM	7:32:48 PM	0:00:00	0:00:20	0:00:20
Vehicle 120	7:42:36 PM	1	7:42:36 PM	7:42:56 PM	0:00:00	0:00:20	0:00:20
Vehicle 121	7:45:02 PM	1	7:45:02 PM	7:45:17 PM	0:00:00	0:00:15	0:00:15
Vehicle 122	7:51:16 PM	1	7:51:16 PM	7:51:37 PM	0:00:00	0:00:21	0:00:21
Vehicle 123	7:53:58 PM	1	7:53:58 PM	7:57:24 PM	0:00:00	0:03:26	0:03:26
Vehicle 124	7:58:24 PM	1	7:58:24 PM	7:58:55 PM	0:00:00	0:00:31	0:00:31
Vehicle 125	8:16:24 PM	1	8:16:24 PM	8:16:37 PM	0:00:00	0:00:13	0:00:13
Vehicle 126	8:18:44 PM	1	8:18:44 PM	8:19:03 PM	0:00:00	0:00:19	0:00:19
Vehicle 127	8:23:00 PM	1	8:23:00 PM	8:23:13 PM	0:00:00	0:00:13	0:00:13
Vehicle 128	8:23:30 PM	1	8:23:30 PM	8:23:53 PM	0:00:00	0:00:23	0:00:23
Vehicle 129	8:28:32 PM	1	8:28:32 PM	8:28:47 PM	0:00:00	0:00:15	0:00:15
Vehicle 130	8:28:37 PM	2	8:28:55 PM	8:29:46 PM	0:00:18	0:00:51	0:01:09
Vehicle 131	8:37:42 PM	1	8:37:42 PM	8:38:03 PM	0:00:00	0:00:21	0:00:21
Vehicle 132	8:38:17 PM	1	8:38:17 PM	8:39:06 PM	0:00:00	0:00:49	0:00:49
Vehicle 133	8:41:56 PM	1	8:41:56 PM	8:42:19 PM	0:00:00	0:00:23	0:00:23
Vehicle 134	8:47:46 PM	1	8:47:46 PM	8:48:04 PM	0:00:00	0:00:18	0:00:18
Vehicle 135	8:51:02 PM	1	8:51:02 PM	8:54:13 PM	0:00:00	0:03:11	0:03:11
Vehicle 136	9:25:07 PM	1	9:25:07 PM	9:25:16 PM	0:00:00	0:00:09	0:00:09

Restaurant Location: 468 East 17th Street, Costa Mesa, CA 92627							
Data Collection Date: Thursday, July 14, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	11:12:38 AM	1	11:12:38 AM	11:12:58 AM	0:00:00	0:00:20	0:00:20
Vehicle 2	11:37:17 AM	1	11:37:17 AM	11:37:44 AM	0:00:00	0:00:27	0:00:27
Vehicle 3	11:38:11 AM	1	11:38:11 AM	11:39:17 AM	0:00:00	0:01:06	0:01:06
Vehicle 4	11:47:37 AM	1	11:47:37 AM	11:48:35 AM	0:00:00	0:00:58	0:00:58
Vehicle 5	11:54:43 AM	1	11:54:43 AM	11:56:02 AM	0:00:00	0:01:19	0:01:19
Vehicle 6	11:55:36 AM	2	11:56:12 AM	11:56:53 AM	0:00:36	0:00:41	0:01:17
Vehicle 7	12:04:21 PM	1	12:04:21 PM	12:05:09 PM	0:00:00	0:00:48	0:00:48
Vehicle 8	12:08:28 PM	1	12:08:28 PM	12:08:44 PM	0:00:00	0:00:16	0:00:16
Vehicle 9	12:15:59 PM	1	12:15:59 PM	12:16:39 PM	0:00:00	0:00:40	0:00:40
Vehicle 10	12:19:20 PM	1	12:19:20 PM	12:21:47 PM	0:00:00	0:02:27	0:02:27
Vehicle 11	12:23:43 PM	1	12:23:43 PM	12:24:26 PM	0:00:00	0:00:43	0:00:43
Vehicle 12	12:23:57 PM	2	12:24:34 PM	12:24:46 PM	0:00:37	0:00:12	0:00:49
Vehicle 13	12:24:55 PM	1	12:24:55 PM	12:28:34 PM	0:00:00	0:03:39	0:03:39
Vehicle 14	12:25:44 PM	2	12:28:45 PM	12:29:18 PM	0:03:01	0:00:33	0:03:34
Vehicle 15	12:27:06 PM	3	12:29:27 PM	12:29:38 PM	0:02:21	0:00:11	0:02:32
Vehicle 16	12:31:39 PM	1	12:31:39 PM	12:32:05 PM	0:00:00	0:00:26	0:00:26
Vehicle 17	12:31:52 PM	2	12:32:14 PM	12:32:37 PM	0:00:22	0:00:23	0:00:45
Vehicle 18	12:42:38 PM	1	12:42:38 PM	12:42:57 PM	0:00:00	0:00:19	0:00:19
Vehicle 19	12:47:15 PM	1	12:47:15 PM	12:48:58 PM	0:00:00	0:01:43	0:01:43
Vehicle 20	12:51:02 PM	1	12:51:02 PM	12:52:35 PM	0:00:00	0:01:33	0:01:33
Vehicle 21	12:52:17 PM	2	12:52:47 PM	12:53:35 PM	0:00:30	0:00:48	0:01:18
Vehicle 22	1:01:35 PM	1	1:01:35 PM	1:01:54 PM	0:00:00	0:00:19	0:00:19
Vehicle 23	1:02:11 PM	1	1:02:11 PM	1:05:41 PM	0:00:00	0:03:30	0:03:30
Vehicle 24	1:02:23 PM	2	1:05:53 PM	1:06:07 PM	0:03:30	0:00:14	0:03:44
Vehicle 25	1:02:21 PM	3	1:06:16 PM	1:06:29 PM	0:03:55	0:00:13	0:04:08
Vehicle 26	1:04:51 PM	4	1:06:38 PM	1:06:58 PM	0:01:47	0:00:20	0:02:07
Vehicle 27	1:06:38 PM	2	1:07:06 PM	1:07:15 PM	0:00:28	0:00:09	0:00:37
Vehicle 28	1:12:20 PM	1	1:12:20 PM	1:12:43 PM	0:00:00	0:00:23	0:00:23
Vehicle 29	1:16:08 PM	1	1:16:08 PM	1:16:56 PM	0:00:00	0:00:48	0:00:48
Vehicle 30	1:19:57 PM	1	1:19:57 PM	1:20:21 PM	0:00:00	0:00:24	0:00:24
Vehicle 31	1:23:38 PM	1	1:23:38 PM	1:23:58 PM	0:00:00	0:00:20	0:00:20
Vehicle 32	1:25:55 PM	1	1:25:55 PM	1:26:09 PM	0:00:00	0:00:14	0:00:14
Vehicle 33	1:33:16 PM	1	1:33:16 PM	1:33:40 PM	0:00:00	0:00:24	0:00:24
Vehicle 34	1:38:24 PM	1	1:38:24 PM	1:38:46 PM	0:00:00	0:00:22	0:00:22
Vehicle 35	1:55:12 PM	1	1:55:12 PM	1:56:05 PM	0:00:00	0:00:53	0:00:53
Vehicle 36	1:58:55 PM	1	1:58:55 PM	1:59:36 PM	0:00:00	0:00:41	0:00:41
Vehicle 37	2:00:14 PM	1	2:00:14 PM	2:00:50 PM	0:00:00	0:00:36	0:00:36
Vehicle 38	2:10:33 PM	1	2:10:33 PM	2:10:58 PM	0:00:00	0:00:25	0:00:25
Vehicle 39	2:18:00 PM	1	2:18:00 PM	2:18:57 PM	0:00:00	0:00:57	0:00:57
Vehicle 40	2:18:26 PM	2	2:19:01 PM	2:19:27 PM	0:00:35	0:00:26	0:01:01
Vehicle 41	2:21:35 PM	1	2:21:35 PM	2:21:55 PM	0:00:00	0:00:20	0:00:20
Vehicle 42	2:31:36 PM	1	2:31:36 PM	2:32:20 PM	0:00:00	0:00:44	0:00:44
Vehicle 43	2:39:31 PM	1	2:39:31 PM	2:40:22 PM	0:00:00	0:00:51	0:00:51
Vehicle 44	2:51:01 PM	1	2:51:01 PM	2:52:01 PM	0:00:00	0:01:00	0:01:00
Vehicle 45	3:21:19 PM	1	3:21:19 PM	3:21:58 PM	0:00:00	0:00:39	0:00:39
Vehicle 46	3:25:48 PM	1	3:25:48 PM	3:27:58 PM	0:00:00	0:02:10	0:02:10
Vehicle 47	3:26:10 PM	2	3:28:12 PM	3:29:16 PM	0:02:02	0:01:04	0:03:06
Vehicle 48	3:26:16 PM	3	3:29:29 PM	3:30:20 PM	0:03:13	0:00:51	0:04:04
Vehicle 49	3:32:44 PM	1	3:32:44 PM	3:34:50 PM	0:00:00	0:02:06	0:02:06
Vehicle 50	3:39:33 PM	1	3:39:33 PM	3:40:58 PM	0:00:00	0:01:25	0:01:25
Vehicle 51	3:50:18 PM	1	3:50:18 PM	3:51:35 PM	0:00:00	0:01:17	0:01:17
Vehicle 52	4:01:00 PM	1	4:01:00 PM	4:01:15 PM	0:00:00	0:00:15	0:00:15
Vehicle 53	4:16:57 PM	1	4:16:57 PM	4:17:39 PM	0:00:00	0:00:42	0:00:42
Vehicle 54	4:32:14 PM	1	4:32:14 PM	4:33:19 PM	0:00:00	0:01:05	0:01:05
Vehicle 55	4:38:58 PM	1	4:38:58 PM	4:39:47 PM	0:00:00	0:00:49	0:00:49
Vehicle 56	4:41:10 PM	1	4:41:10 PM	4:41:33 PM	0:00:00	0:00:23	0:00:23
Vehicle 57	4:55:56 PM	1	4:55:56 PM	4:56:13 PM	0:00:00	0:00:17	0:00:17
Vehicle 58	4:59:19 PM	1	4:59:19 PM	5:00:08 PM	0:00:00	0:00:49	0:00:49
Vehicle 59	5:04:50 PM	1	5:04:50 PM	5:05:23 PM	0:00:00	0:00:33	0:00:33
Vehicle 60	5:14:25 PM	1	5:14:25 PM	5:14:40 PM	0:00:00	0:00:15	0:00:15
Vehicle 61	5:16:22 PM	1	5:16:22 PM	5:16:48 PM	0:00:00	0:00:26	0:00:26
Vehicle 62	5:20:18 PM	1	5:20:18 PM	5:20:42 PM	0:00:00	0:00:24	0:00:24
Vehicle 63	5:29:25 PM	1	5:29:25 PM	5:30:02 PM	0:00:00	0:00:37	0:00:37
Vehicle 64	5:39:10 PM	1	5:39:10 PM	5:39:32 PM	0:00:00	0:00:22	0:00:22
Vehicle 65	5:48:49 PM	1	5:48:49 PM	5:49:12 PM	0:00:00	0:00:23	0:00:23
Vehicle 66	5:49:23 PM	1	5:49:23 PM	5:49:39 PM	0:00:00	0:00:16	0:00:16
Vehicle 67	5:57:23 PM	1	5:57:23 PM	5:58:16 PM	0:00:00	0:00:53	0:00:53
Vehicle 68	5:59:17 PM	1	5:59:17 PM	5:59:46 PM	0:00:00	0:00:29	0:00:29
Vehicle 69	6:00:34 PM	1	6:00:34 PM	6:03:53 PM	0:00:00	0:03:19	0:03:19
Vehicle 70	6:02:47 PM	2	6:04:00 PM	6:04:16 PM	0:01:13	0:00:16	0:01:29
Vehicle 71	6:06:17 PM	1	6:06:17 PM	6:06:25 PM	0:00:00	0:00:08	0:00:08

Vehicle 72	6:17:34 PM	1	6:17:34 PM	6:18:07 PM	0:00:00	0:00:33	0:00:33
Vehicle 73	6:18:31 PM	1	6:18:31 PM	6:20:26 PM	0:00:00	0:01:55	0:01:55
Vehicle 74	6:25:48 PM	1	6:25:48 PM	6:26:10 PM	0:00:00	0:00:22	0:00:22
Vehicle 75	6:28:06 PM	1	6:28:06 PM	6:28:23 PM	0:00:00	0:00:17	0:00:17
Vehicle 76	6:30:35 PM	1	6:30:35 PM	6:31:04 PM	0:00:00	0:00:29	0:00:29
Vehicle 77	6:43:28 PM	1	6:43:28 PM	6:43:41 PM	0:00:00	0:00:13	0:00:13
Vehicle 78	6:45:54 PM	1	6:45:54 PM	6:46:16 PM	0:00:00	0:00:22	0:00:22
Vehicle 79	7:02:34 PM	1	7:02:34 PM	7:04:14 PM	0:00:00	0:01:40	0:01:40
Vehicle 80	7:05:45 PM	1	7:05:45 PM	7:06:02 PM	0:00:00	0:00:17	0:00:17
Vehicle 81	7:12:09 PM	1	7:12:09 PM	7:15:16 PM	0:00:00	0:03:07	0:03:07
Vehicle 82	7:20:38 PM	1	7:20:38 PM	7:22:37 PM	0:00:00	0:01:59	0:01:59
Vehicle 83	7:21:58 PM	2	7:22:46 PM	7:23:06 PM	0:00:48	0:00:20	0:01:08
Vehicle 84	7:24:38 PM	1	7:24:38 PM	7:25:12 PM	0:00:00	0:00:34	0:00:34
Vehicle 85	7:26:51 PM	1	7:26:51 PM	7:27:16 PM	0:00:00	0:00:25	0:00:25
Vehicle 86	7:39:06 PM	1	7:39:06 PM	7:39:24 PM	0:00:00	0:00:18	0:00:18
Vehicle 87	7:40:25 PM	1	7:40:25 PM	7:41:01 PM	0:00:00	0:00:36	0:00:36
Vehicle 88	7:41:45 PM	1	7:41:45 PM	7:44:50 PM	0:00:00	0:03:05	0:03:05
Vehicle 89	7:50:49 PM	1	7:50:49 PM	7:51:22 PM	0:00:00	0:00:33	0:00:33
Vehicle 90	7:59:52 PM	1	7:59:52 PM	8:00:05 PM	0:00:00	0:00:13	0:00:13
Vehicle 91	8:03:53 PM	1	8:03:53 PM	8:04:04 PM	0:00:00	0:00:11	0:00:11
Vehicle 92	8:05:37 PM	1	8:05:37 PM	8:06:00 PM	0:00:00	0:00:23	0:00:23
Vehicle 93	8:08:06 PM	1	8:08:06 PM	8:10:47 PM	0:00:00	0:02:41	0:02:41
Vehicle 94	8:08:33 PM	2	8:10:55 PM	8:11:22 PM	0:02:22	0:00:27	0:02:49
Vehicle 95	8:12:39 PM	1	8:12:39 PM	8:13:31 PM	0:00:00	0:00:52	0:00:52
Vehicle 96	8:16:49 PM	1	8:16:49 PM	8:17:03 PM	0:00:00	0:00:14	0:00:14
Vehicle 97	8:34:44 PM	1	8:34:44 PM	8:34:57 PM	0:00:00	0:00:13	0:00:13
Vehicle 98	8:43:58 PM	1	8:43:58 PM	8:44:32 PM	0:00:00	0:00:34	0:00:34
Vehicle 99	8:44:43 PM	1	8:44:43 PM	8:44:57 PM	0:00:00	0:00:14	0:00:14
Vehicle 100	8:45:22 PM	1	8:45:22 PM	8:45:40 PM	0:00:00	0:00:18	0:00:18
Vehicle 101	8:48:40 PM	1	8:48:40 PM	8:49:01 PM	0:00:00	0:00:21	0:00:21
Vehicle 102	9:02:15 PM	1	9:02:15 PM	9:02:34 PM	0:00:00	0:00:19	0:00:19
Vehicle 103	9:03:45 PM	1	9:03:45 PM	9:03:58 PM	0:00:00	0:00:13	0:00:13
Vehicle 104	9:32:28 PM	1	9:32:28 PM	9:34:31 PM	0:00:00	0:02:03	0:02:03

Restaurant Location: 468 East 17th Street, Costa Mesa, CA 92627							
Data Collection Date: Friday, July 15, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:41:41 AM	1	10:41:41 AM	10:42:37 AM	0:00:00	0:00:56	0:00:56
Vehicle 2	11:05:50 AM	1	11:05:50 AM	11:06:15 AM	0:00:00	0:00:25	0:00:25
Vehicle 3	11:08:09 AM	1	11:08:09 AM	11:09:18 AM	0:00:00	0:01:09	0:01:09
Vehicle 4	11:12:42 AM	1	11:12:42 AM	11:13:04 AM	0:00:00	0:00:22	0:00:22
Vehicle 5	11:18:41 AM	1	11:18:41 AM	11:19:25 AM	0:00:00	0:00:44	0:00:44
Vehicle 6	11:23:56 AM	1	11:23:56 AM	11:24:12 AM	0:00:00	0:00:16	0:00:16
Vehicle 7	11:31:37 AM	1	11:31:37 AM	11:32:02 AM	0:00:00	0:00:25	0:00:25
Vehicle 8	11:37:12 AM	1	11:37:12 AM	11:37:44 AM	0:00:00	0:00:32	0:00:32
Vehicle 9	11:42:55 AM	1	11:42:55 AM	11:43:05 AM	0:00:00	0:00:10	0:00:10
Vehicle 10	11:52:22 AM	1	11:52:22 AM	11:52:56 AM	0:00:00	0:00:34	0:00:34
Vehicle 11	11:58:38 AM	1	11:58:38 AM	11:59:03 AM	0:00:00	0:00:25	0:00:25
Vehicle 12	12:00:52 PM	1	12:00:52 PM	12:01:16 PM	0:00:00	0:00:24	0:00:24
Vehicle 13	12:01:55 PM	1	12:01:55 PM	12:03:54 PM	0:00:00	0:01:59	0:01:59
Vehicle 14	12:02:57 PM	2	12:04:01 PM	12:04:41 PM	0:01:04	0:00:40	0:01:44
Vehicle 15	12:10:13 PM	1	12:10:13 PM	12:20:34 PM	0:00:00	0:10:21	0:10:21
Vehicle 16	12:10:23 PM	2	12:20:45 PM	12:20:54 PM	0:10:22	0:00:09	0:10:31
Vehicle 17	12:10:53 PM	3	12:21:04 PM	12:21:57 PM	0:10:11	0:00:53	0:11:04
Vehicle 18	12:11:30 PM	4	12:22:03 PM	12:22:17 PM	0:10:33	0:00:14	0:10:47
Vehicle 19	12:17:15 PM	5	12:22:25 PM	12:22:40 PM	0:05:10	0:00:15	0:05:25
Vehicle 20	12:19:15 PM	6	12:22:48 PM	12:23:42 PM	0:03:33	0:00:54	0:04:27
Vehicle 21	12:21:33 PM	5	12:23:52 PM	12:26:42 PM	0:02:19	0:02:50	0:05:09
Vehicle 22	12:26:20 PM	2	12:26:48 PM	12:27:09 PM	0:00:28	0:00:21	0:00:49
Vehicle 23	12:27:21 PM	1	12:27:21 PM	12:29:00 PM	0:00:00	0:01:39	0:01:39
Vehicle 24	12:27:39 PM	2	12:29:07 PM	12:30:45 PM	0:01:28	0:01:38	0:03:06
Vehicle 25	12:28:54 PM	3	12:30:54 PM	12:31:18 PM	0:02:00	0:00:24	0:02:24
Vehicle 26	12:31:38 PM	1	12:31:38 PM	12:32:58 PM	0:00:00	0:01:20	0:01:20
Vehicle 27	12:36:11 PM	1	12:36:11 PM	12:36:29 PM	0:00:00	0:00:18	0:00:18
Vehicle 28	12:39:00 PM	1	12:39:00 PM	12:39:31 PM	0:00:00	0:00:31	0:00:31
Vehicle 29	12:39:21 PM	2	12:39:37 PM	12:41:38 PM	0:00:16	0:02:01	0:02:17
Vehicle 30	12:41:16 PM	2	12:41:45 PM	12:41:59 PM	0:00:29	0:00:14	0:00:43
Vehicle 31	12:48:22 PM	1	12:48:22 PM	12:49:57 PM	0:00:00	0:01:35	0:01:35
Vehicle 32	12:48:41 PM	2	12:50:06 PM	12:50:44 PM	0:01:25	0:00:38	0:02:03
Vehicle 33	12:48:56 PM	3	12:50:53 PM	12:51:04 PM	0:01:57	0:00:11	0:02:08
Vehicle 34	12:49:02 PM	4	12:51:20 PM	12:51:37 PM	0:02:18	0:00:17	0:02:35
Vehicle 35	12:58:19 PM	1	12:58:19 PM	12:58:30 PM	0:00:00	0:00:11	0:00:11
Vehicle 36	12:59:47 PM	1	12:59:47 PM	12:59:54 PM	0:00:00	0:00:07	0:00:07
Vehicle 37	1:09:07 PM	1	1:09:07 PM	1:09:25 PM	0:00:00	0:00:18	0:00:18
Vehicle 38	1:16:14 PM	1	1:16:14 PM	1:17:37 PM	0:00:00	0:01:23	0:01:23
Vehicle 39	1:18:48 PM	1	1:18:48 PM	1:19:01 PM	0:00:00	0:00:13	0:00:13
Vehicle 40	1:20:29 PM	1	1:20:29 PM	1:23:48 PM	0:00:00	0:03:19	0:03:19
Vehicle 41	1:20:41 PM	2	1:24:02 PM	1:26:29 PM	0:03:21	0:02:27	0:05:48
Vehicle 42	1:25:55 PM	2	1:26:40 PM	1:26:54 PM	0:00:45	0:00:14	0:00:59
Vehicle 43	1:34:04 PM	1	1:34:04 PM	1:34:28 PM	0:00:00	0:00:24	0:00:24
Vehicle 44	1:42:03 PM	1	1:42:03 PM	1:42:36 PM	0:00:00	0:00:33	0:00:33
Vehicle 45	1:42:24 PM	3	1:42:53 PM	1:43:39 PM	0:00:29	0:00:46	0:01:15
Vehicle 46	1:43:28 PM	2	1:43:51 PM	1:46:16 PM	0:00:23	0:02:25	0:02:48
Vehicle 47	1:43:37 PM	3	1:46:24 PM	1:50:09 PM	0:02:47	0:03:45	0:06:32
Vehicle 48	1:53:08 PM	1	1:53:08 PM	1:54:05 PM	0:00:00	0:00:57	0:00:57
Vehicle 49	1:56:39 PM	1	1:56:39 PM	1:59:28 PM	0:00:00	0:02:49	0:02:49
Vehicle 50	2:07:53 PM	1	2:07:53 PM	2:11:43 PM	0:00:00	0:03:50	0:03:50
Vehicle 51	2:10:01 PM	2	2:11:51 PM	2:12:08 PM	0:01:50	0:00:17	0:02:07
Vehicle 52	2:30:41 PM	1	2:30:41 PM	2:32:14 PM	0:00:00	0:01:33	0:01:33
Vehicle 53	2:33:51 PM	1	2:33:51 PM	2:36:34 PM	0:00:00	0:02:43	0:02:43
Vehicle 54	2:41:03 PM	1	2:41:03 PM	2:45:25 PM	0:00:00	0:04:22	0:04:22
Vehicle 55	2:41:46 PM	2	2:45:42 PM	2:46:54 PM	0:03:56	0:01:12	0:05:08
Vehicle 56	2:45:42 PM	2	2:47:04 PM	2:51:01 PM	0:01:22	0:03:57	0:05:19
Vehicle 57	2:53:56 PM	1	2:53:56 PM	2:54:11 PM	0:00:00	0:00:15	0:00:15
Vehicle 58	3:08:07 PM	1	3:08:07 PM	3:08:21 PM	0:00:00	0:00:14	0:00:14
Vehicle 59	3:10:27 PM	1	3:10:27 PM	3:12:05 PM	0:00:00	0:01:38	0:01:38
Vehicle 60	3:27:57 PM	1	3:27:57 PM	3:29:02 PM	0:00:00	0:01:05	0:01:05
Vehicle 61	3:30:25 PM	1	3:30:25 PM	3:30:43 PM	0:00:00	0:00:18	0:00:18
Vehicle 62	3:35:52 PM	1	3:35:52 PM	3:36:47 PM	0:00:00	0:00:55	0:00:55
Vehicle 63	3:37:09 PM	1	3:37:09 PM	3:41:00 PM	0:00:00	0:03:51	0:03:51
Vehicle 64	3:55:45 PM	1	3:55:45 PM	3:56:08 PM	0:00:00	0:00:23	0:00:23
Vehicle 65	3:58:27 PM	1	3:58:27 PM	3:59:18 PM	0:00:00	0:00:51	0:00:51
Vehicle 66	4:02:22 PM	1	4:02:22 PM	4:07:18 PM	0:00:00	0:04:56	0:04:56
Vehicle 67	4:06:40 PM	1	4:07:24 PM	4:08:00 PM	0:00:44	0:00:36	0:01:20
Vehicle 68	4:15:43 PM	1	4:15:43 PM	4:16:04 PM	0:00:00	0:00:21	0:00:21
Vehicle 69	4:35:47 PM	1	4:35:47 PM	4:35:59 PM	0:00:00	0:00:12	0:00:12
Vehicle 70	4:36:48 PM	1	4:36:48 PM	4:37:01 PM	0:00:00	0:00:13	0:00:13
Vehicle 71	4:42:01 PM	1	4:42:01 PM	4:42:54 PM	0:00:00	0:00:53	0:00:53

Vehicle 72	4:57:35 PM	1	4:57:35 PM	4:57:55 PM	0:00:00	0:00:20	0:00:20
Vehicle 73	4:59:38 PM	1	4:59:38 PM	5:01:09 PM	0:00:00	0:01:31	0:01:31
Vehicle 74	5:03:46 PM	1	5:03:46 PM	5:03:58 PM	0:00:00	0:00:12	0:00:12
Vehicle 75	5:10:01 PM	1	5:10:01 PM	5:10:25 PM	0:00:00	0:00:24	0:00:24
Vehicle 76	5:10:16 PM	2	5:10:36 PM	5:10:50 PM	0:00:20	0:00:14	0:00:34
Vehicle 77	5:16:33 PM	1	5:16:33 PM	5:17:27 PM	0:00:00	0:00:54	0:00:54
Vehicle 78	5:23:41 PM	1	5:23:41 PM	5:26:51 PM	0:00:00	0:03:10	0:03:10
Vehicle 79	5:32:05 PM	1	5:32:05 PM	5:32:53 PM	0:00:00	0:00:48	0:00:48
Vehicle 80	5:42:39 PM	1	5:42:39 PM	5:42:50 PM	0:00:00	0:00:11	0:00:11
Vehicle 81	5:43:38 PM	1	5:43:38 PM	5:44:56 PM	0:00:00	0:01:18	0:01:18
Vehicle 82	5:45:11 PM	1	5:45:11 PM	5:45:44 PM	0:00:00	0:00:33	0:00:33
Vehicle 83	5:46:58 PM	1	5:46:58 PM	5:47:55 PM	0:00:00	0:00:57	0:00:57
Vehicle 84	5:47:15 PM	2	5:48:04 PM	5:48:59 PM	0:00:49	0:00:55	0:01:44
Vehicle 85	5:53:03 PM	1	5:53:03 PM	5:53:40 PM	0:00:00	0:00:37	0:00:37
Vehicle 86	5:54:20 PM	1	5:54:20 PM	5:54:35 PM	0:00:00	0:00:15	0:00:15
Vehicle 87	5:54:30 PM	2	5:54:44 PM	5:55:17 PM	0:00:14	0:00:33	0:00:47
Vehicle 88	5:58:42 PM	1	5:58:42 PM	6:03:15 PM	0:00:00	0:04:33	0:04:33
Vehicle 89	6:00:34 PM	2	6:03:26 PM	6:03:30 PM	0:02:52	0:00:04	0:02:56
Vehicle 90	6:03:07 PM	3	6:03:40 PM	6:05:12 PM	0:00:33	0:01:32	0:02:05
Vehicle 91	6:23:54 PM	1	6:23:54 PM	6:26:08 PM	0:00:00	0:02:14	0:02:14
Vehicle 92	6:29:28 PM	1	6:29:28 PM	6:29:45 PM	0:00:00	0:00:17	0:00:17
Vehicle 93	6:33:16 PM	1	6:33:16 PM	6:33:22 PM	0:00:00	0:00:06	0:00:06
Vehicle 94	6:36:02 PM	1	6:36:02 PM	6:36:44 PM	0:00:00	0:00:42	0:00:42
Vehicle 95	6:37:53 PM	1	6:37:53 PM	6:38:41 PM	0:00:00	0:00:48	0:00:48
Vehicle 96	6:42:22 PM	1	6:42:22 PM	6:42:59 PM	0:00:00	0:00:37	0:00:37
Vehicle 97	6:57:16 PM	1	6:57:16 PM	6:57:33 PM	0:00:00	0:00:17	0:00:17
Vehicle 98	6:59:53 PM	1	6:59:53 PM	7:00:55 PM	0:00:00	0:01:02	0:01:02
Vehicle 99	7:10:56 PM	1	7:10:56 PM	7:12:35 PM	0:00:00	0:01:39	0:01:39
Vehicle 100	7:11:07 PM	2	7:12:44 PM	7:13:19 PM	0:01:37	0:00:35	0:02:12
Vehicle 101	7:13:52 PM	1	7:13:52 PM	7:14:25 PM	0:00:00	0:00:33	0:00:33
Vehicle 102	7:15:08 PM	1	7:15:08 PM	7:17:47 PM	0:00:00	0:02:39	0:02:39
Vehicle 103	7:15:55 PM	2	7:18:04 PM	7:19:29 PM	0:02:09	0:01:25	0:03:34
Vehicle 104	7:17:43 PM	3	7:19:43 PM	7:20:04 PM	0:02:00	0:00:21	0:02:21
Vehicle 105	7:24:07 PM	1	7:24:07 PM	7:24:16 PM	0:00:00	0:00:09	0:00:09
Vehicle 106	7:29:07 PM	1	7:29:07 PM	7:29:32 PM	0:00:00	0:00:25	0:00:25
Vehicle 107	7:35:11 PM	1	7:35:11 PM	7:36:34 PM	0:00:00	0:01:23	0:01:23
Vehicle 108	7:38:20 PM	1	7:38:20 PM	7:39:46 PM	0:00:00	0:01:26	0:01:26
Vehicle 109	7:43:38 PM	1	7:43:38 PM	7:43:51 PM	0:00:00	0:00:13	0:00:13
Vehicle 110	7:44:20 PM	1	7:44:20 PM	7:44:51 PM	0:00:00	0:00:31	0:00:31
Vehicle 111	8:01:20 PM	1	8:01:20 PM	8:02:39 PM	0:00:00	0:01:19	0:01:19
Vehicle 112	8:15:28 PM	1	8:15:28 PM	8:15:57 PM	0:00:00	0:00:29	0:00:29
Vehicle 113	8:19:55 PM	1	8:19:55 PM	8:20:49 PM	0:00:00	0:00:54	0:00:54
Vehicle 114	8:40:45 PM	1	8:40:45 PM	8:41:04 PM	0:00:00	0:00:19	0:00:19
Vehicle 115	8:44:34 PM	1	8:44:34 PM	8:45:09 PM	0:00:00	0:00:35	0:00:35
Vehicle 116	8:49:51 PM	1	8:49:51 PM	8:50:13 PM	0:00:00	0:00:22	0:00:22
Vehicle 117	8:52:53 PM	1	8:52:53 PM	8:53:13 PM	0:00:00	0:00:20	0:00:20
Vehicle 118	9:03:47 PM	1	9:03:47 PM	9:04:02 PM	0:00:00	0:00:15	0:00:15
Vehicle 119	9:16:18 PM	1	9:16:18 PM	9:17:10 PM	0:00:00	0:00:52	0:00:52
Vehicle 120	9:21:02 PM	1	9:21:02 PM	9:21:09 PM	0:00:00	0:00:07	0:00:07

Restaurant Location: 468 East 17th Street, Costa Mesa, CA 92627							
Data Collection Date: Saturday, July 16, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:43:11 AM	1	10:43:11 AM	10:45:09 AM	0:00:00	0:01:58	0:01:58
Vehicle 2	11:10:47 AM	1	11:10:47 AM	11:11:09 AM	0:00:00	0:00:22	0:00:22
Vehicle 3	11:19:25 AM	1	11:19:25 AM	11:20:20 AM	0:00:00	0:00:55	0:00:55
Vehicle 4	11:23:53 AM	1	11:23:53 AM	11:24:09 AM	0:00:00	0:00:16	0:00:16
Vehicle 5	11:47:51 AM	1	11:47:51 AM	11:53:29 AM	0:00:00	0:05:38	0:05:38
Vehicle 6	11:48:27 AM	2	11:53:37 AM	11:54:40 AM	0:05:10	0:01:03	0:06:13
Vehicle 7	11:55:22 AM	1	11:55:22 AM	11:56:28 AM	0:00:00	0:01:06	0:01:06
Vehicle 8	11:56:14 AM	2	11:56:37 AM	11:57:30 AM	0:00:23	0:00:53	0:01:16
Vehicle 9	12:00:26 PM	1	12:00:26 PM	12:01:57 PM	0:00:00	0:01:31	0:01:31
Vehicle 10	12:12:54 PM	1	12:12:54 PM	12:13:09 PM	0:00:00	0:00:15	0:00:15
Vehicle 11	12:20:28 PM	1	12:20:28 PM	12:24:15 PM	0:00:00	0:03:47	0:03:47
Vehicle 12	12:24:03 PM	2	12:24:22 PM	12:25:06 PM	0:00:19	0:00:44	0:01:03
Vehicle 13	12:35:06 PM	1	12:35:06 PM	12:35:26 PM	0:00:00	0:00:20	0:00:20
Vehicle 14	12:41:03 PM	1	12:41:03 PM	12:41:20 PM	0:00:00	0:00:17	0:00:17
Vehicle 15	12:42:49 PM	1	12:42:49 PM	12:43:02 PM	0:00:00	0:00:13	0:00:13
Vehicle 16	12:45:44 PM	1	12:45:44 PM	12:45:57 PM	0:00:00	0:00:13	0:00:13
Vehicle 17	12:46:42 PM	1	12:46:42 PM	12:47:05 PM	0:00:00	0:00:23	0:00:23
Vehicle 18	12:57:20 PM	1	12:57:20 PM	1:03:22 PM	0:00:00	0:06:02	0:06:02
Vehicle 19	1:03:57 PM	1	1:03:57 PM	1:08:47 PM	0:00:00	0:04:50	0:04:50
Vehicle 20	1:11:25 PM	1	1:11:25 PM	1:11:45 PM	0:00:00	0:00:20	0:00:20
Vehicle 21	1:11:35 PM	2	1:11:53 PM	1:13:05 PM	0:00:18	0:01:12	0:01:30
Vehicle 22	1:13:33 PM	1	1:13:33 PM	1:14:04 PM	0:00:00	0:00:31	0:00:31
Vehicle 23	1:23:05 PM	1	1:23:05 PM	1:23:18 PM	0:00:00	0:00:13	0:00:13
Vehicle 24	1:25:12 PM	1	1:25:12 PM	1:25:29 PM	0:00:00	0:00:17	0:00:17
Vehicle 25	1:31:02 PM	1	1:31:02 PM	1:31:57 PM	0:00:00	0:00:55	0:00:55
Vehicle 26	1:31:02 PM	2	1:32:16 PM	1:33:54 PM	0:01:14	0:01:38	0:02:52
Vehicle 27	1:33:05 PM	2	1:34:00 PM	1:34:20 PM	0:00:55	0:00:20	0:01:15
Vehicle 28	1:41:46 PM	1	1:41:46 PM	1:42:08 PM	0:00:00	0:00:22	0:00:22
Vehicle 29	1:51:10 PM	1	1:51:10 PM	2:00:36 PM	0:00:00	0:09:26	0:09:26
Vehicle 30	1:58:19 PM	2	2:00:51 PM	2:01:11 PM	0:02:32	0:00:20	0:02:52
Vehicle 31	1:59:08 PM	3	2:01:21 PM	2:02:18 PM	0:02:13	0:00:57	0:03:10
Vehicle 32	2:02:32 PM	1	2:02:32 PM	2:06:20 PM	0:00:00	0:03:48	0:03:48
Vehicle 33	2:05:08 PM	2	2:06:35 PM	2:07:02 PM	0:01:27	0:00:27	0:01:54
Vehicle 34	2:06:21 PM	2	2:07:14 PM	2:07:54 PM	0:00:53	0:00:40	0:01:33
Vehicle 35	2:20:25 PM	1	2:20:25 PM	2:20:46 PM	0:00:00	0:00:21	0:00:21
Vehicle 36	2:23:16 PM	1	2:23:16 PM	2:23:33 PM	0:00:00	0:00:17	0:00:17
Vehicle 37	2:24:36 PM	1	2:24:36 PM	2:25:42 PM	0:00:00	0:01:06	0:01:06
Vehicle 38	2:29:59 PM	1	2:29:59 PM	2:30:46 PM	0:00:00	0:00:47	0:00:47
Vehicle 39	2:38:07 PM	1	2:38:07 PM	2:38:30 PM	0:00:00	0:00:23	0:00:23
Vehicle 40	2:48:24 PM	1	2:48:24 PM	2:48:47 PM	0:00:00	0:00:23	0:00:23
Vehicle 41	2:56:53 PM	1	2:56:53 PM	2:57:29 PM	0:00:00	0:00:36	0:00:36
Vehicle 42	2:59:13 PM	1	2:59:13 PM	2:59:26 PM	0:00:00	0:00:13	0:00:13
Vehicle 43	2:56:54 PM	1	2:56:54 PM	2:57:30 PM	0:00:00	0:00:36	0:00:36
Vehicle 44	2:59:14 PM	1	2:59:14 PM	2:59:27 PM	0:00:00	0:00:13	0:00:13
Vehicle 45	3:12:26 PM	1	3:12:26 PM	3:12:54 PM	0:00:00	0:00:28	0:00:28
Vehicle 46	3:20:56 PM	1	3:20:56 PM	3:21:34 PM	0:00:00	0:00:38	0:00:38
Vehicle 47	3:25:16 PM	1	3:25:16 PM	3:25:25 PM	0:00:00	0:00:09	0:00:09
Vehicle 48	3:30:57 PM	1	3:30:57 PM	3:32:23 PM	0:00:00	0:01:26	0:01:26
Vehicle 49	3:32:19 PM	2	3:32:30 PM	3:32:47 PM	0:00:11	0:00:17	0:00:28
Vehicle 50	3:52:27 PM	1	3:52:27 PM	3:52:37 PM	0:00:00	0:00:10	0:00:10
Vehicle 51	3:53:22 PM	1	3:53:22 PM	3:53:29 PM	0:00:00	0:00:07	0:00:07
Vehicle 52	4:13:09 PM	1	4:13:09 PM	4:15:02 PM	0:00:00	0:01:53	0:01:53
Vehicle 53	4:22:10 PM	1	4:22:10 PM	4:30:11 PM	0:00:00	0:08:01	0:08:01
Vehicle 54	4:32:20 PM	1	4:32:20 PM	4:32:56 PM	0:00:00	0:00:36	0:00:36
Vehicle 55	4:40:07 PM	1	4:40:07 PM	4:40:32 PM	0:00:00	0:00:25	0:00:25
Vehicle 56	4:45:43 PM	1	4:45:43 PM	4:47:29 PM	0:00:00	0:01:46	0:01:46
Vehicle 57	4:49:35 PM	1	4:49:35 PM	4:50:28 PM	0:00:00	0:00:53	0:00:53
Vehicle 58	4:50:00 PM	2	4:50:37 PM	4:50:53 PM	0:00:37	0:00:16	0:00:53
Vehicle 59	4:51:04 PM	1	4:51:04 PM	4:51:12 PM	0:00:00	0:00:08	0:00:08
Vehicle 60	4:54:27 PM	1	4:54:27 PM	4:55:14 PM	0:00:00	0:00:47	0:00:47
Vehicle 61	4:59:35 PM	1	4:59:35 PM	5:00:20 PM	0:00:00	0:00:45	0:00:45
Vehicle 62	5:09:40 PM	1	5:09:40 PM	5:10:02 PM	0:00:00	0:00:22	0:00:22
Vehicle 63	5:21:35 PM	1	5:21:35 PM	5:23:17 PM	0:00:00	0:01:42	0:01:42
Vehicle 64	5:25:58 PM	1	5:25:58 PM	5:26:37 PM	0:00:00	0:00:39	0:00:39
Vehicle 65	5:32:47 PM	1	5:32:47 PM	5:32:57 PM	0:00:00	0:00:10	0:00:10
Vehicle 66	5:33:37 PM	1	5:33:37 PM	5:33:55 PM	0:00:00	0:00:18	0:00:18
Vehicle 67	5:35:16 PM	1	5:35:16 PM	5:39:43 PM	0:00:00	0:04:27	0:04:27
Vehicle 68	5:42:31 PM	1	5:42:31 PM	5:42:45 PM	0:00:00	0:00:14	0:00:14
Vehicle 69	5:57:52 PM	1	5:57:52 PM	5:58:20 PM	0:00:00	0:00:28	0:00:28
Vehicle 70	6:01:51 PM	1	6:01:51 PM	6:02:09 PM	0:00:00	0:00:18	0:00:18
Vehicle 71	6:20:38 PM	1	6:20:38 PM	6:21:13 PM	0:00:00	0:00:35	0:00:35

Vehicle 72	6:39:03 PM	1	6:39:03 PM	6:39:23 PM	0:00:00	0:00:20	0:00:20
Vehicle 73	6:44:58 PM	1	6:44:58 PM	6:45:24 PM	0:00:00	0:00:26	0:00:26
Vehicle 74	7:07:07 PM	1	7:07:07 PM	7:07:29 PM	0:00:00	0:00:22	0:00:22
Vehicle 75	7:12:52 PM	1	7:12:52 PM	7:13:05 PM	0:00:00	0:00:13	0:00:13
Vehicle 76	7:14:41 PM	1	7:14:41 PM	7:15:09 PM	0:00:00	0:00:28	0:00:28
Vehicle 77	7:15:36 PM	1	7:15:36 PM	7:15:51 PM	0:00:00	0:00:15	0:00:15
Vehicle 78	7:28:03 PM	1	7:28:03 PM	7:28:12 PM	0:00:00	0:00:09	0:00:09
Vehicle 79	7:28:10 PM	2	7:28:25 PM	7:30:25 PM	0:00:15	0:02:00	0:02:15
Vehicle 80	7:32:13 PM	1	7:32:13 PM	7:32:31 PM	0:00:00	0:00:18	0:00:18
Vehicle 81	7:37:01 PM	1	7:37:01 PM	7:38:21 PM	0:00:00	0:01:20	0:01:20
Vehicle 82	7:43:22 PM	1	7:43:22 PM	7:43:50 PM	0:00:00	0:00:28	0:00:28
Vehicle 83	7:45:49 PM	1	7:45:49 PM	7:47:09 PM	0:00:00	0:01:20	0:01:20
Vehicle 84	8:13:58 PM	1	8:13:58 PM	8:14:02 PM	0:00:00	0:00:04	0:00:04
Vehicle 85	8:20:55 PM	1	8:20:55 PM	8:23:15 PM	0:00:00	0:02:20	0:02:20
Vehicle 86	8:32:07 PM	1	8:32:07 PM	8:35:45 PM	0:00:00	0:03:38	0:03:38
Vehicle 87	8:39:52 PM	1	8:39:52 PM	8:40:23 PM	0:00:00	0:00:31	0:00:31
Vehicle 88	8:56:53 PM	1	8:56:53 PM	8:57:00 PM	0:00:00	0:00:07	0:00:07
Vehicle 89	9:21:00 PM	1	9:21:00 PM	9:21:35 PM	0:00:00	0:00:35	0:00:35
Vehicle 90	9:21:06 PM	2	9:21:43 PM	9:22:00 PM	0:00:37	0:00:17	0:00:54
Vehicle 91	9:41:54 PM	1	9:41:54 PM	9:41:58 PM	0:00:00	0:00:04	0:00:04

APPENDIX B
FOOTHILL RANCH, CA CHIPOTLANE DATA

Restaurant Location:	26592 Towne Centre Drive, Suite 120, Lake Forest, CA 92610						
Data Collection Date:	Wednesday, July 13, 2022						
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:36:39 AM	1	10:36:39 AM	10:41:57 AM	0:00:00	0:05:18	0:05:18
Vehicle 2	10:42:20 AM	1	10:42:20 AM	10:45:46 AM	0:00:00	0:03:26	0:03:26
Vehicle 3	10:43:36 AM	2	10:45:52 AM	10:47:00 AM	0:02:16	0:01:08	0:03:24
Vehicle 4	10:47:49 AM	1	10:47:49 AM	10:49:17 AM	0:00:00	0:01:28	0:01:28
Vehicle 5	11:25:02 AM	1	11:25:02 AM	11:25:29 AM	0:00:00	0:00:27	0:00:27
Vehicle 6	11:30:14 AM	1	11:30:14 AM	11:30:35 AM	0:00:00	0:00:21	0:00:21
Vehicle 7	11:30:27 AM	2	11:30:52 AM	11:33:11 AM	0:00:25	0:02:19	0:02:44
Vehicle 8	11:32:15 AM	2	11:33:20 AM	11:33:30 AM	0:01:05	0:00:10	0:01:15
Vehicle 9	11:37:44 AM	1	11:37:44 AM	11:38:00 AM	0:00:00	0:00:16	0:00:16
Vehicle 10	11:39:56 AM	1	11:39:56 AM	11:40:10 AM	0:00:00	0:00:14	0:00:14
Vehicle 11	11:43:47 AM	1	11:43:47 AM	11:44:20 AM	0:00:00	0:00:33	0:00:33
Vehicle 12	11:44:39 AM	1	11:44:39 AM	11:45:21 AM	0:00:00	0:00:42	0:00:42
Vehicle 13	11:51:35 AM	1	11:51:35 AM	11:51:49 AM	0:00:00	0:00:14	0:00:14
Vehicle 14	11:52:37 AM	1	11:52:37 AM	11:52:55 AM	0:00:00	0:00:18	0:00:18
Vehicle 15	12:00:19 PM	1	12:00:19 PM	12:00:45 PM	0:00:00	0:00:26	0:00:26
Vehicle 16	12:01:47 PM	1	12:01:47 PM	12:02:25 PM	0:00:00	0:00:38	0:00:38
Vehicle 17	12:02:50 PM	1	12:02:50 PM	12:03:38 PM	0:00:00	0:00:48	0:00:48
Vehicle 18	12:06:32 PM	1	12:06:32 PM	12:06:47 PM	0:00:00	0:00:15	0:00:15
Vehicle 19	12:07:13 PM	1	12:07:13 PM	12:07:41 PM	0:00:00	0:00:28	0:00:28
Vehicle 20	12:08:06 PM	1	12:08:06 PM	12:08:25 PM	0:00:00	0:00:19	0:00:19
Vehicle 21	12:08:14 PM	2	12:08:30 PM	12:08:46 PM	0:00:16	0:00:16	0:00:32
Vehicle 22	12:08:16 PM	3	12:08:55 PM	12:09:00 PM	0:00:39	0:00:05	0:00:44
Vehicle 23	12:08:27 PM	3	12:09:08 PM	12:09:11 PM	0:00:41	0:00:03	0:00:44
Vehicle 24	12:08:55 PM	3	12:09:23 PM	12:09:27 PM	0:00:28	0:00:04	0:00:32
Vehicle 25	12:08:58 PM	4	12:09:34 PM	12:09:39 PM	0:00:36	0:00:05	0:00:41
Vehicle 26	12:08:29 PM	2	12:09:46 PM	12:11:26 PM	0:01:17	0:01:40	0:02:57
Vehicle 27	12:10:55 PM	2	12:11:33 PM	12:12:42 PM	0:00:38	0:01:09	0:01:47
Vehicle 28	12:13:05 PM	1	12:13:05 PM	12:15:49 PM	0:00:00	0:02:44	0:02:44
Vehicle 29	12:13:42 PM	2	12:15:56 PM	12:16:58 PM	0:02:14	0:01:02	0:03:16
Vehicle 30	12:14:45 PM	3	12:17:13 PM	12:17:47 PM	0:02:28	0:00:34	0:03:02
Vehicle 31	12:17:46 PM	2	12:17:58 PM	12:19:20 PM	0:00:12	0:01:22	0:01:34
Vehicle 32	12:18:18 PM	2	12:19:32 PM	12:20:00 PM	0:01:14	0:00:28	0:01:42
Vehicle 33	12:19:48 PM	2	12:20:09 PM	12:20:46 PM	0:00:21	0:00:37	0:00:58
Vehicle 34	12:19:49 PM	3	12:20:56 PM	12:21:09 PM	0:01:07	0:00:13	0:01:20
Vehicle 35	12:19:50 PM	4	12:21:16 PM	12:21:28 PM	0:01:26	0:00:12	0:01:38
Vehicle 36	12:21:51 PM	1	12:21:51 PM	12:22:23 PM	0:00:00	0:00:32	0:00:32
Vehicle 37	12:24:36 PM	1	12:24:36 PM	12:24:56 PM	0:00:00	0:00:20	0:00:20
Vehicle 38	12:24:54 PM	2	12:25:04 PM	12:25:13 PM	0:00:10	0:00:09	0:00:19
Vehicle 39	12:31:23 PM	1	12:31:23 PM	12:31:39 PM	0:00:00	0:00:16	0:00:16
Vehicle 40	12:31:59 PM	1	12:31:59 PM	12:32:48 PM	0:00:00	0:00:49	0:00:49
Vehicle 41	12:33:21 PM	1	12:33:21 PM	12:33:50 PM	0:00:00	0:00:29	0:00:29
Vehicle 42	12:35:06 PM	1	12:35:06 PM	12:35:24 PM	0:00:00	0:00:18	0:00:18
Vehicle 43	12:35:59 PM	1	12:35:59 PM	12:37:11 PM	0:00:00	0:01:12	0:01:12
Vehicle 44	12:37:00 PM	2	12:37:31 PM	12:37:39 PM	0:00:31	0:00:08	0:00:39
Vehicle 45	12:41:53 PM	1	12:41:53 PM	12:42:10 PM	0:00:00	0:00:17	0:00:17
Vehicle 46	12:48:14 PM	1	12:48:14 PM	12:49:08 PM	0:00:00	0:00:54	0:00:54
Vehicle 47	1:04:19 PM	1	1:04:19 PM	1:04:37 PM	0:00:00	0:00:18	0:00:18
Vehicle 48	1:10:14 PM	1	1:10:14 PM	1:10:31 PM	0:00:00	0:00:17	0:00:17
Vehicle 49	1:12:28 PM	1	1:12:28 PM	1:13:01 PM	0:00:00	0:00:33	0:00:33
Vehicle 50	1:24:15 PM	1	1:24:15 PM	1:25:05 PM	0:00:00	0:00:50	0:00:50
Vehicle 51	1:30:07 PM	1	1:30:07 PM	1:30:22 PM	0:00:00	0:00:15	0:00:15
Vehicle 52	1:33:38 PM	1	1:33:38 PM	1:33:59 PM	0:00:00	0:00:21	0:00:21
Vehicle 53	1:34:58 PM	1	1:34:58 PM	1:35:22 PM	0:00:00	0:00:24	0:00:24
Vehicle 54	1:40:49 PM	1	1:40:49 PM	1:42:49 PM	0:00:00	0:02:00	0:02:00
Vehicle 55	1:50:41 PM	1	1:50:41 PM	1:51:41 PM	0:00:00	0:01:00	0:01:00
Vehicle 56	1:51:50 PM	1	1:51:50 PM	1:51:58 PM	0:00:00	0:00:08	0:00:08
Vehicle 57	1:55:28 PM	1	1:55:28 PM	1:55:44 PM	0:00:00	0:00:16	0:00:16
Vehicle 58	2:00:25 PM	1	2:00:25 PM	2:00:42 PM	0:00:00	0:00:17	0:00:17
Vehicle 59	2:10:46 PM	1	2:10:46 PM	2:11:07 PM	0:00:00	0:00:21	0:00:21
Vehicle 60	2:12:31 PM	1	2:12:31 PM	2:13:11 PM	0:00:00	0:00:40	0:00:40
Vehicle 61	2:14:24 PM	1	2:14:24 PM	2:15:42 PM	0:00:00	0:01:18	0:01:18
Vehicle 62	2:16:44 PM	1	2:16:44 PM	2:18:04 PM	0:00:00	0:01:20	0:01:20
Vehicle 63	2:22:18 PM	1	2:22:18 PM	2:22:56 PM	0:00:00	0:00:38	0:00:38
Vehicle 64	2:29:41 PM	1	2:29:41 PM	2:30:34 PM	0:00:00	0:00:53	0:00:53
Vehicle 65	2:31:21 PM	1	2:31:21 PM	2:32:07 PM	0:00:00	0:00:46	0:00:46
Vehicle 66	2:35:34 PM	1	2:35:34 PM	2:35:50 PM	0:00:00	0:00:16	0:00:16
Vehicle 67	2:38:51 PM	1	2:38:51 PM	2:39:34 PM	0:00:00	0:00:43	0:00:43
Vehicle 68	2:48:07 PM	1	2:48:07 PM	2:48:27 PM	0:00:00	0:00:20	0:00:20
Vehicle 69	2:53:05 PM	1	2:53:05 PM	2:53:35 PM	0:00:00	0:00:30	0:00:30
Vehicle 70	2:53:58 PM	1	2:53:58 PM	2:54:29 PM	0:00:00	0:00:31	0:00:31
Vehicle 71	2:54:43 PM	1	2:54:43 PM	2:55:19 PM	0:00:00	0:00:36	0:00:36

Vehicle 72	2:56:35 PM	1	2:56:35 PM	2:56:43 PM	0:00:00	0:00:08	0:00:08
Vehicle 73	3:03:33 PM	1	3:03:33 PM	3:04:10 PM	0:00:00	0:00:37	0:00:37
Vehicle 74	3:21:46 PM	1	3:21:46 PM	3:21:57 PM	0:00:00	0:00:11	0:00:11
Vehicle 75	3:33:52 PM	1	3:33:52 PM	3:34:20 PM	0:00:00	0:00:28	0:00:28
Vehicle 76	3:39:18 PM	1	3:39:18 PM	3:39:38 PM	0:00:00	0:00:20	0:00:20
Vehicle 77	3:52:02 PM	1	3:52:02 PM	3:52:24 PM	0:00:00	0:00:22	0:00:22
Vehicle 78	4:21:02 PM	1	4:21:02 PM	4:21:25 PM	0:00:00	0:00:23	0:00:23
Vehicle 79	4:21:37 PM	1	4:21:37 PM	4:22:05 PM	0:00:00	0:00:28	0:00:28
Vehicle 80	4:32:18 PM	1	4:32:18 PM	4:33:22 PM	0:00:00	0:01:04	0:01:04
Vehicle 81	4:39:35 PM	1	4:39:35 PM	4:40:20 PM	0:00:00	0:00:45	0:00:45
Vehicle 82	4:43:04 PM	1	4:43:04 PM	4:44:08 PM	0:00:00	0:01:04	0:01:04
Vehicle 83	4:45:12 PM	1	4:45:12 PM	4:45:35 PM	0:00:00	0:00:23	0:00:23
Vehicle 84	4:49:54 PM	1	4:49:54 PM	4:50:15 PM	0:00:00	0:00:21	0:00:21
Vehicle 85	4:50:33 PM	1	4:50:33 PM	4:51:02 PM	0:00:00	0:00:29	0:00:29
Vehicle 86	4:55:53 PM	1	4:55:53 PM	4:57:19 PM	0:00:00	0:01:26	0:01:26
Vehicle 87	5:03:14 PM	1	5:03:14 PM	5:03:34 PM	0:00:00	0:00:20	0:00:20
Vehicle 88	5:13:02 PM	1	5:13:02 PM	5:13:25 PM	0:00:00	0:00:23	0:00:23
Vehicle 89	5:26:05 PM	1	5:26:05 PM	5:26:18 PM	0:00:00	0:00:13	0:00:13
Vehicle 90	5:26:11 PM	2	5:26:26 PM	5:26:36 PM	0:00:15	0:00:10	0:00:25
Vehicle 91	5:37:22 PM	1	5:37:22 PM	5:38:39 PM	0:00:00	0:01:17	0:01:17
Vehicle 92	5:51:31 PM	1	5:51:31 PM	5:51:52 PM	0:00:00	0:00:21	0:00:21
Vehicle 93	5:52:07 PM	1	5:52:07 PM	5:52:20 PM	0:00:00	0:00:13	0:00:13
Vehicle 94	6:07:33 PM	1	6:07:33 PM	6:07:52 PM	0:00:00	0:00:19	0:00:19
Vehicle 95	6:09:03 PM	1	6:09:03 PM	6:09:16 PM	0:00:00	0:00:13	0:00:13
Vehicle 96	6:09:56 PM	1	6:09:56 PM	6:10:11 PM	0:00:00	0:00:15	0:00:15
Vehicle 97	6:10:06 PM	2	6:10:18 PM	6:11:28 PM	0:00:12	0:01:10	0:01:22
Vehicle 98	6:16:41 PM	1	6:16:41 PM	6:17:29 PM	0:00:00	0:00:48	0:00:48
Vehicle 99	6:27:13 PM	1	6:27:13 PM	6:27:31 PM	0:00:00	0:00:18	0:00:18
Vehicle 100	6:33:48 PM	1	6:33:48 PM	6:34:58 PM	0:00:00	0:01:10	0:01:10
Vehicle 101	6:40:00 PM	1	6:40:00 PM	6:40:56 PM	0:00:00	0:00:56	0:00:56
Vehicle 102	6:40:13 PM	2	6:41:05 PM	6:41:24 PM	0:00:52	0:00:19	0:01:11
Vehicle 103	6:42:41 PM	1	6:42:41 PM	6:44:38 PM	0:00:00	0:01:57	0:01:57
Vehicle 104	6:44:53 PM	1	6:44:53 PM	6:45:15 PM	0:00:00	0:00:22	0:00:22
Vehicle 105	6:48:26 PM	1	6:48:26 PM	6:49:03 PM	0:00:00	0:00:37	0:00:37
Vehicle 106	6:53:42 PM	1	6:53:42 PM	6:54:55 PM	0:00:00	0:01:13	0:01:13
Vehicle 107	7:00:48 PM	1	7:00:48 PM	7:01:15 PM	0:00:00	0:00:27	0:00:27
Vehicle 108	7:01:01 PM	2	7:01:24 PM	7:02:08 PM	0:00:23	0:00:44	0:01:07
Vehicle 109	7:12:35 PM	1	7:12:35 PM	7:13:08 PM	0:00:00	0:00:33	0:00:33
Vehicle 110	7:16:51 PM	1	7:16:51 PM	7:17:08 PM	0:00:00	0:00:17	0:00:17
Vehicle 111	7:17:34 PM	1	7:17:34 PM	7:18:21 PM	0:00:00	0:00:47	0:00:47
Vehicle 112	7:21:02 PM	1	7:21:02 PM	7:21:24 PM	0:00:00	0:00:22	0:00:22
Vehicle 113	7:32:45 PM	1	7:32:45 PM	7:33:34 PM	0:00:00	0:00:49	0:00:49
Vehicle 114	7:49:37 PM	1	7:49:37 PM	7:50:57 PM	0:00:00	0:01:20	0:01:20
Vehicle 115	7:56:57 PM	1	7:56:57 PM	7:58:09 PM	0:00:00	0:01:12	0:01:12
Vehicle 116	8:00:05 PM	1	8:00:05 PM	8:00:20 PM	0:00:00	0:00:15	0:00:15
Vehicle 117	8:01:53 PM	1	8:01:53 PM	8:02:29 PM	0:00:00	0:00:36	0:00:36
Vehicle 118	8:05:57 PM	1	8:05:57 PM	8:06:14 PM	0:00:00	0:00:17	0:00:17
Vehicle 119	8:09:26 PM	1	8:09:26 PM	8:11:06 PM	0:00:00	0:01:40	0:01:40
Vehicle 120	8:13:21 PM	1	8:13:21 PM	8:13:30 PM	0:00:00	0:00:09	0:00:09
Vehicle 121	8:27:55 PM	1	8:27:55 PM	8:28:06 PM	0:00:00	0:00:11	0:00:11
Vehicle 122	8:36:34 PM	1	8:36:34 PM	8:36:42 PM	0:00:00	0:00:08	0:00:08
Vehicle 123	8:43:06 PM	1	8:43:06 PM	8:43:22 PM	0:00:00	0:00:16	0:00:16
Vehicle 124	8:53:35 PM	1	8:53:35 PM	8:54:26 PM	0:00:00	0:00:51	0:00:51
Vehicle 125	8:55:33 PM	1	8:55:33 PM	8:55:48 PM	0:00:00	0:00:15	0:00:15
Vehicle 126	9:01:33 PM	1	9:01:33 PM	9:01:50 PM	0:00:00	0:00:17	0:00:17
Vehicle 127	9:06:40 PM	1	9:06:40 PM	9:07:37 PM	0:00:00	0:00:57	0:00:57
Vehicle 128	9:13:29 PM	1	9:13:29 PM	9:13:50 PM	0:00:00	0:00:21	0:00:21

Restaurant Location: 26592 Towne Centre Drive, Suite 120, Lake Forest, CA 92610							
Data Collection Date: Thursday, July 14, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:59:19 AM	1	10:59:19 AM	11:01:40 AM	0:00:00	0:02:21	0:02:21
Vehicle 2	11:14:34 AM	1	11:14:34 AM	11:16:38 AM	0:00:00	0:02:04	0:02:04
Vehicle 3	11:18:39 AM	1	11:18:39 AM	11:18:50 AM	0:00:00	0:00:11	0:00:11
Vehicle 4	11:26:21 AM	1	11:26:21 AM	11:26:42 AM	0:00:00	0:00:21	0:00:21
Vehicle 5	11:29:05 AM	1	11:29:05 AM	11:30:14 AM	0:00:00	0:01:09	0:01:09
Vehicle 6	11:36:05 AM	1	11:36:05 AM	11:36:30 AM	0:00:00	0:00:25	0:00:25
Vehicle 7	11:41:20 AM	1	11:41:20 AM	11:43:08 AM	0:00:00	0:01:48	0:01:48
Vehicle 8	11:43:53 AM	1	11:43:53 AM	11:44:45 AM	0:00:00	0:00:52	0:00:52
Vehicle 9	11:46:25 AM	1	11:46:25 AM	11:46:45 AM	0:00:00	0:00:20	0:00:20
Vehicle 10	11:46:53 AM	1	11:46:53 AM	11:47:17 AM	0:00:00	0:00:24	0:00:24
Vehicle 11	11:52:01 AM	1	11:52:01 AM	11:53:12 AM	0:00:00	0:01:11	0:01:11
Vehicle 12	11:53:03 AM	2	11:53:23 AM	11:53:40 AM	0:00:20	0:00:17	0:00:37
Vehicle 13	11:54:23 AM	1	11:54:23 AM	11:54:58 AM	0:00:00	0:00:35	0:00:35
Vehicle 14	12:06:11 PM	1	12:06:11 PM	12:06:37 PM	0:00:00	0:00:26	0:00:26
Vehicle 15	12:08:18 PM	1	12:08:18 PM	12:08:47 PM	0:00:00	0:00:29	0:00:29
Vehicle 16	12:10:07 PM	1	12:10:07 PM	12:12:35 PM	0:00:00	0:02:28	0:02:28
Vehicle 17	12:15:51 PM	1	12:15:51 PM	12:16:01 PM	0:00:00	0:00:10	0:00:10
Vehicle 18	12:16:56 PM	1	12:16:56 PM	12:17:09 PM	0:00:00	0:00:13	0:00:13
Vehicle 19	12:17:08 PM	2	12:17:17 PM	12:17:31 PM	0:00:09	0:00:14	0:00:23
Vehicle 20	12:20:41 PM	1	12:20:41 PM	12:22:45 PM	0:00:00	0:02:04	0:02:04
Vehicle 21	12:23:48 PM	1	12:23:48 PM	12:24:39 PM	0:00:00	0:00:51	0:00:51
Vehicle 22	12:24:50 PM	1	12:24:50 PM	12:27:28 PM	0:00:00	0:02:38	0:02:38
Vehicle 23	12:26:34 PM	2	12:27:41 PM	12:30:58 PM	0:01:07	0:03:17	0:04:24
Vehicle 24	12:26:49 PM	3	12:31:07 PM	12:31:22 PM	0:04:18	0:00:15	0:04:33
Vehicle 25	12:27:13 PM	4	12:31:36 PM	12:31:54 PM	0:04:23	0:00:18	0:04:41
Vehicle 26	12:27:51 PM	4	12:32:07 PM	12:32:18 PM	0:04:16	0:00:11	0:04:27
Vehicle 27	12:28:43 PM	5	12:32:23 PM	12:33:21 PM	0:03:40	0:00:58	0:04:38
Vehicle 28	12:32:29 PM	2	12:33:30 PM	12:34:00 PM	0:01:01	0:00:30	0:01:31
Vehicle 29	12:34:45 PM	1	12:34:45 PM	12:35:06 PM	0:00:00	0:00:21	0:00:21
Vehicle 30	12:36:29 PM	1	12:36:29 PM	12:38:05 PM	0:00:00	0:01:36	0:01:36
Vehicle 31	12:36:31 PM	2	12:38:16 PM	12:39:03 PM	0:01:45	0:00:47	0:02:32
Vehicle 32	12:38:35 PM	2	12:39:11 PM	12:39:41 PM	0:00:36	0:00:30	0:01:06
Vehicle 33	12:40:05 PM	1	12:40:05 PM	12:40:25 PM	0:00:00	0:00:20	0:00:20
Vehicle 34	12:41:51 PM	1	12:41:51 PM	12:48:34 PM	0:00:00	0:06:43	0:06:43
Vehicle 35	12:43:58 PM	2	12:48:41 PM	12:49:19 PM	0:04:43	0:00:38	0:05:21
Vehicle 36	12:44:22 PM	3	12:49:32 PM	12:50:22 PM	0:05:10	0:00:50	0:06:00
Vehicle 37	12:46:34 PM	4	12:50:32 PM	12:50:45 PM	0:03:58	0:00:13	0:04:11
Vehicle 38	12:47:41 PM	5	12:50:57 PM	12:52:08 PM	0:03:16	0:01:11	0:04:27
Vehicle 39	12:48:05 PM	6	12:52:18 PM	12:52:27 PM	0:04:13	0:00:09	0:04:22
Vehicle 40	12:52:37 PM	1	12:52:37 PM	12:52:44 PM	0:00:00	0:00:07	0:00:07
Vehicle 41	12:53:11 PM	1	12:53:11 PM	12:53:44 PM	0:00:00	0:00:33	0:00:33
Vehicle 42	12:53:29 PM	2	12:53:50 PM	12:54:12 PM	0:00:21	0:00:22	0:00:43
Vehicle 43	12:53:52 PM	2	12:54:23 PM	12:55:14 PM	0:00:31	0:00:51	0:01:22
Vehicle 44	12:53:52 PM	3	12:55:23 PM	12:55:35 PM	0:01:31	0:00:12	0:01:43
Vehicle 45	12:54:41 PM	3	12:55:42 PM	12:56:14 PM	0:01:01	0:00:32	0:01:33
Vehicle 46	1:00:14 PM	1	1:00:14 PM	1:01:24 PM	0:00:00	0:01:10	0:01:10
Vehicle 47	1:00:20 PM	2	1:01:34 PM	1:01:48 PM	0:01:14	0:00:14	0:01:28
Vehicle 48	1:03:48 PM	1	1:03:48 PM	1:04:00 PM	0:00:00	0:00:12	0:00:12
Vehicle 49	1:05:13 PM	1	1:05:13 PM	1:05:40 PM	0:00:00	0:00:27	0:00:27
Vehicle 50	1:07:58 PM	1	1:07:58 PM	1:08:16 PM	0:00:00	0:00:18	0:00:18
Vehicle 51	1:09:03 PM	1	1:09:03 PM	1:09:20 PM	0:00:00	0:00:17	0:00:17
Vehicle 52	1:12:16 PM	1	1:12:16 PM	1:12:51 PM	0:00:00	0:00:35	0:00:35
Vehicle 53	1:16:18 PM	1	1:16:18 PM	1:18:17 PM	0:00:00	0:01:59	0:01:59
Vehicle 54	1:18:48 PM	1	1:18:48 PM	1:19:00 PM	0:00:00	0:00:12	0:00:12
Vehicle 55	1:29:44 PM	1	1:29:44 PM	1:30:43 PM	0:00:00	0:00:59	0:00:59
Vehicle 56	1:30:00 PM	2	1:30:56 PM	1:31:12 PM	0:00:56	0:00:16	0:01:12
Vehicle 57	1:35:48 PM	1	1:35:48 PM	1:36:35 PM	0:00:00	0:00:47	0:00:47
Vehicle 58	1:38:29 PM	1	1:38:29 PM	1:38:57 PM	0:00:00	0:00:28	0:00:28
Vehicle 59	1:41:00 PM	1	1:41:00 PM	1:41:56 PM	0:00:00	0:00:56	0:00:56
Vehicle 60	1:43:46 PM	1	1:43:46 PM	1:44:55 PM	0:00:00	0:01:09	0:01:09
Vehicle 61	1:46:16 PM	1	1:46:16 PM	1:46:31 PM	0:00:00	0:00:15	0:00:15
Vehicle 62	1:55:15 PM	1	1:55:15 PM	1:58:29 PM	0:00:00	0:03:14	0:03:14
Vehicle 63	1:57:53 PM	2	1:58:39 PM	1:59:10 PM	0:00:46	0:00:31	0:01:17
Vehicle 64	1:59:52 PM	1	1:59:52 PM	2:00:28 PM	0:00:00	0:00:36	0:00:36
Vehicle 65	2:01:07 PM	1	2:01:07 PM	2:02:06 PM	0:00:00	0:00:59	0:00:59
Vehicle 66	2:25:13 PM	1	2:25:13 PM	2:25:26 PM	0:00:00	0:00:13	0:00:13
Vehicle 67	2:39:09 PM	1	2:39:09 PM	2:39:28 PM	0:00:00	0:00:19	0:00:19
Vehicle 68	2:42:11 PM	1	2:42:11 PM	2:42:56 PM	0:00:00	0:00:45	0:00:45
Vehicle 69	2:48:57 PM	1	2:48:57 PM	2:49:20 PM	0:00:00	0:00:23	0:00:23
Vehicle 70	2:50:04 PM	1	2:50:04 PM	2:50:26 PM	0:00:00	0:00:22	0:00:22
Vehicle 71	3:15:42 PM	1	3:15:42 PM	3:16:00 PM	0:00:00	0:00:18	0:00:18

Vehicle 72	3:22:42 PM	1	3:22:42 PM	3:23:44 PM	0:00:00	0:01:02	0:01:02
Vehicle 73	3:26:09 PM	1	3:26:09 PM	3:26:22 PM	0:00:00	0:00:13	0:00:13
Vehicle 74	3:26:34 PM	1	3:26:34 PM	3:26:42 PM	0:00:00	0:00:08	0:00:08
Vehicle 75	3:36:11 PM	1	3:36:11 PM	3:36:23 PM	0:00:00	0:00:12	0:00:12
Vehicle 76	3:44:38 PM	1	3:44:38 PM	3:44:51 PM	0:00:00	0:00:13	0:00:13
Vehicle 77	4:08:17 PM	1	4:08:17 PM	4:08:37 PM	0:00:00	0:00:20	0:00:20
Vehicle 78	4:08:34 PM	2	4:08:46 PM	4:08:57 PM	0:00:12	0:00:11	0:00:23
Vehicle 79	4:13:34 PM	1	4:13:34 PM	4:14:04 PM	0:00:00	0:00:30	0:00:30
Vehicle 80	4:31:12 PM	1	4:31:12 PM	4:31:36 PM	0:00:00	0:00:24	0:00:24
Vehicle 81	4:45:14 PM	1	4:45:14 PM	4:45:30 PM	0:00:00	0:00:16	0:00:16
Vehicle 82	4:48:54 PM	1	4:48:54 PM	4:49:38 PM	0:00:00	0:00:44	0:00:44
Vehicle 83	4:49:36 PM	2	4:49:49 PM	4:50:16 PM	0:00:13	0:00:27	0:00:40
Vehicle 84	4:59:37 PM	1	4:59:37 PM	5:02:35 PM	0:00:00	0:02:58	0:02:58
Vehicle 85	5:08:46 PM	1	5:08:46 PM	5:09:07 PM	0:00:00	0:00:21	0:00:21
Vehicle 86	5:13:27 PM	1	5:13:27 PM	5:13:36 PM	0:00:00	0:00:09	0:00:09
Vehicle 87	5:14:34 PM	1	5:14:34 PM	5:15:12 PM	0:00:00	0:00:38	0:00:38
Vehicle 88	5:15:40 PM	1	5:15:40 PM	5:16:08 PM	0:00:00	0:00:28	0:00:28
Vehicle 89	5:17:25 PM	1	5:17:25 PM	5:17:42 PM	0:00:00	0:00:17	0:00:17
Vehicle 90	5:21:31 PM	1	5:21:31 PM	5:21:50 PM	0:00:00	0:00:19	0:00:19
Vehicle 91	5:22:03 PM	1	5:22:03 PM	5:22:18 PM	0:00:00	0:00:15	0:00:15
Vehicle 92	5:29:27 PM	1	5:29:27 PM	5:29:54 PM	0:00:00	0:00:27	0:00:27
Vehicle 93	5:32:57 PM	1	5:32:57 PM	5:33:18 PM	0:00:00	0:00:21	0:00:21
Vehicle 94	5:37:05 PM	1	5:37:05 PM	5:37:25 PM	0:00:00	0:00:20	0:00:20
Vehicle 95	5:37:34 PM	1	5:37:34 PM	5:37:46 PM	0:00:00	0:00:12	0:00:12
Vehicle 96	5:41:05 PM	1	5:41:05 PM	5:41:22 PM	0:00:00	0:00:17	0:00:17
Vehicle 97	5:42:21 PM	1	5:42:21 PM	5:44:06 PM	0:00:00	0:01:45	0:01:45
Vehicle 98	5:44:15 PM	1	5:44:15 PM	5:44:24 PM	0:00:00	0:00:09	0:00:09
Vehicle 99	5:44:32 PM	1	5:44:32 PM	5:45:58 PM	0:00:00	0:01:26	0:01:26
Vehicle 100	5:47:48 PM	1	5:47:48 PM	5:50:51 PM	0:00:00	0:03:03	0:03:03
Vehicle 101	5:48:27 PM	2	5:51:01 PM	5:51:54 PM	0:02:34	0:00:53	0:03:27
Vehicle 102	6:01:15 PM	1	6:01:15 PM	6:02:11 PM	0:00:00	0:00:56	0:00:56
Vehicle 103	6:02:06 PM	2	6:02:24 PM	6:03:07 PM	0:00:18	0:00:43	0:01:01
Vehicle 104	6:05:23 PM	1	6:05:23 PM	6:05:38 PM	0:00:00	0:00:15	0:00:15
Vehicle 105	6:05:36 PM	2	6:05:48 PM	6:06:05 PM	0:00:12	0:00:17	0:00:29
Vehicle 106	6:07:49 PM	1	6:07:49 PM	6:08:24 PM	0:00:00	0:00:35	0:00:35
Vehicle 107	6:09:13 PM	1	6:09:13 PM	6:09:25 PM	0:00:00	0:00:12	0:00:12
Vehicle 108	6:11:39 PM	1	6:11:39 PM	6:12:30 PM	0:00:00	0:00:51	0:00:51
Vehicle 109	6:17:20 PM	1	6:17:20 PM	6:17:38 PM	0:00:00	0:00:18	0:00:18
Vehicle 110	6:22:26 PM	1	6:22:26 PM	6:22:47 PM	0:00:00	0:00:21	0:00:21
Vehicle 111	6:26:15 PM	1	6:26:15 PM	6:26:48 PM	0:00:00	0:00:33	0:00:33
Vehicle 112	6:33:00 PM	1	6:33:00 PM	6:34:44 PM	0:00:00	0:01:44	0:01:44
Vehicle 113	6:35:56 PM	1	6:35:56 PM	6:36:37 PM	0:00:00	0:00:41	0:00:41
Vehicle 114	6:42:11 PM	1	6:42:11 PM	6:42:37 PM	0:00:00	0:00:26	0:00:26
Vehicle 115	6:44:41 PM	1	6:44:41 PM	6:45:34 PM	0:00:00	0:00:53	0:00:53
Vehicle 116	6:44:55 PM	2	6:45:41 PM	6:46:40 PM	0:00:46	0:00:59	0:01:45
Vehicle 117	6:47:24 PM	1	6:47:24 PM	6:47:45 PM	0:00:00	0:00:21	0:00:21
Vehicle 118	6:48:55 PM	1	6:48:55 PM	6:49:06 PM	0:00:00	0:00:11	0:00:11
Vehicle 119	7:04:05 PM	1	7:04:05 PM	7:07:40 PM	0:00:00	0:03:35	0:03:35
Vehicle 120	7:08:27 PM	1	7:08:27 PM	7:09:11 PM	0:00:00	0:00:44	0:00:44
Vehicle 121	7:12:00 PM	1	7:12:00 PM	7:12:19 PM	0:00:00	0:00:19	0:00:19
Vehicle 122	7:14:47 PM	1	7:14:47 PM	7:14:58 PM	0:00:00	0:00:11	0:00:11
Vehicle 123	7:23:05 PM	1	7:23:05 PM	7:23:28 PM	0:00:00	0:00:23	0:00:23
Vehicle 124	7:39:24 PM	1	7:39:24 PM	7:39:48 PM	0:00:00	0:00:24	0:00:24
Vehicle 125	7:41:12 PM	1	7:41:12 PM	7:42:17 PM	0:00:00	0:01:05	0:01:05
Vehicle 126	7:52:48 PM	1	7:52:48 PM	7:53:05 PM	0:00:00	0:00:17	0:00:17
Vehicle 127	7:56:23 PM	1	7:56:23 PM	7:58:57 PM	0:00:00	0:02:34	0:02:34
Vehicle 128	8:07:27 PM	1	8:07:27 PM	8:10:04 PM	0:00:00	0:02:37	0:02:37
Vehicle 129	8:08:16 PM	2	8:10:15 PM	8:10:25 PM	0:01:59	0:00:10	0:02:09
Vehicle 130	8:09:59 PM	3	8:10:35 PM	8:11:14 PM	0:00:36	0:00:39	0:01:15
Vehicle 131	8:13:34 PM	1	8:13:34 PM	8:16:01 PM	0:00:00	0:02:27	0:02:27
Vehicle 132	8:14:06 PM	2	8:16:08 PM	8:16:34 PM	0:02:02	0:00:26	0:02:28
Vehicle 133	8:18:11 PM	1	8:18:11 PM	8:19:11 PM	0:00:00	0:01:00	0:01:00
Vehicle 134	8:21:10 PM	1	8:21:10 PM	8:22:05 PM	0:00:00	0:00:55	0:00:55
Vehicle 135	8:21:53 PM	2	8:22:14 PM	8:22:26 PM	0:00:21	0:00:12	0:00:33
Vehicle 136	8:23:10 PM	1	8:23:10 PM	8:23:21 PM	0:00:00	0:00:11	0:00:11
Vehicle 137	8:23:11 PM	2	8:23:29 PM	8:23:40 PM	0:00:18	0:00:11	0:00:29
Vehicle 138	8:50:20 PM	1	8:50:20 PM	8:50:40 PM	0:00:00	0:00:20	0:00:20
Vehicle 139	8:57:49 PM	1	8:57:49 PM	8:58:00 PM	0:00:00	0:00:11	0:00:11
Vehicle 140	9:20:30 PM	1	9:20:30 PM	9:20:45 PM	0:00:00	0:00:15	0:00:15
Vehicle 141	9:41:27 PM	1	9:41:27 PM	9:41:34 PM	0:00:00	0:00:07	0:00:07

Restaurant Location: 26592 Towne Centre Drive, Suite 120, Lake Forest, CA 92610							
Data Collection Date: Friday, July 15, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	11:03:00 AM	1	11:03:00 AM	11:07:10 AM	0:00:00	0:04:10	0:04:10
Vehicle 2	11:10:09 AM	1	11:10:09 AM	11:10:25 AM	0:00:00	0:00:16	0:00:16
Vehicle 3	11:11:21 AM	1	11:11:21 AM	11:12:47 AM	0:00:00	0:01:26	0:01:26
Vehicle 4	11:20:06 AM	1	11:20:06 AM	11:20:09 AM	0:00:00	0:00:03	0:00:03
Vehicle 5	11:25:16 AM	1	11:25:16 AM	11:25:38 AM	0:00:00	0:00:22	0:00:22
Vehicle 6	11:26:39 AM	1	11:26:39 AM	11:26:52 AM	0:00:00	0:00:13	0:00:13
Vehicle 7	11:27:53 AM	1	11:27:53 AM	11:33:08 AM	0:00:00	0:05:15	0:05:15
Vehicle 8	11:28:41 AM	2	11:33:18 AM	11:35:03 AM	0:04:37	0:01:45	0:06:22
Vehicle 9	11:31:01 AM	3	11:35:13 AM	11:36:21 AM	0:04:12	0:01:08	0:05:20
Vehicle 10	11:31:53 AM	4	11:36:32 AM	11:36:52 AM	0:04:39	0:00:20	0:04:59
Vehicle 11	11:50:39 AM	1	11:50:39 AM	11:52:36 AM	0:00:00	0:01:57	0:01:57
Vehicle 12	11:54:03 AM	1	11:54:03 AM	11:56:46 AM	0:00:00	0:02:43	0:02:43
Vehicle 13	11:57:32 AM	1	11:57:32 AM	12:02:53 PM	0:00:00	0:05:21	0:05:21
Vehicle 14	11:58:55 AM	2	12:03:00 PM	12:03:12 PM	0:04:05	0:00:12	0:04:17
Vehicle 15	11:59:46 AM	3	12:03:21 PM	12:04:48 PM	0:03:35	0:01:27	0:05:02
Vehicle 16	12:03:40 PM	2	12:05:01 PM	12:07:00 PM	0:01:21	0:01:59	0:03:20
Vehicle 17	12:04:26 PM	3	12:07:10 PM	12:17:44 PM	0:02:44	0:10:34	0:13:18
Vehicle 18	12:06:35 PM	3	12:17:55 PM	12:21:19 PM	0:11:20	0:03:24	0:14:44
Vehicle 19	12:09:52 PM	3	12:21:27 PM	12:23:03 PM	0:11:35	0:01:36	0:13:11
Vehicle 20	12:10:02 PM	4	12:23:13 PM	12:23:18 PM	0:13:11	0:00:05	0:13:16
Vehicle 21	12:14:39 PM	5	12:23:32 PM	12:24:04 PM	0:08:53	0:00:32	0:09:25
Vehicle 22	12:14:47 PM	6	12:24:17 PM	12:26:50 PM	0:09:30	0:02:33	0:12:03
Vehicle 23	12:18:06 PM	6	12:26:58 PM	12:27:57 PM	0:08:52	0:00:59	0:09:51
Vehicle 24	12:29:09 PM	1	12:29:09 PM	12:31:33 PM	0:00:00	0:02:24	0:02:24
Vehicle 25	12:29:50 PM	2	12:31:45 PM	12:31:53 PM	0:01:55	0:00:08	0:02:03
Vehicle 26	12:32:02 PM	1	12:32:02 PM	12:32:39 PM	0:00:00	0:00:37	0:00:37
Vehicle 27	12:32:32 PM	2	12:32:47 PM	12:41:39 PM	0:00:15	0:08:52	0:09:07
Vehicle 28	12:34:21 PM	2	12:41:47 PM	12:42:37 PM	0:07:26	0:00:50	0:08:16
Vehicle 29	12:39:58 PM	4	12:42:56 PM	12:47:00 PM	0:02:58	0:04:04	0:07:02
Vehicle 30	12:40:10 PM	5	12:47:16 PM	12:48:15 PM	0:07:06	0:00:59	0:08:05
Vehicle 31	12:40:31 PM	6	12:48:26 PM	12:52:30 PM	0:07:55	0:04:04	0:11:59
Vehicle 32	12:40:35 PM	7	12:52:37 PM	12:52:52 PM	0:12:02	0:00:15	0:12:17
Vehicle 33	12:52:07 PM	7	12:53:00 PM	12:56:11 PM	0:00:53	0:03:11	0:04:04
Vehicle 34	12:43:28 PM	6	12:56:21 PM	1:01:00 PM	0:12:53	0:04:39	0:17:32
Vehicle 35	12:44:25 PM	7	1:01:11 PM	1:01:29 PM	0:16:46	0:00:18	0:17:04
Vehicle 36	12:48:28 PM	6	1:01:42 PM	1:01:52 PM	0:13:14	0:00:10	0:13:24
Vehicle 37	12:50:59 PM	7	1:02:04 PM	1:07:51 PM	0:11:05	0:05:47	0:16:52
Vehicle 38	12:51:50 PM	8	1:08:05 PM	1:08:55 PM	0:16:15	0:00:50	0:17:05
Vehicle 39	12:53:45 PM	7	1:09:05 PM	1:10:46 PM	0:15:20	0:01:41	0:17:01
Vehicle 40	12:56:08 PM	8	1:10:55 PM	1:11:28 PM	0:14:47	0:00:33	0:15:20
Vehicle 41	12:58:35 PM	8	1:11:37 PM	1:12:52 PM	0:13:02	0:01:15	0:14:17
Vehicle 42	12:59:45 PM	9	1:13:03 PM	1:13:20 PM	0:13:18	0:00:17	0:13:35
Vehicle 43	1:06:20 PM	7	1:13:30 PM	1:13:48 PM	0:07:10	0:00:18	0:07:28
Vehicle 44	1:09:53 PM	6	1:14:01 PM	1:19:28 PM	0:04:08	0:05:27	0:09:35
Vehicle 45	1:18:22 PM	2	1:19:33 PM	1:22:11 PM	0:01:11	0:02:38	0:03:49
Vehicle 46	1:29:44 PM	1	1:29:44 PM	1:31:51 PM	0:00:00	0:02:07	0:02:07
Vehicle 47	1:29:50 PM	2	1:32:00 PM	1:33:16 PM	0:02:10	0:01:16	0:03:26
Vehicle 48	1:30:01 PM	3	1:33:27 PM	1:34:16 PM	0:03:26	0:00:49	0:04:15
Vehicle 49	1:38:25 PM	1	1:38:25 PM	1:39:36 PM	0:00:00	0:01:11	0:01:11
Vehicle 50	1:39:09 PM	2	1:39:46 PM	1:40:25 PM	0:00:37	0:00:39	0:01:16
Vehicle 51	1:41:01 PM	1	1:41:01 PM	1:42:04 PM	0:00:00	0:01:03	0:01:03
Vehicle 52	1:42:13 PM	1	1:42:13 PM	1:43:03 PM	0:00:00	0:00:50	0:00:50
Vehicle 53	1:42:58 PM	2	1:43:12 PM	1:45:49 PM	0:00:14	0:02:37	0:02:51
Vehicle 54	1:48:32 PM	1	1:48:32 PM	1:48:41 PM	0:00:00	0:00:09	0:00:09
Vehicle 55	1:51:54 PM	1	1:51:54 PM	1:52:20 PM	0:00:00	0:00:26	0:00:26
Vehicle 56	2:08:53 PM	1	2:08:53 PM	2:11:26 PM	0:00:00	0:02:33	0:02:33
Vehicle 57	2:12:01 PM	1	2:12:01 PM	2:14:13 PM	0:00:00	0:02:12	0:02:12
Vehicle 58	2:13:51 PM	2	2:14:21 PM	2:15:02 PM	0:00:30	0:00:41	0:01:11
Vehicle 59	2:15:53 PM	1	2:15:53 PM	2:16:10 PM	0:00:00	0:00:17	0:00:17
Vehicle 60	2:16:37 PM	1	2:16:37 PM	2:16:49 PM	0:00:00	0:00:12	0:00:12
Vehicle 61	2:20:10 PM	1	2:20:10 PM	2:20:35 PM	0:00:00	0:00:25	0:00:25
Vehicle 62	2:29:53 PM	1	2:29:53 PM	2:31:55 PM	0:00:00	0:02:02	0:02:02
Vehicle 63	2:48:02 PM	1	2:48:02 PM	2:49:19 PM	0:00:00	0:01:17	0:01:17
Vehicle 64	2:49:01 PM	2	2:49:31 PM	2:50:08 PM	0:00:30	0:00:37	0:01:07
Vehicle 65	2:49:57 PM	3	2:50:28 PM	2:53:56 PM	0:00:31	0:03:28	0:03:59
Vehicle 66	2:54:22 PM	1	2:54:22 PM	2:54:43 PM	0:00:00	0:00:21	0:00:21
Vehicle 67	2:54:59 PM	1	2:54:59 PM	2:56:40 PM	0:00:00	0:01:41	0:01:41
Vehicle 68	2:55:14 PM	2	2:56:49 PM	2:57:03 PM	0:01:35	0:00:14	0:01:49
Vehicle 69	2:56:44 PM	3	2:57:13 PM	2:57:28 PM	0:00:29	0:00:15	0:00:44
Vehicle 70	3:11:50 PM	1	3:11:50 PM	3:12:37 PM	0:00:00	0:00:47	0:00:47
Vehicle 71	3:26:01 PM	1	3:26:01 PM	3:26:04 PM	0:00:00	0:00:03	0:00:03

Vehicle 72	3:27:45 PM	1	3:27:45 PM	3:28:00 PM	0:00:00	0:00:15	0:00:15
Vehicle 73	3:55:32 PM	1	3:55:32 PM	3:56:53 PM	0:00:00	0:01:21	0:01:21
Vehicle 74	3:58:02 PM	1	3:58:02 PM	3:59:54 PM	0:00:00	0:01:52	0:01:52
Vehicle 75	4:03:20 PM	1	4:03:20 PM	4:04:07 PM	0:00:00	0:00:47	0:00:47
Vehicle 76	4:12:46 PM	1	4:12:46 PM	4:13:56 PM	0:00:00	0:01:10	0:01:10
Vehicle 77	4:16:56 PM	1	4:16:56 PM	4:17:12 PM	0:00:00	0:00:16	0:00:16
Vehicle 78	4:26:30 PM	1	4:26:30 PM	4:26:46 PM	0:00:00	0:00:16	0:00:16
Vehicle 79	4:38:36 PM	1	4:38:36 PM	4:39:21 PM	0:00:00	0:00:45	0:00:45
Vehicle 80	4:48:10 PM	1	4:48:10 PM	4:48:19 PM	0:00:00	0:00:09	0:00:09
Vehicle 81	4:53:55 PM	1	4:53:55 PM	4:54:05 PM	0:00:00	0:00:10	0:00:10
Vehicle 82	4:54:02 PM	2	4:54:18 PM	4:59:29 PM	0:00:16	0:05:11	0:05:27
Vehicle 83	5:05:04 PM	1	5:05:04 PM	5:17:07 PM	0:00:00	0:12:03	0:12:03
Vehicle 84	5:15:04 PM	3	5:17:28 PM	5:22:46 PM	0:02:24	0:05:18	0:07:42
Vehicle 85	5:18:20 PM	2	5:22:56 PM	5:24:08 PM	0:04:36	0:01:12	0:05:48
Vehicle 86	5:39:28 PM	1	5:39:28 PM	5:40:27 PM	0:00:00	0:00:59	0:00:59
Vehicle 87	5:40:54 PM	1	5:40:54 PM	5:41:38 PM	0:00:00	0:00:44	0:00:44
Vehicle 88	5:43:40 PM	1	5:43:40 PM	5:44:00 PM	0:00:00	0:00:20	0:00:20
Vehicle 89	5:44:46 PM	1	5:44:46 PM	5:44:57 PM	0:00:00	0:00:11	0:00:11
Vehicle 90	5:47:00 PM	1	5:47:00 PM	5:47:21 PM	0:00:00	0:00:21	0:00:21
Vehicle 91	5:48:10 PM	1	5:48:10 PM	5:48:28 PM	0:00:00	0:00:18	0:00:18
Vehicle 92	5:51:20 PM	1	5:51:20 PM	5:51:39 PM	0:00:00	0:00:19	0:00:19
Vehicle 93	5:52:40 PM	1	5:52:40 PM	5:53:02 PM	0:00:00	0:00:22	0:00:22
Vehicle 94	5:58:12 PM	1	5:58:12 PM	5:58:56 PM	0:00:00	0:00:44	0:00:44
Vehicle 95	6:01:15 PM	1	6:01:15 PM	6:01:32 PM	0:00:00	0:00:17	0:00:17
Vehicle 96	6:01:20 PM	2	6:01:42 PM	6:02:26 PM	0:00:22	0:00:44	0:01:06
Vehicle 97	6:05:52 PM	1	6:05:52 PM	6:06:12 PM	0:00:00	0:00:20	0:00:20
Vehicle 98	6:11:41 PM	1	6:11:41 PM	6:12:07 PM	0:00:00	0:00:26	0:00:26
Vehicle 99	6:14:24 PM	1	6:14:24 PM	6:14:55 PM	0:00:00	0:00:31	0:00:31
Vehicle 100	6:20:26 PM	1	6:20:26 PM	6:21:41 PM	0:00:00	0:01:15	0:01:15
Vehicle 101	6:21:52 PM	1	6:21:52 PM	6:23:04 PM	0:00:00	0:01:12	0:01:12
Vehicle 102	6:27:05 PM	1	6:27:05 PM	6:29:34 PM	0:00:00	0:02:29	0:02:29
Vehicle 103	6:27:17 PM	2	6:29:42 PM	6:33:00 PM	0:02:25	0:03:18	0:05:43
Vehicle 104	6:36:59 PM	1	6:36:59 PM	6:38:39 PM	0:00:00	0:01:40	0:01:40
Vehicle 105	6:49:59 PM	1	6:49:59 PM	6:52:53 PM	0:00:00	0:02:54	0:02:54
Vehicle 106	6:50:35 PM	2	6:53:02 PM	6:54:00 PM	0:02:27	0:00:58	0:03:25
Vehicle 107	6:51:43 PM	3	6:54:19 PM	6:54:23 PM	0:02:36	0:00:04	0:02:40
Vehicle 108	6:52:12 PM	4	6:54:35 PM	6:54:53 PM	0:02:23	0:00:18	0:02:41
Vehicle 109	6:57:09 PM	1	6:57:09 PM	6:57:27 PM	0:00:00	0:00:18	0:00:18
Vehicle 110	6:58:46 PM	1	6:58:46 PM	6:59:24 PM	0:00:00	0:00:38	0:00:38
Vehicle 111	6:59:22 PM	2	6:59:31 PM	6:59:56 PM	0:00:09	0:00:25	0:00:34
Vehicle 112	7:00:28 PM	1	7:00:28 PM	7:01:00 PM	0:00:00	0:00:32	0:00:32
Vehicle 113	7:00:48 PM	2	7:01:09 PM	7:02:29 PM	0:00:21	0:01:20	0:01:41
Vehicle 114	7:01:12 PM	2	7:02:43 PM	7:03:45 PM	0:01:31	0:01:02	0:02:33
Vehicle 115	7:05:11 PM	1	7:05:11 PM	7:09:58 PM	0:00:00	0:04:47	0:04:47
Vehicle 116	7:10:06 PM	1	7:10:06 PM	7:13:55 PM	0:00:00	0:03:49	0:03:49
Vehicle 117	7:10:36 PM	2	7:14:06 PM	7:14:20 PM	0:03:30	0:00:14	0:03:44
Vehicle 118	7:12:40 PM	3	7:14:30 PM	7:14:54 PM	0:01:50	0:00:24	0:02:14
Vehicle 119	7:13:09 PM	4	7:15:09 PM	7:15:25 PM	0:02:00	0:00:16	0:02:16
Vehicle 120	7:22:48 PM	1	7:22:48 PM	7:23:07 PM	0:00:00	0:00:19	0:00:19
Vehicle 121	7:25:32 PM	1	7:25:32 PM	7:25:40 PM	0:00:00	0:00:08	0:00:08
Vehicle 122	7:29:38 PM	1	7:29:38 PM	7:30:00 PM	0:00:00	0:00:22	0:00:22
Vehicle 123	7:34:26 PM	1	7:34:26 PM	7:34:45 PM	0:00:00	0:00:19	0:00:19
Vehicle 124	7:37:28 PM	1	7:37:28 PM	7:37:45 PM	0:00:00	0:00:17	0:00:17
Vehicle 125	7:49:49 PM	1	7:49:49 PM	7:50:38 PM	0:00:00	0:00:49	0:00:49
Vehicle 126	7:53:32 PM	1	7:53:32 PM	7:53:57 PM	0:00:00	0:00:25	0:00:25
Vehicle 127	7:58:44 PM	1	7:58:44 PM	7:59:11 PM	0:00:00	0:00:27	0:00:27
Vehicle 128	8:03:05 PM	1	8:03:05 PM	8:03:14 PM	0:00:00	0:00:09	0:00:09
Vehicle 129	8:06:44 PM	1	8:06:44 PM	8:07:04 PM	0:00:00	0:00:20	0:00:20
Vehicle 130	8:08:46 PM	1	8:08:46 PM	8:08:56 PM	0:00:00	0:00:10	0:00:10
Vehicle 131	8:09:56 PM	1	8:09:56 PM	8:10:12 PM	0:00:00	0:00:16	0:00:16
Vehicle 132	8:12:05 PM	1	8:12:05 PM	8:12:38 PM	0:00:00	0:00:33	0:00:33
Vehicle 133	8:16:12 PM	1	8:16:12 PM	8:17:02 PM	0:00:00	0:00:50	0:00:50
Vehicle 134	8:22:11 PM	1	8:22:11 PM	8:23:04 PM	0:00:00	0:00:53	0:00:53
Vehicle 135	8:22:27 PM	2	8:23:13 PM	8:27:47 PM	0:00:46	0:04:34	0:05:20
Vehicle 136	8:24:01 PM	2	8:27:57 PM	8:28:17 PM	0:03:56	0:00:20	0:04:16
Vehicle 137	8:31:51 PM	1	8:31:51 PM	8:34:30 PM	0:00:00	0:02:39	0:02:39
Vehicle 138	8:32:02 PM	2	8:34:38 PM	8:36:07 PM	0:02:36	0:01:29	0:04:05
Vehicle 139	8:41:52 PM	1	8:41:52 PM	8:44:52 PM	0:00:00	0:03:00	0:03:00
Vehicle 140	8:43:42 PM	2	8:45:02 PM	8:47:01 PM	0:01:20	0:01:59	0:03:19
Vehicle 141	8:51:20 PM	1	8:51:20 PM	8:51:28 PM	0:00:00	0:00:08	0:00:08
Vehicle 142	8:51:25 PM	2	8:51:36 PM	8:51:45 PM	0:00:11	0:00:09	0:00:20
Vehicle 143	8:54:46 PM	1	8:54:46 PM	8:56:36 PM	0:00:00	0:01:50	0:01:50
Vehicle 144	8:55:11 PM	2	8:56:54 PM	9:01:44 PM	0:01:43	0:04:50	0:06:33
Vehicle 145	9:06:31 PM	1	9:06:31 PM	9:06:41 PM	0:00:00	0:00:10	0:00:10
Vehicle 146	9:13:44 PM	1	9:13:44 PM	9:14:05 PM	0:00:00	0:00:21	0:00:21

Vehicle 147	9:21:07 PM	1	9:21:07 PM	9:22:12 PM	0:00:00	0:01:05	0:01:05
Vehicle 148	9:26:05 PM	1	9:26:05 PM	9:26:27 PM	0:00:00	0:00:22	0:00:22
Vehicle 149	9:26:46 PM	1	9:26:46 PM	9:27:03 PM	0:00:00	0:00:17	0:00:17

Restaurant Location: 26592 Towne Centre Drive, Suite 120, Lake Forest, CA 92610							
Data Collection Date: Saturday, July 16, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:51:04 AM	1	10:51:04 AM	10:51:23 AM	0:00:00	0:00:19	0:00:19
Vehicle 2	11:51:02 AM	1	11:51:02 AM	11:51:17 AM	0:00:00	0:00:15	0:00:15
Vehicle 3	12:02:45 PM	1	12:02:45 PM	12:02:59 PM	0:00:00	0:00:14	0:00:14
Vehicle 4	12:08:15 PM	1	12:08:15 PM	12:08:31 PM	0:00:00	0:00:16	0:00:16
Vehicle 5	12:09:01 PM	1	12:09:01 PM	12:09:20 PM	0:00:00	0:00:19	0:00:19
Vehicle 6	12:12:00 PM	1	12:12:00 PM	12:13:01 PM	0:00:00	0:01:01	0:01:01
Vehicle 7	12:17:36 PM	1	12:17:36 PM	12:17:54 PM	0:00:00	0:00:18	0:00:18
Vehicle 8	12:19:09 PM	1	12:19:09 PM	12:24:04 PM	0:00:00	0:04:55	0:04:55
Vehicle 9	12:21:48 PM	2	12:24:12 PM	12:24:34 PM	0:02:24	0:00:22	0:02:46
Vehicle 10	12:25:27 PM	1	12:25:27 PM	12:26:00 PM	0:00:00	0:00:33	0:00:33
Vehicle 11	12:27:07 PM	1	12:27:07 PM	12:29:28 PM	0:00:00	0:02:21	0:02:21
Vehicle 12	12:45:20 PM	1	12:45:20 PM	12:45:50 PM	0:00:00	0:00:30	0:00:30
Vehicle 13	12:47:57 PM	1	12:47:57 PM	12:48:17 PM	0:00:00	0:00:20	0:00:20
Vehicle 14	12:50:31 PM	1	12:50:31 PM	12:51:25 PM	0:00:00	0:00:54	0:00:54
Vehicle 15	12:53:05 PM	1	12:53:05 PM	12:53:21 PM	0:00:00	0:00:16	0:00:16
Vehicle 16	1:01:27 PM	1	1:01:27 PM	1:01:43 PM	0:00:00	0:00:16	0:00:16
Vehicle 17	1:02:02 PM	1	1:02:02 PM	1:02:34 PM	0:00:00	0:00:32	0:00:32
Vehicle 18	1:03:41 PM	1	1:03:41 PM	1:04:06 PM	0:00:00	0:00:25	0:00:25
Vehicle 19	1:03:47 PM	2	1:04:20 PM	1:04:27 PM	0:00:33	0:00:07	0:00:40
Vehicle 20	1:05:04 PM	1	1:05:04 PM	1:05:17 PM	0:00:00	0:00:13	0:00:13
Vehicle 21	1:19:46 PM	1	1:19:46 PM	1:20:41 PM	0:00:00	0:00:55	0:00:55
Vehicle 22	1:28:32 PM	1	1:28:32 PM	1:29:22 PM	0:00:00	0:00:50	0:00:50
Vehicle 23	1:29:13 PM	2	1:29:36 PM	1:30:44 PM	0:00:23	0:01:08	0:01:31
Vehicle 24	1:31:08 PM	1	1:31:08 PM	1:31:32 PM	0:00:00	0:00:24	0:00:24
Vehicle 25	1:31:14 PM	2	1:31:42 PM	1:31:54 PM	0:00:28	0:00:12	0:00:40
Vehicle 26	1:36:09 PM	1	1:36:09 PM	1:36:15 PM	0:00:00	0:00:06	0:00:06
Vehicle 27	1:41:13 PM	1	1:41:13 PM	1:41:36 PM	0:00:00	0:00:23	0:00:23
Vehicle 28	1:52:42 PM	1	1:52:42 PM	1:54:51 PM	0:00:00	0:02:09	0:02:09
Vehicle 29	1:58:24 PM	1	1:58:24 PM	1:59:01 PM	0:00:00	0:00:37	0:00:37
Vehicle 30	2:04:18 PM	1	2:04:18 PM	2:04:30 PM	0:00:00	0:00:12	0:00:12
Vehicle 31	2:44:12 PM	1	2:44:12 PM	2:44:28 PM	0:00:00	0:00:16	0:00:16
Vehicle 32	2:59:38 PM	1	2:59:38 PM	3:00:13 PM	0:00:00	0:00:35	0:00:35
Vehicle 33	3:12:23 PM	1	3:12:23 PM	3:12:51 PM	0:00:00	0:00:28	0:00:28
Vehicle 34	3:18:59 PM	1	3:18:59 PM	3:20:01 PM	0:00:00	0:01:02	0:01:02
Vehicle 35	3:21:08 PM	1	3:21:08 PM	3:21:16 PM	0:00:00	0:00:08	0:00:08
Vehicle 36	3:28:44 PM	1	3:28:44 PM	3:28:54 PM	0:00:00	0:00:10	0:00:10
Vehicle 37	3:31:12 PM	1	3:31:12 PM	3:31:22 PM	0:00:00	0:00:10	0:00:10
Vehicle 38	3:31:20 PM	2	3:31:33 PM	3:31:43 PM	0:00:13	0:00:10	0:00:23
Vehicle 39	3:34:11 PM	1	3:34:11 PM	3:34:35 PM	0:00:00	0:00:24	0:00:24
Vehicle 40	3:35:13 PM	1	3:35:13 PM	3:36:04 PM	0:00:00	0:00:51	0:00:51
Vehicle 41	3:38:26 PM	1	3:38:26 PM	3:40:51 PM	0:00:00	0:02:25	0:02:25
Vehicle 42	3:43:30 PM	1	3:43:30 PM	3:44:02 PM	0:00:00	0:00:32	0:00:32
Vehicle 43	3:53:55 PM	1	3:53:55 PM	3:54:06 PM	0:00:00	0:00:11	0:00:11
Vehicle 44	4:00:56 PM	1	4:00:56 PM	4:02:06 PM	0:00:00	0:01:10	0:01:10
Vehicle 45	4:01:29 PM	2	4:02:14 PM	4:02:29 PM	0:00:45	0:00:15	0:01:00
Vehicle 46	4:13:11 PM	1	4:13:11 PM	4:13:43 PM	0:00:00	0:00:32	0:00:32
Vehicle 47	4:23:00 PM	1	4:23:00 PM	4:23:21 PM	0:00:00	0:00:21	0:00:21
Vehicle 48	4:26:53 PM	1	4:26:53 PM	4:27:56 PM	0:00:00	0:01:03	0:01:03
Vehicle 49	4:39:07 PM	1	4:39:07 PM	4:39:45 PM	0:00:00	0:00:38	0:00:38
Vehicle 50	4:40:49 PM	1	4:40:49 PM	4:41:01 PM	0:00:00	0:00:12	0:00:12
Vehicle 51	4:41:09 PM	1	4:41:09 PM	4:41:47 PM	0:00:00	0:00:38	0:00:38
Vehicle 52	4:44:43 PM	1	4:44:43 PM	4:45:24 PM	0:00:00	0:00:41	0:00:41
Vehicle 53	5:05:28 PM	1	5:05:28 PM	5:06:03 PM	0:00:00	0:00:35	0:00:35
Vehicle 54	5:06:53 PM	1	5:06:53 PM	5:07:13 PM	0:00:00	0:00:20	0:00:20
Vehicle 55	5:18:21 PM	1	5:18:21 PM	5:18:48 PM	0:00:00	0:00:27	0:00:27
Vehicle 56	5:25:26 PM	1	5:25:26 PM	5:26:47 PM	0:00:00	0:01:21	0:01:21
Vehicle 57	5:34:50 PM	1	5:34:50 PM	5:35:09 PM	0:00:00	0:00:19	0:00:19
Vehicle 58	5:39:32 PM	1	5:39:32 PM	5:39:51 PM	0:00:00	0:00:19	0:00:19
Vehicle 59	5:41:14 PM	1	5:41:14 PM	5:41:54 PM	0:00:00	0:00:40	0:00:40
Vehicle 60	5:41:42 PM	2	5:42:05 PM	5:42:29 PM	0:00:23	0:00:24	0:00:47
Vehicle 61	5:54:50 PM	1	5:54:50 PM	5:55:20 PM	0:00:00	0:00:30	0:00:30
Vehicle 62	5:55:34 PM	1	5:55:34 PM	5:55:55 PM	0:00:00	0:00:21	0:00:21
Vehicle 63	5:56:10 PM	1	5:56:10 PM	5:56:50 PM	0:00:00	0:00:40	0:00:40
Vehicle 64	5:56:24 PM	2	5:57:01 PM	5:57:23 PM	0:00:37	0:00:22	0:00:59
Vehicle 65	5:59:35 PM	1	5:59:35 PM	5:59:51 PM	0:00:00	0:00:16	0:00:16
Vehicle 66	6:06:01 PM	1	6:06:01 PM	6:06:25 PM	0:00:00	0:00:24	0:00:24
Vehicle 67	6:12:28 PM	1	6:12:28 PM	6:12:43 PM	0:00:00	0:00:15	0:00:15
Vehicle 68	6:18:35 PM	1	6:18:35 PM	6:18:45 PM	0:00:00	0:00:10	0:00:10
Vehicle 69	6:20:26 PM	1	6:20:26 PM	6:20:49 PM	0:00:00	0:00:23	0:00:23
Vehicle 70	6:30:04 PM	1	6:30:04 PM	6:30:22 PM	0:00:00	0:00:18	0:00:18
Vehicle 71	6:31:44 PM	1	6:31:44 PM	6:32:08 PM	0:00:00	0:00:24	0:00:24

Vehicle 72	6:51:05 PM	1	6:51:05 PM	6:51:16 PM	0:00:00	0:00:11	0:00:11
Vehicle 73	6:55:13 PM	1	6:55:13 PM	6:55:34 PM	0:00:00	0:00:21	0:00:21
Vehicle 74	6:58:36 PM	1	6:58:36 PM	6:59:05 PM	0:00:00	0:00:29	0:00:29
Vehicle 75	7:04:57 PM	1	7:04:57 PM	7:05:05 PM	0:00:00	0:00:08	0:00:08
Vehicle 76	7:06:00 PM	1	7:06:00 PM	7:06:02 PM	0:00:00	0:00:02	0:00:02
Vehicle 77	7:17:24 PM	1	7:17:24 PM	7:17:38 PM	0:00:00	0:00:14	0:00:14
Vehicle 78	7:22:16 PM	1	7:22:16 PM	7:22:27 PM	0:00:00	0:00:11	0:00:11
Vehicle 79	7:23:28 PM	1	7:23:28 PM	7:23:31 PM	0:00:00	0:00:03	0:00:03
Vehicle 80	7:23:38 PM	1	7:23:38 PM	7:24:00 PM	0:00:00	0:00:22	0:00:22
Vehicle 81	7:31:19 PM	1	7:31:19 PM	7:31:33 PM	0:00:00	0:00:14	0:00:14
Vehicle 82	7:47:36 PM	1	7:47:36 PM	7:48:07 PM	0:00:00	0:00:31	0:00:31
Vehicle 83	7:50:12 PM	1	7:50:12 PM	7:50:31 PM	0:00:00	0:00:19	0:00:19
Vehicle 84	7:59:19 PM	1	7:59:19 PM	7:59:41 PM	0:00:00	0:00:22	0:00:22
Vehicle 85	8:08:03 PM	1	8:08:03 PM	8:08:28 PM	0:00:00	0:00:25	0:00:25
Vehicle 86	8:08:40 PM	1	8:08:40 PM	8:10:19 PM	0:00:00	0:01:39	0:01:39
Vehicle 87	8:28:12 PM	1	8:28:12 PM	8:28:51 PM	0:00:00	0:00:39	0:00:39
Vehicle 88	8:58:15 PM	1	8:58:15 PM	8:58:23 PM	0:00:00	0:00:08	0:00:08
Vehicle 89	9:01:04 PM	1	9:01:04 PM	9:01:18 PM	0:00:00	0:00:14	0:00:14
Vehicle 90	9:02:35 PM	1	9:02:35 PM	9:03:03 PM	0:00:00	0:00:28	0:00:28
Vehicle 91	9:19:44 PM	1	9:19:44 PM	9:19:58 PM	0:00:00	0:00:14	0:00:14

APPENDIX C
HANOVER, MA CHIPOTLANE DATA

Restaurant Location:		1773 Washington Street, Hanover, MA 02339					
Data Collection Date:		Wednesday, July 13, 2022					
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:51:59 AM	1	10:51:59 AM	10:52:37 AM	0:00:00	0:00:38	0:00:38
Vehicle 2	11:06:43 AM	1	11:06:43 AM	11:07:00 AM	0:00:00	0:00:17	0:00:17
Vehicle 3	11:16:19 AM	1	11:16:19 AM	11:17:00 AM	0:00:00	0:00:41	0:00:41
Vehicle 4	11:17:29 AM	1	11:17:29 AM	11:17:42 AM	0:00:00	0:00:13	0:00:13
Vehicle 5	11:29:18 AM	1	11:29:18 AM	11:30:41 AM	0:00:00	0:01:23	0:01:23
Vehicle 6	11:31:27 AM	1	11:31:27 AM	11:31:38 AM	0:00:00	0:00:11	0:00:11
Vehicle 7	11:35:56 AM	1	11:35:56 AM	11:36:09 AM	0:00:00	0:00:13	0:00:13
Vehicle 8	11:37:52 AM	1	11:37:52 AM	11:38:07 AM	0:00:00	0:00:15	0:00:15
Vehicle 9	11:40:57 AM	1	11:40:57 AM	11:41:17 AM	0:00:00	0:00:20	0:00:20
Vehicle 10	11:41:16 AM	2	11:41:20 AM	11:46:21 AM	0:00:04	0:05:01	0:05:05
Vehicle 11	11:42:58 AM	2	11:46:30 AM	11:46:43 AM	0:03:32	0:00:13	0:03:45
Vehicle 12	11:51:24 AM	1	11:51:24 AM	11:51:42 AM	0:00:00	0:00:18	0:00:18
Vehicle 13	11:52:35 AM	1	11:52:35 AM	11:52:45 AM	0:00:00	0:00:10	0:00:10
Vehicle 14	11:54:25 AM	1	11:54:25 AM	11:54:54 AM	0:00:00	0:00:29	0:00:29
Vehicle 15	11:55:08 AM	1	11:55:08 AM	11:55:38 AM	0:00:00	0:00:30	0:00:30
Vehicle 16	11:56:04 AM	1	11:56:04 AM	11:56:29 AM	0:00:00	0:00:25	0:00:25
Vehicle 17	11:57:19 AM	1	11:57:19 AM	11:58:01 AM	0:00:00	0:00:42	0:00:42
Vehicle 18	11:58:11 AM	1	11:58:11 AM	11:58:52 AM	0:00:00	0:00:41	0:00:41
Vehicle 19	12:03:34 PM	1	12:03:34 PM	12:03:41 PM	0:00:00	0:00:07	0:00:07
Vehicle 20	12:16:20 PM	1	12:16:20 PM	12:16:52 PM	0:00:00	0:00:32	0:00:32
Vehicle 21	12:16:43 PM	2	12:17:01 PM	12:17:32 PM	0:00:18	0:00:31	0:00:49
Vehicle 22	12:16:46 PM	3	12:17:38 PM	12:17:49 PM	0:00:52	0:00:11	0:01:03
Vehicle 23	12:19:33 PM	1	12:19:33 PM	12:20:16 PM	0:00:00	0:00:43	0:00:43
Vehicle 24	12:19:33 PM	2	12:20:24 PM	12:20:30 PM	0:00:51	0:00:06	0:00:57
Vehicle 25	12:20:24 PM	2	12:20:38 PM	12:21:09 PM	0:00:14	0:00:31	0:00:45
Vehicle 26	12:21:06 PM	2	12:21:20 PM	12:21:23 PM	0:00:14	0:00:03	0:00:17
Vehicle 27	12:23:39 PM	1	12:23:39 PM	12:23:58 PM	0:00:00	0:00:19	0:00:19
Vehicle 28	12:23:40 PM	2	12:24:04 PM	12:24:24 PM	0:00:24	0:00:20	0:00:44
Vehicle 29	12:23:57 PM	3	12:24:31 PM	12:24:42 PM	0:00:34	0:00:11	0:00:45
Vehicle 30	12:24:22 PM	3	12:24:46 PM	12:25:32 PM	0:00:24	0:00:46	0:01:10
Vehicle 31	12:26:20 PM	1	12:26:20 PM	12:26:52 PM	0:00:00	0:00:32	0:00:32
Vehicle 32	12:26:25 PM	2	12:27:00 PM	12:27:27 PM	0:00:35	0:00:27	0:01:02
Vehicle 33	12:30:18 PM	1	12:30:18 PM	12:30:40 PM	0:00:00	0:00:22	0:00:22
Vehicle 34	12:30:47 PM	1	12:30:47 PM	12:31:38 PM	0:00:00	0:00:51	0:00:51
Vehicle 35	12:30:49 PM	2	12:31:49 PM	12:32:07 PM	0:01:00	0:00:18	0:01:18
Vehicle 36	12:32:19 PM	1	12:32:19 PM	12:32:29 PM	0:00:00	0:00:10	0:00:10
Vehicle 37	12:35:16 PM	1	12:35:16 PM	12:35:33 PM	0:00:00	0:00:17	0:00:17
Vehicle 38	12:37:26 PM	1	12:37:26 PM	12:37:37 PM	0:00:00	0:00:11	0:00:11
Vehicle 39	12:40:30 PM	1	12:40:30 PM	12:41:31 PM	0:00:00	0:01:01	0:01:01
Vehicle 40	12:40:38 PM	2	12:41:38 PM	12:42:13 PM	0:01:00	0:00:35	0:01:35
Vehicle 41	12:40:44 PM	3	12:42:21 PM	12:42:29 PM	0:01:37	0:00:08	0:01:45
Vehicle 42	12:42:08 PM	3	12:42:38 PM	12:42:51 PM	0:00:30	0:00:13	0:00:43
Vehicle 43	12:42:12 PM	4	12:42:59 PM	12:43:25 PM	0:00:47	0:00:26	0:01:13
Vehicle 44	12:44:19 PM	1	12:44:19 PM	12:44:45 PM	0:00:00	0:00:26	0:00:26
Vehicle 45	12:50:15 PM	1	12:50:20 PM	12:53:24 PM	0:00:05	0:03:04	0:03:09
Vehicle 46	12:51:42 PM	2	12:53:36 PM	12:54:56 PM	0:01:54	0:01:20	0:03:14
Vehicle 47	12:53:57 PM	2	12:55:35 PM	12:55:50 PM	0:01:38	0:00:15	0:01:53
Vehicle 48	12:54:48 PM	3	12:55:57 PM	12:56:43 PM	0:01:09	0:00:46	0:01:55
Vehicle 49	12:56:33 PM	2	12:56:48 PM	12:57:26 PM	0:00:15	0:00:38	0:00:53
Vehicle 50	12:59:02 PM	1	12:59:02 PM	1:00:12 PM	0:00:00	0:01:10	0:01:10
Vehicle 51	12:59:18 PM	2	1:00:19 PM	1:02:09 PM	0:01:01	0:01:50	0:02:51
Vehicle 52	1:01:13 PM	2	1:02:20 PM	1:03:12 PM	0:01:07	0:00:52	0:01:59
Vehicle 53	1:02:37 PM	2	1:03:16 PM	1:04:10 PM	0:00:39	0:00:54	0:01:33
Vehicle 54	1:03:28 PM	2	1:04:24 PM	1:05:38 PM	0:00:56	0:01:14	0:02:10
Vehicle 55	1:07:09 PM	1	1:07:09 PM	1:08:00 PM	0:00:00	0:00:51	0:00:51
Vehicle 56	1:07:14 PM	2	1:08:08 PM	1:09:45 PM	0:00:54	0:01:37	0:02:31
Vehicle 57	1:07:47 PM	3	1:09:56 PM	1:11:05 PM	0:02:09	0:01:09	0:03:18
Vehicle 58	1:07:58 PM	4	1:11:11 PM	1:11:24 PM	0:03:13	0:00:13	0:03:26
Vehicle 59	1:08:21 PM	4	1:11:30 PM	1:11:55 PM	0:03:09	0:00:25	0:03:34
Vehicle 60	1:08:39 PM	5	1:12:02 PM	1:12:08 PM	0:03:23	0:00:06	0:03:29
Vehicle 61	1:19:06 PM	1	1:19:06 PM	1:19:40 PM	0:00:00	0:00:34	0:00:34
Vehicle 62	1:19:24 PM	2	1:19:48 PM	1:20:01 PM	0:00:24	0:00:13	0:00:37
Vehicle 63	1:23:31 PM	1	1:23:31 PM	1:24:49 PM	0:00:00	0:01:18	0:01:18
Vehicle 64	1:27:31 PM	1	1:27:31 PM	1:27:51 PM	0:00:00	0:00:20	0:00:20
Vehicle 65	1:27:48 PM	2	1:27:55 PM	1:31:20 PM	0:00:07	0:03:25	0:03:32
Vehicle 66	1:29:13 PM	2	1:31:30 PM	1:32:00 PM	0:02:17	0:00:30	0:02:47
Vehicle 67	1:29:51 PM	3	1:32:14 PM	1:34:12 PM	0:02:23	0:01:58	0:04:21
Vehicle 68	1:30:10 PM	4	1:34:23 PM	1:35:33 PM	0:04:13	0:01:10	0:05:23
Vehicle 69	1:33:33 PM	3	1:35:41 PM	1:36:09 PM	0:02:08	0:00:28	0:02:36
Vehicle 70	1:40:26 PM	1	1:40:26 PM	1:41:23 PM	0:00:00	0:00:57	0:00:57
Vehicle 71	1:44:57 PM	1	1:44:57 PM	1:45:17 PM	0:00:00	0:00:20	0:00:20

Vehicle 72	1:47:34 PM	1	1:47:34 PM	1:47:46 PM	0:00:00	0:00:12	0:00:12
Vehicle 73	1:50:03 PM	1	1:50:03 PM	1:50:32 PM	0:00:00	0:00:29	0:00:29
Vehicle 74	1:51:00 PM	1	1:51:00 PM	1:51:17 PM	0:00:00	0:00:17	0:00:17
Vehicle 75	1:53:25 PM	1	1:53:25 PM	1:53:49 PM	0:00:00	0:00:24	0:00:24
Vehicle 76	1:55:25 PM	1	1:55:25 PM	1:55:52 PM	0:00:00	0:00:27	0:00:27
Vehicle 77	1:57:02 PM	1	1:57:02 PM	1:57:18 PM	0:00:00	0:00:16	0:00:16
Vehicle 78	2:02:34 PM	1	2:02:34 PM	2:02:58 PM	0:00:00	0:00:24	0:00:24
Vehicle 79	2:05:45 PM	1	2:05:45 PM	2:06:15 PM	0:00:00	0:00:30	0:00:30
Vehicle 80	2:06:57 PM	1	2:06:57 PM	2:07:53 PM	0:00:00	0:00:56	0:00:56
Vehicle 81	2:10:31 PM	1	2:10:31 PM	2:11:07 PM	0:00:00	0:00:36	0:00:36
Vehicle 82	2:15:16 PM	1	2:15:16 PM	2:15:30 PM	0:00:00	0:00:14	0:00:14
Vehicle 83	2:16:10 PM	1	2:16:10 PM	2:16:19 PM	0:00:00	0:00:09	0:00:09
Vehicle 84	2:20:57 PM	1	2:20:57 PM	2:21:03 PM	0:00:00	0:00:06	0:00:06
Vehicle 85	2:23:55 PM	1	2:23:55 PM	2:24:15 PM	0:00:00	0:00:20	0:00:20
Vehicle 86	2:33:06 PM	1	2:33:06 PM	2:33:12 PM	0:00:00	0:00:06	0:00:06
Vehicle 87	2:33:21 PM	1	2:33:21 PM	2:33:45 PM	0:00:00	0:00:24	0:00:24
Vehicle 88	2:36:54 PM	1	2:36:54 PM	2:37:05 PM	0:00:00	0:00:11	0:00:11
Vehicle 89	2:48:43 PM	1	2:48:43 PM	2:49:03 PM	0:00:00	0:00:20	0:00:20
Vehicle 90	2:50:51 PM	1	2:50:51 PM	2:51:05 PM	0:00:00	0:00:14	0:00:14
Vehicle 91	3:00:45 PM	1	3:00:45 PM	3:01:23 PM	0:00:00	0:00:38	0:00:38
Vehicle 92	3:05:21 PM	1	3:05:21 PM	3:05:43 PM	0:00:00	0:00:22	0:00:22
Vehicle 93	3:10:20 PM	1	3:10:20 PM	3:11:32 PM	0:00:00	0:01:12	0:01:12
Vehicle 94	3:12:59 PM	1	3:12:59 PM	3:14:51 PM	0:00:00	0:01:52	0:01:52
Vehicle 95	3:12:59 PM	2	3:14:57 PM	3:16:12 PM	0:01:58	0:01:15	0:03:13
Vehicle 96	3:20:30 PM	1	3:20:30 PM	3:20:39 PM	0:00:00	0:00:09	0:00:09
Vehicle 97	3:22:00 PM	1	3:22:00 PM	3:22:08 PM	0:00:00	0:00:08	0:00:08
Vehicle 98	3:25:23 PM	1	3:25:23 PM	3:26:15 PM	0:00:00	0:00:52	0:00:52
Vehicle 99	3:25:33 PM	2	3:26:24 PM	3:27:15 PM	0:00:51	0:00:51	0:01:42
Vehicle 100	3:27:47 PM	1	3:27:47 PM	3:28:09 PM	0:00:00	0:00:22	0:00:22
Vehicle 101	3:29:01 PM	1	3:29:01 PM	3:29:20 PM	0:00:00	0:00:19	0:00:19
Vehicle 102	3:30:25 PM	1	3:30:25 PM	3:31:02 PM	0:00:00	0:00:37	0:00:37
Vehicle 103	3:42:01 PM	1	3:42:01 PM	3:42:32 PM	0:00:00	0:00:31	0:00:31
Vehicle 104	3:45:32 PM	1	3:45:32 PM	3:45:52 PM	0:00:00	0:00:20	0:00:20
Vehicle 105	3:52:51 PM	1	3:52:51 PM	3:55:08 PM	0:00:00	0:02:17	0:02:17
Vehicle 106	3:53:41 PM	2	3:55:17 PM	3:55:23 PM	0:01:36	0:00:06	0:01:42
Vehicle 107	3:57:17 PM	1	3:57:17 PM	3:57:43 PM	0:00:00	0:00:26	0:00:26
Vehicle 108	4:12:26 PM	1	4:12:26 PM	4:12:34 PM	0:00:00	0:00:08	0:00:08
Vehicle 109	4:18:39 PM	1	4:18:39 PM	4:18:56 PM	0:00:00	0:00:17	0:00:17
Vehicle 110	4:19:05 PM	1	4:19:05 PM	4:19:21 PM	0:00:00	0:00:16	0:00:16
Vehicle 111	4:25:19 PM	1	4:25:19 PM	4:25:42 PM	0:00:00	0:00:23	0:00:23
Vehicle 112	4:30:28 PM	1	4:30:28 PM	4:32:26 PM	0:00:00	0:01:58	0:01:58
Vehicle 113	4:33:50 PM	1	4:33:50 PM	4:35:15 PM	0:00:00	0:01:25	0:01:25
Vehicle 114	4:34:59 PM	2	4:35:24 PM	4:35:40 PM	0:00:25	0:00:16	0:00:41
Vehicle 115	4:36:58 PM	1	4:36:58 PM	4:38:13 PM	0:00:00	0:01:15	0:01:15
Vehicle 116	4:40:06 PM	1	4:40:06 PM	4:41:42 PM	0:00:00	0:01:36	0:01:36
Vehicle 117	4:44:04 PM	1	4:44:04 PM	4:44:23 PM	0:00:00	0:00:19	0:00:19
Vehicle 118	4:46:38 PM	1	4:46:38 PM	4:47:36 PM	0:00:00	0:00:58	0:00:58
Vehicle 119	4:49:02 PM	1	4:49:02 PM	4:49:55 PM	0:00:00	0:00:53	0:00:53
Vehicle 120	4:49:17 PM	2	4:50:00 PM	4:50:44 PM	0:00:43	0:00:44	0:01:27
Vehicle 121	4:58:00 PM	1	4:58:00 PM	4:58:33 PM	0:00:00	0:00:33	0:00:33
Vehicle 122	4:58:51 PM	1	4:58:51 PM	4:59:06 PM	0:00:00	0:00:15	0:00:15
Vehicle 123	5:00:35 PM	1	5:00:35 PM	5:01:50 PM	0:00:00	0:01:15	0:01:15
Vehicle 124	5:00:44 PM	2	5:01:55 PM	5:03:31 PM	0:01:11	0:01:36	0:02:47
Vehicle 125	5:08:26 PM	1	5:08:26 PM	5:09:07 PM	0:00:00	0:00:41	0:00:41
Vehicle 126	5:08:26 PM	2	5:09:19 PM	5:10:07 PM	0:00:53	0:00:48	0:01:41
Vehicle 127	5:08:37 PM	3	5:10:13 PM	5:11:23 PM	0:01:36	0:01:10	0:02:46
Vehicle 128	5:12:12 PM	1	5:12:12 PM	5:12:58 PM	0:00:00	0:00:46	0:00:46
Vehicle 129	5:14:35 PM	1	5:14:35 PM	5:15:34 PM	0:00:00	0:00:59	0:00:59
Vehicle 130	5:15:27 PM	2	5:15:42 PM	5:16:36 PM	0:00:15	0:00:54	0:01:09
Vehicle 131	5:20:53 PM	1	5:20:53 PM	5:21:15 PM	0:00:00	0:00:22	0:00:22
Vehicle 132	5:23:06 PM	1	5:23:06 PM	5:23:33 PM	0:00:00	0:00:27	0:00:27
Vehicle 133	5:24:44 PM	1	5:24:44 PM	5:25:26 PM	0:00:00	0:00:42	0:00:42
Vehicle 134	5:25:31 PM	1	5:25:31 PM	5:26:17 PM	0:00:00	0:00:46	0:00:46
Vehicle 135	5:26:10 PM	2	5:26:10 PM	5:26:51 PM	0:00:00	0:00:41	0:00:41
Vehicle 136	5:26:17 PM	3	5:26:59 PM	5:27:26 PM	0:00:42	0:00:27	0:01:09
Vehicle 137	5:27:16 PM	2	5:27:35 PM	5:28:00 PM	0:00:19	0:00:25	0:00:44
Vehicle 138	5:27:56 PM	2	5:28:12 PM	5:28:41 PM	0:00:16	0:00:29	0:00:45
Vehicle 139	5:27:56 PM	3	5:28:47 PM	5:29:23 PM	0:00:51	0:00:36	0:01:27
Vehicle 140	5:28:54 PM	2	5:29:31 PM	5:29:55 PM	0:00:37	0:00:24	0:01:01
Vehicle 141	5:30:50 PM	1	5:30:50 PM	5:32:36 PM	0:00:00	0:01:46	0:01:46
Vehicle 142	5:32:34 PM	2	5:32:44 PM	5:34:20 PM	0:00:10	0:01:36	0:01:46
Vehicle 143	5:33:12 PM	2	5:34:29 PM	5:36:57 PM	0:01:17	0:02:28	0:03:45
Vehicle 144	5:33:12 PM	3	5:37:04 PM	5:37:59 PM	0:03:52	0:00:55	0:04:47
Vehicle 145	5:35:03 PM	3	5:38:06 PM	5:38:27 PM	0:03:03	0:00:21	0:03:24
Vehicle 146	5:36:32 PM	4	5:38:37 PM	5:39:45 PM	0:02:05	0:01:08	0:03:13

Vehicle 147	5:36:52 PM	5	5:39:50 PM	5:40:59 PM	0:02:58	0:01:09	0:04:07
Vehicle 148	5:36:55 PM	6	5:41:06 PM	5:41:26 PM	0:04:11	0:00:20	0:04:31
Vehicle 149	5:37:37 PM	7	5:41:33 PM	5:43:13 PM	0:03:56	0:01:40	0:05:36
Vehicle 150	5:37:59 PM	7	5:43:19 PM	5:44:15 PM	0:05:20	0:00:56	0:06:16
Vehicle 151	5:38:05 PM	7	5:44:20 PM	5:45:38 PM	0:06:15	0:01:18	0:07:33
Vehicle 152	5:39:02 PM	6	5:45:45 PM	5:47:56 PM	0:06:43	0:02:11	0:08:54
Vehicle 153	5:40:34 PM	7	5:48:04 PM	5:49:32 PM	0:07:30	0:01:28	0:08:58
Vehicle 154	5:40:52 PM	8	5:49:38 PM	5:51:28 PM	0:08:46	0:01:50	0:10:36
Vehicle 155	5:41:54 PM	7	5:51:39 PM	5:52:24 PM	0:09:45	0:00:45	0:10:30
Vehicle 156	5:42:53 PM	8	5:52:32 PM	5:52:59 PM	0:09:39	0:00:27	0:10:06
Vehicle 157	5:42:59 PM	9	5:53:06 PM	5:53:59 PM	0:10:07	0:00:53	0:11:00
Vehicle 158	5:44:47 PM	8	5:54:07 PM	5:54:49 PM	0:09:20	0:00:42	0:10:02
Vehicle 159	5:46:17 PM	8	5:54:57 PM	5:55:11 PM	0:08:40	0:00:14	0:08:54
Vehicle 160	5:47:20 PM	9	5:55:18 PM	5:56:10 PM	0:07:58	0:00:52	0:08:50
Vehicle 161	5:48:09 PM	9	5:56:18 PM	5:56:56 PM	0:08:09	0:00:38	0:08:47
Vehicle 162	5:49:23 PM	10	5:57:03 PM	5:57:16 PM	0:07:40	0:00:13	0:07:53
Vehicle 163	5:50:33 PM	10	5:57:22 PM	5:58:15 PM	0:06:49	0:00:53	0:07:42
Vehicle 164	5:52:21 PM	10	5:58:24 PM	5:59:08 PM	0:06:03	0:00:44	0:06:47
Vehicle 165	5:53:24 PM	9	5:59:19 PM	6:00:16 PM	0:05:55	0:00:57	0:06:52
Vehicle 166	5:54:00 PM	9	6:00:22 PM	6:01:57 PM	0:06:22	0:01:35	0:07:57
Vehicle 167	5:54:09 PM	10	6:02:03 PM	6:02:32 PM	0:07:54	0:00:29	0:08:23
Vehicle 168	5:56:31 PM	8	6:02:57 PM	6:04:03 PM	0:06:26	0:01:06	0:07:32
Vehicle 169	6:00:19 PM	5	6:04:10 PM	6:04:24 PM	0:03:51	0:00:14	0:04:05
Vehicle 170	6:05:50 PM	1	6:05:50 PM	6:06:23 PM	0:00:00	0:00:33	0:00:33
Vehicle 171	6:05:50 PM	2	6:06:30 PM	6:07:35 PM	0:00:40	0:01:05	0:01:45
Vehicle 172	6:07:55 PM	1	6:07:55 PM	6:09:45 PM	0:00:00	0:01:50	0:01:50
Vehicle 173	6:08:22 PM	2	6:09:52 PM	6:17:05 PM	0:01:30	0:07:13	0:08:43
Vehicle 174	6:09:00 PM	3	6:17:14 PM	6:17:43 PM	0:08:14	0:00:29	0:08:43
Vehicle 175	6:09:34 PM	4	6:17:48 PM	6:22:07 PM	0:08:14	0:04:19	0:12:33
Vehicle 176	6:10:17 PM	4	6:22:16 PM	6:22:30 PM	0:11:59	0:00:14	0:12:13
Vehicle 177	6:10:59 PM	5	6:22:40 PM	6:24:00 PM	0:11:41	0:01:20	0:13:01
Vehicle 178	6:12:13 PM	6	6:24:08 PM	6:26:12 PM	0:11:55	0:02:04	0:13:59
Vehicle 179	6:13:52 PM	7	6:26:17 PM	6:27:14 PM	0:12:25	0:00:57	0:13:22
Vehicle 180	6:15:34 PM	8	6:27:23 PM	6:27:53 PM	0:11:49	0:00:30	0:12:19
Vehicle 181	6:16:45 PM	9	6:27:59 PM	6:30:06 PM	0:11:14	0:02:07	0:13:21
Vehicle 182	6:16:55 PM	10	6:30:15 PM	6:30:56 PM	0:13:20	0:00:41	0:14:01
Vehicle 183	6:20:21 PM	9	6:31:01 PM	6:31:50 PM	0:10:40	0:00:49	0:11:29
Vehicle 184	6:22:04 PM	10	6:31:55 PM	6:34:08 PM	0:09:51	0:02:13	0:12:04
Vehicle 185	6:23:00 PM	9	6:34:15 PM	6:35:01 PM	0:11:15	0:00:46	0:12:01
Vehicle 186	6:23:50 PM	10	6:35:11 PM	6:36:43 PM	0:11:21	0:01:32	0:12:53
Vehicle 187	6:24:51 PM	10	6:36:55 PM	6:38:06 PM	0:12:04	0:01:11	0:13:15
Vehicle 188	6:26:58 PM	10	6:38:16 PM	6:38:44 PM	0:11:18	0:00:28	0:11:46
Vehicle 189	6:28:03 PM	9	6:38:51 PM	6:39:08 PM	0:10:48	0:00:17	0:11:05
Vehicle 190	6:28:45 PM	10	6:39:15 PM	6:40:34 PM	0:10:30	0:01:19	0:11:49
Vehicle 191	6:31:03 PM	10	6:40:39 PM	6:41:33 PM	0:09:36	0:00:54	0:10:30
Vehicle 192	6:31:48 PM	10	6:41:38 PM	6:42:28 PM	0:09:50	0:00:50	0:10:40
Vehicle 193	6:31:48 PM	11	6:42:39 PM	6:43:25 PM	0:10:51	0:00:46	0:11:37
Vehicle 194	6:34:52 PM	11	6:43:32 PM	6:44:01 PM	0:08:40	0:00:29	0:09:09
Vehicle 195	6:38:23 PM	8	6:44:07 PM	6:46:00 PM	0:05:44	0:01:53	0:07:37
Vehicle 196	6:38:59 PM	8	6:46:06 PM	6:47:13 PM	0:07:07	0:01:07	0:08:14
Vehicle 197	6:40:50 PM	7	6:47:17 PM	6:47:59 PM	0:06:27	0:00:42	0:07:09
Vehicle 198	6:42:12 PM	7	6:48:07 PM	6:50:05 PM	0:05:55	0:01:58	0:07:53
Vehicle 199	6:44:47 PM	5	6:50:10 PM	6:58:09 PM	0:05:23	0:07:59	0:13:22
Vehicle 200	6:47:40 PM	4	6:58:17 PM	7:04:57 PM	0:10:37	0:06:40	0:17:17
Vehicle 201	6:47:08 PM	5	7:05:03 PM	7:07:12 PM	0:17:55	0:02:09	0:20:04
Vehicle 202	6:50:21 PM	5	7:07:19 PM	7:08:20 PM	0:16:58	0:01:01	0:17:59
Vehicle 203	6:53:31 PM	6	7:08:27 PM	7:09:37 PM	0:14:56	0:01:10	0:16:06
Vehicle 204	6:56:06 PM	7	7:09:57 PM	7:10:36 PM	0:13:51	0:00:39	0:14:30
Vehicle 205	6:56:30 PM	8	7:10:49 PM	7:11:51 PM	0:14:19	0:01:02	0:15:21
Vehicle 206	6:57:07 PM	9	7:11:57 PM	7:13:11 PM	0:14:50	0:01:14	0:16:04
Vehicle 207	6:58:10 PM	10	7:13:21 PM	7:14:36 PM	0:15:11	0:01:15	0:16:26
Vehicle 208	6:58:43 PM	10	7:14:42 PM	7:16:55 PM	0:15:59	0:02:13	0:18:12
Vehicle 209	6:58:55 PM	11	7:17:00 PM	7:18:33 PM	0:18:05	0:01:33	0:19:38
Vehicle 210	7:00:47 PM	12	7:18:41 PM	7:19:35 PM	0:17:54	0:00:54	0:18:48
Vehicle 211	7:06:01 PM	11	7:19:45 PM	7:20:05 PM	0:13:44	0:00:20	0:14:04
Vehicle 212	7:06:11 PM	12	7:20:13 PM	7:20:43 PM	0:14:02	0:00:30	0:14:32
Vehicle 213	7:10:12 PM	10	7:20:50 PM	7:21:45 PM	0:10:38	0:00:55	0:11:33
Vehicle 214	7:10:49 PM	10	7:21:51 PM	7:25:48 PM	0:11:02	0:03:57	0:14:59
Vehicle 215	7:10:49 PM	11	7:25:56 PM	7:27:54 PM	0:15:07	0:01:58	0:17:05
Vehicle 216	7:12:50 PM	11	7:28:05 PM	7:29:42 PM	0:15:15	0:01:37	0:16:52
Vehicle 217	7:19:39 PM	8	7:29:50 PM	7:30:20 PM	0:10:11	0:00:30	0:10:41
Vehicle 218	7:19:46 PM	9	7:30:27 PM	7:32:24 PM	0:10:41	0:01:57	0:12:38
Vehicle 219	7:24:04 PM	6	7:32:33 PM	7:33:12 PM	0:08:29	0:00:39	0:09:08
Vehicle 220	7:27:15 PM	7	7:33:21 PM	7:33:54 PM	0:06:06	0:00:33	0:06:39
Vehicle 221	7:27:42 PM	7	7:34:03 PM	7:37:02 PM	0:06:21	0:02:59	0:09:20

Vehicle 222	7:37:25 PM	1	7:37:25 PM	7:38:27 PM	0:00:00	0:01:02	0:01:02
Vehicle 223	7:38:50 PM	1	7:38:50 PM	7:40:50 PM	0:00:00	0:02:00	0:02:00
Vehicle 224	7:40:15 PM	2	7:40:58 PM	7:43:55 PM	0:00:43	0:02:57	0:03:40
Vehicle 225	7:42:00 PM	2	7:44:01 PM	7:46:30 PM	0:02:01	0:02:29	0:04:30
Vehicle 226	7:44:18 PM	2	7:46:39 PM	7:49:47 PM	0:02:21	0:03:08	0:05:29
Vehicle 227	7:44:18 PM	3	7:49:55 PM	7:50:57 PM	0:05:37	0:01:02	0:06:39
Vehicle 228	7:46:40 PM	3	7:51:07 PM	7:51:34 PM	0:04:27	0:00:27	0:04:54
Vehicle 229	7:47:43 PM	4	7:51:44 PM	7:53:13 PM	0:04:01	0:01:29	0:05:30
Vehicle 230	7:49:47 PM	5	7:53:25 PM	7:53:45 PM	0:03:38	0:00:20	0:03:58
Vehicle 231	7:51:58 PM	3	7:53:49 PM	7:54:00 PM	0:01:51	0:00:11	0:02:02
Vehicle 232	7:52:09 PM	4	7:54:08 PM	7:54:20 PM	0:01:59	0:00:12	0:02:11
Vehicle 233	7:55:28 PM	1	7:55:28 PM	7:56:23 PM	0:00:00	0:00:55	0:00:55
Vehicle 234	7:55:32 PM	2	7:56:31 PM	7:56:37 PM	0:00:59	0:00:06	0:01:05
Vehicle 235	7:55:49 PM	3	7:56:43 PM	7:56:56 PM	0:00:54	0:00:13	0:01:07
Vehicle 236	8:00:17 PM	1	8:00:17 PM	8:00:44 PM	0:00:00	0:00:27	0:00:27
Vehicle 237	8:00:25 PM	2	8:00:50 PM	8:01:01 PM	0:00:25	0:00:11	0:00:36
Vehicle 238	8:03:24 PM	1	8:03:24 PM	8:05:39 PM	0:00:00	0:02:15	0:02:15
Vehicle 239	8:03:39 PM	2	8:05:51 PM	8:06:51 PM	0:02:12	0:01:00	0:03:12
Vehicle 240	8:05:59 PM	2	8:07:00 PM	8:07:32 PM	0:01:01	0:00:32	0:01:33
Vehicle 241	8:14:32 PM	1	8:14:32 PM	8:15:39 PM	0:00:00	0:01:07	0:01:07
Vehicle 242	8:19:08 PM	1	8:19:08 PM	8:20:44 PM	0:00:00	0:01:36	0:01:36
Vehicle 243	8:19:34 PM	2	8:20:56 PM	8:21:26 PM	0:01:22	0:00:30	0:01:52
Vehicle 244	8:21:16 PM	2	8:21:38 PM	8:21:58 PM	0:00:22	0:00:20	0:00:42
Vehicle 245	8:21:49 PM	2	8:22:07 PM	8:25:00 PM	0:00:18	0:02:53	0:03:11
Vehicle 246	8:29:45 PM	1	8:29:45 PM	8:30:19 PM	0:00:00	0:00:34	0:00:34
Vehicle 247	8:31:40 PM	1	8:31:40 PM	8:35:12 PM	0:00:00	0:03:32	0:03:32
Vehicle 248	8:32:09 PM	2	8:35:22 PM	8:36:44 PM	0:03:13	0:01:22	0:04:35
Vehicle 249	8:40:53 PM	1	8:40:53 PM	8:41:52 PM	0:00:00	0:00:59	0:00:59
Vehicle 250	8:44:28 PM	1	8:44:28 PM	8:46:50 PM	0:00:00	0:02:22	0:02:22
Vehicle 251	8:50:10 PM	1	8:50:10 PM	8:50:19 PM	0:00:00	0:00:09	0:00:09
Vehicle 252	8:56:08 PM	1	8:56:08 PM	8:57:38 PM	0:00:00	0:01:30	0:01:30
Vehicle 253	9:04:34 PM	1	9:04:34 PM	9:05:31 PM	0:00:00	0:00:57	0:00:57
Vehicle 254	9:07:29 PM	1	9:07:29 PM	9:08:58 PM	0:00:00	0:01:29	0:01:29
Vehicle 255	9:09:35 PM	1	9:09:35 PM	9:09:38 PM	0:00:00	0:00:03	0:00:03
Vehicle 256	9:13:09 PM	1	9:13:09 PM	9:15:12 PM	0:00:00	0:02:03	0:02:03
Vehicle 257	9:21:07 PM	1	9:21:07 PM	9:21:34 PM	0:00:00	0:00:27	0:00:27
Vehicle 258	9:25:13 PM	1	9:25:13 PM	9:25:19 PM	0:00:00	0:00:06	0:00:06
Vehicle 259	9:31:37 PM	1	9:31:37 PM	9:31:52 PM	0:00:00	0:00:15	0:00:15
Vehicle 260	9:38:12 PM	1	9:38:12 PM	9:38:50 PM	0:00:00	0:00:38	0:00:38
Vehicle 261	9:39:01 PM	1	9:39:01 PM	9:39:51 PM	0:00:00	0:00:50	0:00:50

Restaurant Location:		1773 Washington Street, Hanover, MA 02339					
Data Collection Date:		Thursday, July 14, 2022					
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:50:27 AM	1	10:50:27 AM	10:52:57 AM	0:00:00	0:02:30	0:02:30
Vehicle 2	11:09:39 AM	1	11:09:39 AM	11:09:46 AM	0:00:00	0:00:07	0:00:07
Vehicle 3	11:12:18 AM	1	11:12:18 AM	11:12:51 AM	0:00:00	0:00:33	0:00:33
Vehicle 4	11:14:50 AM	1	11:14:50 AM	11:15:41 AM	0:00:00	0:00:51	0:00:51
Vehicle 5	11:19:22 AM	1	11:19:22 AM	11:19:58 AM	0:00:00	0:00:36	0:00:36
Vehicle 6	11:21:11 AM	1	11:21:11 AM	11:21:41 AM	0:00:00	0:00:30	0:00:30
Vehicle 7	11:23:46 AM	1	11:23:46 AM	11:24:03 AM	0:00:00	0:00:17	0:00:17
Vehicle 8	11:24:10 AM	1	11:24:10 AM	11:25:12 AM	0:00:00	0:01:02	0:01:02
Vehicle 9	11:29:51 AM	1	11:29:51 AM	11:30:45 AM	0:00:00	0:00:54	0:00:54
Vehicle 10	11:31:55 AM	1	11:31:55 AM	11:32:06 AM	0:00:00	0:00:11	0:00:11
Vehicle 11	11:41:46 AM	1	11:41:46 AM	11:42:11 AM	0:00:00	0:00:25	0:00:25
Vehicle 12	11:47:33 AM	1	11:47:33 AM	11:50:57 AM	0:00:00	0:03:24	0:03:24
Vehicle 13	11:48:27 AM	2	11:51:03 AM	11:51:37 AM	0:02:36	0:00:34	0:03:10
Vehicle 14	11:48:36 AM	3	11:51:42 AM	11:55:48 AM	0:03:06	0:04:06	0:07:12
Vehicle 15	11:48:58 AM	4	11:55:55 AM	11:57:26 AM	0:06:57	0:01:31	0:08:28
Vehicle 16	11:51:57 AM	3	11:57:34 AM	11:58:41 AM	0:05:37	0:01:07	0:06:44
Vehicle 17	11:54:18 AM	4	11:58:49 AM	11:59:55 AM	0:04:31	0:01:06	0:05:37
Vehicle 18	12:00:50 PM	1	12:00:50 PM	12:01:03 PM	0:00:00	0:00:13	0:00:13
Vehicle 19	12:07:07 PM	1	12:07:07 PM	12:10:53 PM	0:00:00	0:03:46	0:03:46
Vehicle 20	12:07:26 PM	2	12:11:00 PM	12:14:04 PM	0:03:34	0:03:04	0:06:38
Vehicle 21	12:08:32 PM	3	12:14:10 PM	12:17:08 PM	0:05:38	0:02:58	0:08:36
Vehicle 22	12:11:08 PM	3	12:17:16 PM	12:20:44 PM	0:06:08	0:03:28	0:09:36
Vehicle 23	12:13:10 PM	4	12:20:50 PM	12:23:44 PM	0:07:40	0:02:54	0:10:34
Vehicle 24	12:15:36 PM	4	12:23:52 PM	12:27:00 PM	0:08:16	0:03:08	0:11:24
Vehicle 25	12:17:24 PM	4	12:27:07 PM	12:28:11 PM	0:09:43	0:01:04	0:10:47
Vehicle 26	12:19:13 PM	5	12:28:19 PM	12:31:26 PM	0:09:06	0:03:07	0:12:13
Vehicle 27	12:21:41 PM	5	12:31:35 PM	12:32:29 PM	0:09:54	0:00:54	0:10:48
Vehicle 28	12:24:00 PM	6	12:32:37 PM	12:36:54 PM	0:08:37	0:04:17	0:12:54
Vehicle 29	12:25:58 PM	7	12:37:02 PM	12:43:22 PM	0:11:04	0:06:20	0:17:24
Vehicle 30	12:26:46 PM	8	12:43:31 PM	12:44:22 PM	0:16:45	0:00:51	0:17:36
Vehicle 31	12:29:19 PM	8	12:44:30 PM	12:45:01 PM	0:15:11	0:00:31	0:15:42
Vehicle 32	12:31:53 PM	6	12:45:09 PM	12:45:42 PM	0:13:16	0:00:33	0:13:49
Vehicle 33	12:33:45 PM	6	12:45:02 PM	12:49:10 PM	0:11:17	0:04:08	0:15:25
Vehicle 34	12:33:46 PM	7	12:49:22 PM	12:49:37 PM	0:15:36	0:00:15	0:15:51
Vehicle 35	12:39:48 PM	7	12:49:42 PM	12:49:53 PM	0:09:54	0:00:11	0:10:05
Vehicle 36	12:39:56 PM	8	12:50:03 PM	12:50:08 PM	0:10:07	0:00:05	0:10:12
Vehicle 37	12:42:40 PM	9	12:50:16 PM	12:54:00 PM	0:07:36	0:03:44	0:11:20
Vehicle 38	12:44:20 PM	9	12:54:07 PM	12:54:19 PM	0:09:47	0:00:12	0:09:59
Vehicle 39	12:44:32 PM	10	12:54:27 PM	12:55:20 PM	0:09:55	0:00:53	0:10:48
Vehicle 40	12:46:23 PM	8	12:55:27 PM	12:55:42 PM	0:09:04	0:00:15	0:09:19
Vehicle 41	1:03:58 PM	1	1:03:58 PM	1:04:26 PM	0:00:00	0:00:28	0:00:28
Vehicle 42	1:45:51 PM	1	1:45:51 PM	1:46:00 PM	0:00:00	0:00:09	0:00:09
Vehicle 43	2:02:45 PM	1	2:02:45 PM	2:03:10 PM	0:00:00	0:00:25	0:00:25
Vehicle 44	2:23:53 PM	1	2:23:53 PM	2:25:34 PM	0:00:00	0:01:41	0:01:41
Vehicle 45	2:50:29 PM	1	2:50:29 PM	2:51:08 PM	0:00:00	0:00:39	0:00:39
Vehicle 46	5:07:25 PM	1	5:07:25 PM	5:07:58 PM	0:00:00	0:00:33	0:00:33
Vehicle 47	7:16:17 PM	1	7:16:17 PM	7:16:27 PM	0:00:00	0:00:10	0:00:10
Vehicle 48	8:06:59 PM	1	8:06:59 PM	8:08:39 PM	0:00:00	0:01:40	0:01:40

Restaurant Location: 1773 Washington Street, Hanover, MA 02339							
Data Collection Date: Friday, July 15, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:59:47 AM	1	10:59:47 AM	11:00:49 AM	0:00:00	0:01:02	0:01:02
Vehicle 2	11:00:55 AM	1	11:00:55 AM	11:01:38 AM	0:00:00	0:00:43	0:00:43
Vehicle 3	11:02:22 AM	1	11:02:22 AM	11:03:39 AM	0:00:00	0:01:17	0:01:17
Vehicle 4	11:03:50 AM	1	11:03:50 AM	11:04:33 AM	0:00:00	0:00:43	0:00:43
Vehicle 5	11:03:57 AM	2	11:04:41 AM	11:06:23 AM	0:00:44	0:01:42	0:02:26
Vehicle 6	11:10:20 AM	1	11:10:20 AM	11:10:56 AM	0:00:00	0:00:36	0:00:36
Vehicle 7	11:14:29 AM	1	11:14:29 AM	11:14:47 AM	0:00:00	0:00:18	0:00:18
Vehicle 8	11:22:53 AM	1	11:22:53 AM	11:24:28 AM	0:00:00	0:01:35	0:01:35
Vehicle 9	11:23:16 AM	2	11:24:39 AM	11:26:46 AM	0:01:23	0:02:07	0:03:30
Vehicle 10	11:24:45 AM	2	11:26:54 AM	11:27:29 AM	0:02:09	0:00:35	0:02:44
Vehicle 11	11:26:24 AM	3	11:27:42 AM	11:28:02 AM	0:01:18	0:00:20	0:01:38
Vehicle 12	11:28:26 AM	1	11:28:26 AM	11:30:36 AM	0:00:00	0:02:10	0:02:10
Vehicle 13	11:37:18 AM	1	11:37:18 AM	11:38:00 AM	0:00:00	0:00:42	0:00:42
Vehicle 14	11:39:31 AM	1	11:39:31 AM	11:40:50 AM	0:00:00	0:01:19	0:01:19
Vehicle 15	11:41:36 AM	1	11:41:36 AM	11:43:57 AM	0:00:00	0:02:21	0:02:21
Vehicle 16	11:41:59 AM	2	11:44:10 AM	11:44:51 AM	0:02:11	0:00:41	0:02:52
Vehicle 17	11:42:08 AM	3	11:44:58 AM	11:46:19 AM	0:02:50	0:01:21	0:04:11
Vehicle 18	11:42:47 AM	4	11:46:27 AM	11:47:20 AM	0:03:40	0:00:53	0:04:33
Vehicle 19	11:53:35 AM	1	11:53:35 AM	11:54:23 AM	0:00:00	0:00:48	0:00:48
Vehicle 20	11:57:19 AM	1	11:57:19 AM	11:57:32 AM	0:00:00	0:00:13	0:00:13
Vehicle 21	11:57:24 AM	2	11:57:40 AM	11:58:24 AM	0:00:16	0:00:44	0:01:00
Vehicle 22	11:58:45 AM	1	11:58:45 AM	11:59:23 AM	0:00:00	0:00:38	0:00:38
Vehicle 23	12:00:37 PM	1	12:00:37 PM	12:01:16 PM	0:00:00	0:00:39	0:00:39
Vehicle 24	12:03:02 PM	1	12:03:02 PM	12:03:15 PM	0:00:00	0:00:13	0:00:13
Vehicle 25	12:03:05 PM	2	12:03:23 PM	12:03:35 PM	0:00:18	0:00:12	0:00:30
Vehicle 26	12:03:31 PM	2	12:03:42 PM	12:03:59 PM	0:00:11	0:00:17	0:00:28
Vehicle 27	12:05:03 PM	1	12:05:03 PM	12:05:21 PM	0:00:00	0:00:18	0:00:18
Vehicle 28	12:05:13 PM	2	12:05:31 PM	12:05:37 PM	0:00:18	0:00:06	0:00:24
Vehicle 29	12:05:49 PM	1	12:05:49 PM	12:06:58 PM	0:00:00	0:01:09	0:01:09
Vehicle 30	12:06:48 PM	2	12:07:06 PM	12:07:25 PM	0:00:18	0:00:19	0:00:37
Vehicle 31	12:08:04 PM	1	12:08:04 PM	12:11:06 PM	0:00:00	0:03:02	0:03:02
Vehicle 32	12:08:31 PM	2	12:11:13 PM	12:11:21 PM	0:02:42	0:00:08	0:02:50
Vehicle 33	12:10:35 PM	3	12:11:30 PM	12:11:46 PM	0:00:55	0:00:16	0:01:11
Vehicle 34	12:15:06 PM	1	12:15:06 PM	12:15:16 PM	0:00:00	0:00:10	0:00:10
Vehicle 35	12:15:26 PM	1	12:15:26 PM	12:15:38 PM	0:00:00	0:00:12	0:00:12
Vehicle 36	12:15:50 PM	1	12:15:50 PM	12:15:54 PM	0:00:00	0:00:04	0:00:04
Vehicle 37	12:17:50 PM	1	12:17:50 PM	12:17:53 PM	0:00:00	0:00:03	0:00:03
Vehicle 38	12:18:47 PM	1	12:18:47 PM	12:19:15 PM	0:00:00	0:00:28	0:00:28
Vehicle 39	12:25:44 PM	1	12:25:44 PM	12:25:55 PM	0:00:00	0:00:11	0:00:11
Vehicle 40	12:28:25 PM	1	12:28:25 PM	12:28:36 PM	0:00:00	0:00:11	0:00:11
Vehicle 41	12:28:43 PM	1	12:28:43 PM	12:29:07 PM	0:00:00	0:00:24	0:00:24
Vehicle 42	12:30:44 PM	1	12:30:44 PM	12:31:20 PM	0:00:00	0:00:36	0:00:36
Vehicle 43	12:33:23 PM	1	12:33:23 PM	12:38:14 PM	0:00:00	0:04:51	0:04:51
Vehicle 44	12:39:14 PM	1	12:39:14 PM	12:39:28 PM	0:00:00	0:00:14	0:00:14
Vehicle 45	12:39:25 PM	2	12:39:35 PM	12:40:12 PM	0:00:10	0:00:37	0:00:47
Vehicle 46	12:40:22 PM	1	12:40:22 PM	12:41:03 PM	0:00:00	0:00:41	0:00:41
Vehicle 47	12:42:47 PM	1	12:42:47 PM	12:44:26 PM	0:00:00	0:01:39	0:01:39
Vehicle 48	12:49:02 PM	1	12:49:02 PM	12:50:49 PM	0:00:00	0:01:47	0:01:47
Vehicle 49	12:56:41 PM	1	12:56:41 PM	12:58:59 PM	0:00:00	0:02:18	0:02:18
Vehicle 50	12:57:07 PM	2	12:59:15 PM	1:00:12 PM	0:02:08	0:00:57	0:03:05
Vehicle 51	12:59:54 PM	2	1:00:23 PM	1:02:11 PM	0:00:29	0:01:48	0:02:17
Vehicle 52	1:01:16 PM	2	1:02:20 PM	1:02:47 PM	0:01:04	0:00:27	0:01:31
Vehicle 53	1:01:20 PM	3	1:02:56 PM	1:03:43 PM	0:01:36	0:00:47	0:02:23
Vehicle 54	1:02:37 PM	3	1:03:50 PM	1:04:30 PM	0:01:13	0:00:40	0:01:53
Vehicle 55	1:02:45 PM	4	1:04:40 PM	1:05:13 PM	0:01:55	0:00:33	0:02:28
Vehicle 56	1:05:08 PM	2	1:05:21 PM	1:08:35 PM	0:00:13	0:03:14	0:03:27
Vehicle 57	1:05:56 PM	2	1:08:42 PM	1:08:53 PM	0:02:46	0:00:11	0:02:57
Vehicle 58	1:06:39 PM	3	1:09:01 PM	1:09:24 PM	0:02:22	0:00:23	0:02:45
Vehicle 59	1:07:39 PM	4	1:09:32 PM	1:09:41 PM	0:01:53	0:00:09	0:02:02
Vehicle 60	1:12:40 PM	1	1:12:40 PM	1:13:20 PM	0:00:00	0:00:40	0:00:40
Vehicle 61	1:14:12 PM	1	1:14:12 PM	1:14:29 PM	0:00:00	0:00:17	0:00:17
Vehicle 62	1:16:41 PM	1	1:16:41 PM	1:16:55 PM	0:00:00	0:00:14	0:00:14
Vehicle 63	1:18:14 PM	1	1:18:14 PM	1:18:37 PM	0:00:00	0:00:23	0:00:23
Vehicle 64	1:23:15 PM	1	1:23:15 PM	1:23:48 PM	0:00:00	0:00:33	0:00:33
Vehicle 65	1:24:17 PM	1	1:24:17 PM	1:24:52 PM	0:00:00	0:00:35	0:00:35
Vehicle 66	1:25:37 PM	1	1:25:37 PM	1:26:08 PM	0:00:00	0:00:31	0:00:31
Vehicle 67	1:36:14 PM	1	1:36:14 PM	1:37:12 PM	0:00:00	0:00:58	0:00:58
Vehicle 68	1:48:25 PM	1	1:48:25 PM	1:50:13 PM	0:00:00	0:01:48	0:01:48
Vehicle 69	1:51:20 PM	1	1:51:20 PM	1:53:29 PM	0:00:00	0:02:09	0:02:09
Vehicle 70	1:54:30 PM	1	1:54:30 PM	1:56:05 PM	0:00:00	0:01:35	0:01:35
Vehicle 71	1:55:09 PM	2	1:56:16 PM	1:57:10 PM	0:01:07	0:00:54	0:02:01

Vehicle 72	1:55:27 PM	3	1:57:16 PM	1:58:50 PM	0:01:49	0:01:34	0:03:23
Vehicle 73	1:56:19 PM	4	1:58:58 PM	1:59:44 PM	0:02:39	0:00:46	0:03:25
Vehicle 74	1:57:08 PM	4	1:59:50 PM	2:00:00 PM	0:02:42	0:00:10	0:02:52
Vehicle 75	2:00:05 PM	1	2:00:05 PM	2:01:08 PM	0:00:00	0:01:03	0:01:03
Vehicle 76	2:01:33 PM	1	2:01:33 PM	2:03:05 PM	0:00:00	0:01:32	0:01:32
Vehicle 77	2:03:54 PM	1	2:03:54 PM	2:04:09 PM	0:00:00	0:00:15	0:00:15
Vehicle 78	2:04:07 PM	2	2:04:14 PM	2:04:24 PM	0:00:07	0:00:10	0:00:17
Vehicle 79	2:07:12 PM	1	2:07:12 PM	2:10:21 PM	0:00:00	0:03:09	0:03:09
Vehicle 80	2:09:25 PM	2	2:10:33 PM	2:11:12 PM	0:01:08	0:00:39	0:01:47
Vehicle 81	2:09:38 PM	3	2:11:23 PM	2:12:13 PM	0:01:45	0:00:50	0:02:35
Vehicle 82	2:09:59 PM	4	2:12:22 PM	2:12:53 PM	0:02:23	0:00:31	0:02:54
Vehicle 83	2:12:27 PM	2	2:13:03 PM	2:13:22 PM	0:00:36	0:00:19	0:00:55
Vehicle 84	2:14:44 PM	1	2:14:44 PM	2:15:08 PM	0:00:00	0:00:24	0:00:24
Vehicle 85	2:16:17 PM	1	2:16:17 PM	2:17:33 PM	0:00:00	0:01:16	0:01:16
Vehicle 86	2:21:14 PM	1	2:21:14 PM	2:21:18 PM	0:00:00	0:00:04	0:00:04
Vehicle 87	2:24:02 PM	1	2:24:02 PM	2:24:34 PM	0:00:00	0:00:32	0:00:32
Vehicle 88	2:25:30 PM	1	2:25:30 PM	2:26:04 PM	0:00:00	0:00:34	0:00:34
Vehicle 89	2:27:55 PM	1	2:27:55 PM	2:29:40 PM	0:00:00	0:01:45	0:01:45
Vehicle 90	2:27:56 PM	2	2:29:51 PM	2:29:55 PM	0:01:55	0:00:04	0:01:59
Vehicle 91	2:32:37 PM	1	2:32:37 PM	2:33:56 PM	0:00:00	0:01:19	0:01:19
Vehicle 92	2:32:47 PM	2	2:34:07 PM	2:35:07 PM	0:01:20	0:01:00	0:02:20
Vehicle 93	2:37:09 PM	1	2:37:09 PM	2:37:51 PM	0:00:00	0:00:42	0:00:42
Vehicle 94	2:43:44 PM	1	2:43:44 PM	2:43:50 PM	0:00:00	0:00:06	0:00:06
Vehicle 95	2:50:26 PM	1	2:50:26 PM	2:50:34 PM	0:00:00	0:00:08	0:00:08
Vehicle 96	3:03:18 PM	1	3:03:18 PM	3:03:27 PM	0:00:00	0:00:09	0:00:09
Vehicle 97	3:03:22 PM	2	3:03:33 PM	3:04:56 PM	0:00:11	0:01:23	0:01:34
Vehicle 98	3:05:36 PM	1	3:05:36 PM	3:08:30 PM	0:00:00	0:02:54	0:02:54
Vehicle 99	3:12:06 PM	1	3:12:06 PM	3:12:22 PM	0:00:00	0:00:16	0:00:16
Vehicle 100	3:12:50 PM	1	3:12:50 PM	3:12:54 PM	0:00:00	0:00:04	0:00:04
Vehicle 101	3:15:53 PM	1	3:15:53 PM	3:16:23 PM	0:00:00	0:00:30	0:00:30
Vehicle 102	3:22:38 PM	1	3:22:38 PM	3:23:18 PM	0:00:00	0:00:40	0:00:40
Vehicle 103	3:38:06 PM	1	3:38:06 PM	3:38:26 PM	0:00:00	0:00:20	0:00:20
Vehicle 104	3:39:54 PM	1	3:39:54 PM	3:40:37 PM	0:00:00	0:00:43	0:00:43
Vehicle 105	3:40:27 PM	2	3:40:48 PM	3:41:04 PM	0:00:21	0:00:16	0:00:37
Vehicle 106	3:42:16 PM	1	3:42:16 PM	3:42:47 PM	0:00:00	0:00:31	0:00:31
Vehicle 107	3:47:54 PM	1	3:47:54 PM	3:48:03 PM	0:00:00	0:00:09	0:00:09
Vehicle 108	3:48:41 PM	1	3:48:41 PM	3:48:57 PM	0:00:00	0:00:16	0:00:16
Vehicle 109	3:50:41 PM	1	3:50:41 PM	3:51:38 PM	0:00:00	0:00:57	0:00:57
Vehicle 110	3:59:29 PM	1	3:59:29 PM	4:00:47 PM	0:00:00	0:01:18	0:01:18
Vehicle 111	4:05:26 PM	1	4:05:26 PM	4:06:38 PM	0:00:00	0:01:12	0:01:12
Vehicle 112	4:09:33 PM	1	4:09:33 PM	4:10:42 PM	0:00:00	0:01:09	0:01:09
Vehicle 113	4:14:35 PM	1	4:14:35 PM	4:14:43 PM	0:00:00	0:00:08	0:00:08
Vehicle 114	4:21:28 PM	1	4:21:28 PM	4:22:16 PM	0:00:00	0:00:48	0:00:48
Vehicle 115	4:22:09 PM	2	4:22:24 PM	4:23:04 PM	0:00:15	0:00:40	0:00:55
Vehicle 116	4:26:21 PM	1	4:26:21 PM	4:26:36 PM	0:00:00	0:00:15	0:00:15
Vehicle 117	4:26:26 PM	2	4:26:46 PM	4:27:21 PM	0:00:20	0:00:35	0:00:55
Vehicle 118	4:28:13 PM	1	4:28:13 PM	4:28:50 PM	0:00:00	0:00:37	0:00:37
Vehicle 119	4:29:03 PM	1	4:29:03 PM	4:29:22 PM	0:00:00	0:00:19	0:00:19
Vehicle 120	4:41:32 PM	1	4:41:32 PM	4:42:28 PM	0:00:00	0:00:56	0:00:56
Vehicle 121	4:42:57 PM	1	4:42:57 PM	4:44:08 PM	0:00:00	0:01:11	0:01:11
Vehicle 122	4:43:08 PM	2	4:44:21 PM	4:51:00 PM	0:01:13	0:06:39	0:07:52
Vehicle 123	4:49:22 PM	2	4:51:11 PM	4:52:00 PM	0:01:49	0:00:49	0:02:38
Vehicle 124	4:54:26 PM	1	4:54:26 PM	4:56:38 PM	0:00:00	0:02:12	0:02:12
Vehicle 125	4:58:51 PM	1	4:58:51 PM	4:59:02 PM	0:00:00	0:00:11	0:00:11
Vehicle 126	5:02:52 PM	1	5:02:52 PM	5:03:05 PM	0:00:00	0:00:13	0:00:13
Vehicle 127	5:07:26 PM	1	5:07:26 PM	5:07:35 PM	0:00:00	0:00:09	0:00:09
Vehicle 128	5:16:25 PM	1	5:16:25 PM	5:16:40 PM	0:00:00	0:00:15	0:00:15
Vehicle 129	5:19:13 PM	1	5:19:13 PM	5:20:33 PM	0:00:00	0:01:20	0:01:20
Vehicle 130	5:21:12 PM	1	5:21:12 PM	5:21:30 PM	0:00:00	0:00:18	0:00:18
Vehicle 131	5:22:21 PM	1	5:22:21 PM	5:23:10 PM	0:00:00	0:00:49	0:00:49
Vehicle 132	5:24:26 PM	1	5:24:26 PM	5:25:34 PM	0:00:00	0:01:08	0:01:08
Vehicle 133	5:28:24 PM	1	5:28:24 PM	5:28:32 PM	0:00:00	0:00:08	0:00:08
Vehicle 134	5:28:55 PM	1	5:28:55 PM	5:29:34 PM	0:00:00	0:00:39	0:00:39
Vehicle 135	5:28:55 PM	2	5:29:40 PM	5:30:35 PM	0:00:45	0:00:55	0:01:40
Vehicle 136	5:29:40 PM	2	5:30:45 PM	5:31:49 PM	0:01:05	0:01:04	0:02:09
Vehicle 137	5:33:50 PM	1	5:33:50 PM	5:34:23 PM	0:00:00	0:00:33	0:00:33
Vehicle 138	5:33:50 PM	2	5:34:30 PM	5:36:27 PM	0:00:40	0:01:57	0:02:37
Vehicle 139	5:36:43 PM	1	5:36:43 PM	5:37:16 PM	0:00:00	0:00:33	0:00:33
Vehicle 140	5:37:40 PM	1	5:37:40 PM	5:38:08 PM	0:00:00	0:00:28	0:00:28
Vehicle 141	5:42:43 PM	1	5:42:43 PM	5:44:16 PM	0:00:00	0:01:33	0:01:33
Vehicle 142	5:46:15 PM	1	5:46:15 PM	5:46:42 PM	0:00:00	0:00:27	0:00:27
Vehicle 143	5:48:00 PM	1	5:48:00 PM	5:49:45 PM	0:00:00	0:01:45	0:01:45
Vehicle 144	5:51:05 PM	1	5:51:05 PM	5:51:32 PM	0:00:00	0:00:27	0:00:27
Vehicle 145	5:55:34 PM	1	5:55:34 PM	5:56:13 PM	0:00:00	0:00:39	0:00:39
Vehicle 146	6:01:23 PM	1	6:01:23 PM	6:02:23 PM	0:00:00	0:01:00	0:01:00

Vehicle 147	6:07:13 PM	1	6:07:13 PM	6:07:28 PM	0:00:00	0:00:15	0:00:15
Vehicle 148	6:20:04 PM	1	6:20:04 PM	6:21:29 PM	0:00:00	0:01:25	0:01:25
Vehicle 149	6:20:57 PM	2	6:21:39 PM	6:22:39 PM	0:00:42	0:01:00	0:01:42
Vehicle 150	6:21:26 PM	3	6:22:47 PM	6:23:22 PM	0:01:21	0:00:35	0:01:56
Vehicle 151	6:22:19 PM	3	6:23:32 PM	6:24:38 PM	0:01:13	0:01:06	0:02:19
Vehicle 152	6:22:55 PM	3	6:24:49 PM	6:25:43 PM	0:01:54	0:00:54	0:02:48
Vehicle 153	6:23:43 PM	3	6:25:51 PM	6:26:40 PM	0:02:08	0:00:49	0:02:57
Vehicle 154	6:28:27 PM	1	6:28:27 PM	6:28:37 PM	0:00:00	0:00:10	0:00:10
Vehicle 155	6:29:03 PM	1	6:29:03 PM	6:30:21 PM	0:00:00	0:01:18	0:01:18
Vehicle 156	6:29:47 PM	2	6:30:28 PM	6:31:27 PM	0:00:41	0:00:59	0:01:40
Vehicle 157	6:29:54 PM	4	6:31:42 PM	6:31:54 PM	0:01:48	0:00:12	0:02:00
Vehicle 158	6:31:44 PM	2	6:32:05 PM	6:32:26 PM	0:00:21	0:00:21	0:00:42
Vehicle 159	6:31:51 PM	3	6:32:34 PM	6:32:45 PM	0:00:43	0:00:11	0:00:54
Vehicle 160	6:34:46 PM	1	6:34:46 PM	6:35:28 PM	0:00:00	0:00:42	0:00:42
Vehicle 161	6:36:56 PM	1	6:36:56 PM	6:37:12 PM	0:00:00	0:00:16	0:00:16
Vehicle 162	6:39:38 PM	1	6:39:38 PM	6:39:57 PM	0:00:00	0:00:19	0:00:19
Vehicle 163	6:39:44 PM	2	6:40:08 PM	6:41:15 PM	0:00:24	0:01:07	0:01:31
Vehicle 164	6:39:54 PM	3	6:41:23 PM	6:42:10 PM	0:01:29	0:00:47	0:02:16
Vehicle 165	6:45:53 PM	1	6:45:53 PM	6:45:59 PM	0:00:00	0:00:06	0:00:06
Vehicle 166	6:46:50 PM	1	6:46:50 PM	6:48:24 PM	0:00:00	0:01:34	0:01:34
Vehicle 167	6:47:06 PM	2	6:48:34 PM	6:49:37 PM	0:01:28	0:01:03	0:02:31
Vehicle 168	6:47:53 PM	3	6:49:46 PM	6:51:00 PM	0:01:53	0:01:14	0:03:07
Vehicle 169	6:48:06 PM	4	6:51:10 PM	6:51:30 PM	0:03:04	0:00:20	0:03:24
Vehicle 170	6:49:57 PM	3	6:51:40 PM	6:51:47 PM	0:01:43	0:00:07	0:01:50
Vehicle 171	6:50:16 PM	4	6:51:54 PM	6:52:13 PM	0:01:38	0:00:19	0:01:57
Vehicle 172	6:50:21 PM	5	6:52:22 PM	6:53:45 PM	0:02:01	0:01:23	0:03:24
Vehicle 173	6:54:04 PM	1	6:54:04 PM	6:54:33 PM	0:00:00	0:00:29	0:00:29
Vehicle 174	6:54:32 PM	2	6:54:40 PM	6:54:48 PM	0:00:08	0:00:08	0:00:16
Vehicle 175	6:54:38 PM	2	6:54:55 PM	6:56:01 PM	0:00:17	0:01:06	0:01:23
Vehicle 176	6:54:38 PM	3	6:56:06 PM	6:57:00 PM	0:01:28	0:00:54	0:02:22
Vehicle 177	6:56:05 PM	2	6:57:08 PM	6:58:36 PM	0:01:03	0:01:28	0:02:31
Vehicle 178	6:56:16 PM	3	6:58:46 PM	7:01:45 PM	0:02:30	0:02:59	0:05:29
Vehicle 179	7:01:26 PM	2	7:01:51 PM	7:02:26 PM	0:00:25	0:00:35	0:01:00
Vehicle 180	7:01:36 PM	3	7:02:33 PM	7:07:50 PM	0:00:57	0:05:17	0:06:14
Vehicle 181	7:03:05 PM	2	7:08:02 PM	7:08:52 PM	0:04:57	0:00:50	0:05:47
Vehicle 182	7:07:58 PM	2	7:09:04 PM	7:10:13 PM	0:01:06	0:01:09	0:02:15
Vehicle 183	7:09:09 PM	2	7:10:22 PM	7:11:56 PM	0:01:13	0:01:34	0:02:47
Vehicle 184	7:11:46 PM	2	7:12:01 PM	7:12:51 PM	0:00:15	0:00:50	0:01:05
Vehicle 185	7:11:53 PM	3	7:13:00 PM	7:13:30 PM	0:01:07	0:00:30	0:01:37
Vehicle 186	7:14:08 PM	1	7:14:08 PM	7:14:29 PM	0:00:00	0:00:21	0:00:21
Vehicle 187	7:15:00 PM	1	7:15:00 PM	7:15:17 PM	0:00:00	0:00:17	0:00:17
Vehicle 188	7:17:04 PM	1	7:17:04 PM	7:17:14 PM	0:00:00	0:00:10	0:00:10
Vehicle 189	7:18:11 PM	1	7:18:11 PM	7:18:45 PM	0:00:00	0:00:34	0:00:34
Vehicle 190	7:20:46 PM	1	7:20:46 PM	7:20:55 PM	0:00:00	0:00:09	0:00:09
Vehicle 191	7:22:28 PM	1	7:22:28 PM	7:22:53 PM	0:00:00	0:00:25	0:00:25
Vehicle 192	7:22:50 PM	2	7:23:02 PM	7:23:58 PM	0:00:12	0:00:56	0:01:08
Vehicle 193	7:23:14 PM	2	7:24:08 PM	7:25:00 PM	0:00:54	0:00:52	0:01:46
Vehicle 194	7:28:19 PM	1	7:28:19 PM	7:32:00 PM	0:00:00	0:03:41	0:03:41
Vehicle 195	7:28:42 PM	2	7:32:12 PM	7:33:13 PM	0:03:30	0:01:01	0:04:31
Vehicle 196	7:29:16 PM	3	7:33:24 PM	7:34:22 PM	0:04:08	0:00:58	0:05:06
Vehicle 197	7:29:16 PM	4	7:34:33 PM	7:35:20 PM	0:05:17	0:00:47	0:06:04
Vehicle 198	7:35:38 PM	1	7:35:38 PM	7:36:26 PM	0:00:00	0:00:48	0:00:48
Vehicle 199	7:36:55 PM	1	7:36:55 PM	7:37:19 PM	0:00:00	0:00:24	0:00:24
Vehicle 200	7:38:58 PM	1	7:38:58 PM	7:39:11 PM	0:00:00	0:00:13	0:00:13
Vehicle 201	7:43:39 PM	1	7:43:39 PM	7:43:58 PM	0:00:00	0:00:19	0:00:19
Vehicle 202	7:46:41 PM	1	7:46:41 PM	7:48:57 PM	0:00:00	0:02:16	0:02:16
Vehicle 203	7:54:12 PM	1	7:54:12 PM	7:54:24 PM	0:00:00	0:00:12	0:00:12
Vehicle 204	8:01:27 PM	1	8:01:27 PM	8:02:58 PM	0:00:00	0:01:31	0:01:31
Vehicle 205	8:02:12 PM	1	8:02:12 PM	8:02:28 PM	0:00:00	0:00:16	0:00:16
Vehicle 206	8:06:47 PM	1	8:06:47 PM	8:07:11 PM	0:00:00	0:00:24	0:00:24
Vehicle 207	8:07:52 PM	1	8:07:52 PM	8:08:13 PM	0:00:00	0:00:21	0:00:21
Vehicle 208	8:08:39 PM	1	8:08:39 PM	8:09:26 PM	0:00:00	0:00:47	0:00:47
Vehicle 209	8:11:04 PM	1	8:11:04 PM	8:11:29 PM	0:00:00	0:00:25	0:00:25
Vehicle 210	8:16:45 PM	1	8:16:45 PM	8:17:01 PM	0:00:00	0:00:16	0:00:16
Vehicle 211	8:18:46 PM	1	8:18:46 PM	8:19:04 PM	0:00:00	0:00:18	0:00:18
Vehicle 212	8:20:39 PM	1	8:20:39 PM	8:21:48 PM	0:00:00	0:01:09	0:01:09
Vehicle 213	8:22:47 PM	1	8:22:47 PM	8:23:13 PM	0:00:00	0:00:26	0:00:26
Vehicle 214	8:28:19 PM	1	8:28:19 PM	8:28:34 PM	0:00:00	0:00:15	0:00:15
Vehicle 215	8:32:37 PM	1	8:32:37 PM	8:32:59 PM	0:00:00	0:00:22	0:00:22
Vehicle 216	8:37:00 PM	1	8:37:00 PM	8:38:33 PM	0:00:00	0:01:33	0:01:33
Vehicle 217	8:38:46 PM	1	8:38:46 PM	8:39:40 PM	0:00:00	0:00:54	0:00:54
Vehicle 218	8:42:10 PM	1	8:42:10 PM	8:42:20 PM	0:00:00	0:00:10	0:00:10
Vehicle 219	8:42:43 PM	1	8:42:43 PM	8:43:00 PM	0:00:00	0:00:17	0:00:17
Vehicle 220	8:45:19 PM	1	8:45:19 PM	8:45:32 PM	0:00:00	0:00:13	0:00:13
Vehicle 221	8:49:30 PM	1	8:49:30 PM	8:49:45 PM	0:00:00	0:00:15	0:00:15

Vehicle 222	8:52:08 PM	1	8:52:08 PM	8:52:29 PM	0:00:00	0:00:21	0:00:21
Vehicle 223	9:01:15 PM	1	9:01:15 PM	9:01:19 PM	0:00:00	0:00:04	0:00:04
Vehicle 224	9:04:09 PM	1	9:04:09 PM	9:04:24 PM	0:00:00	0:00:15	0:00:15
Vehicle 225	9:10:00 PM	1	9:10:00 PM	9:10:21 PM	0:00:00	0:00:21	0:00:21
Vehicle 226	9:10:08 PM	1	9:10:28 PM	9:10:44 PM	0:00:20	0:00:16	0:00:36
Vehicle 227	9:10:56 PM	1	9:10:56 PM	9:11:22 PM	0:00:00	0:00:26	0:00:26
Vehicle 228	9:29:16 PM	1	9:29:16 PM	9:29:26 PM	0:00:00	0:00:10	0:00:10
Vehicle 229	9:34:18 PM	1	9:34:18 PM	9:34:50 PM	0:00:00	0:00:32	0:00:32

1773 Washington Street, Hanover, MA 02339							
Saturday, July 16, 2022							
Restaurant Location:							
Data Collection Date:							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:46:22 AM	1	10:46:22 AM	10:49:33 AM	0:00:00	0:03:11	0:03:11
Vehicle 2	10:53:56 AM	1	10:53:56 AM	10:54:08 AM	0:00:00	0:00:12	0:00:12
Vehicle 3	11:01:55 AM	1	11:01:55 AM	11:02:04 AM	0:00:00	0:00:09	0:00:09
Vehicle 4	11:11:27 AM	1	11:11:27 AM	11:11:39 AM	0:00:00	0:00:12	0:00:12
Vehicle 5	11:19:37 AM	1	11:19:37 AM	11:19:43 AM	0:00:00	0:00:06	0:00:06
Vehicle 6	11:40:31 AM	1	11:40:31 AM	11:41:00 AM	0:00:00	0:00:29	0:00:29
Vehicle 7	11:48:17 AM	1	11:48:17 AM	11:48:24 AM	0:00:00	0:00:07	0:00:07
Vehicle 8	11:57:23 AM	1	11:57:23 AM	11:58:22 AM	0:00:00	0:00:59	0:00:59
Vehicle 9	12:00:45 PM	1	12:00:45 PM	12:00:52 PM	0:00:00	0:00:07	0:00:07
Vehicle 10	12:01:46 PM	1	12:01:46 PM	12:01:54 PM	0:00:00	0:00:08	0:00:08
Vehicle 11	12:14:34 PM	1	12:14:34 PM	12:15:34 PM	0:00:00	0:01:00	0:01:00
Vehicle 12	12:14:41 PM	2	12:15:45 PM	12:15:54 PM	0:01:04	0:00:09	0:01:13
Vehicle 13	12:15:02 PM	3	12:16:04 PM	12:16:15 PM	0:01:02	0:00:11	0:01:13
Vehicle 14	12:19:04 PM	1	12:19:04 PM	12:19:51 PM	0:00:00	0:00:47	0:00:47
Vehicle 15	12:26:54 PM	1	12:26:54 PM	12:27:14 PM	0:00:00	0:00:20	0:00:20
Vehicle 16	12:27:04 PM	2	12:27:23 PM	12:28:14 PM	0:00:19	0:00:51	0:01:10
Vehicle 17	12:27:13 PM	3	12:28:22 PM	12:28:55 PM	0:01:09	0:00:33	0:01:42
Vehicle 18	12:28:03 PM	3	12:29:04 PM	12:29:14 PM	0:01:01	0:00:10	0:01:11
Vehicle 19	12:29:29 PM	1	12:29:29 PM	12:29:46 PM	0:00:00	0:00:17	0:00:17
Vehicle 20	12:29:37 PM	2	12:29:57 PM	12:30:07 PM	0:00:20	0:00:10	0:00:30
Vehicle 21	12:30:27 PM	1	12:30:27 PM	12:32:14 PM	0:00:00	0:01:47	0:01:47
Vehicle 22	12:36:41 PM	1	12:36:41 PM	12:37:54 PM	0:00:00	0:01:13	0:01:13
Vehicle 23	12:38:46 PM	1	12:38:46 PM	12:39:24 PM	0:00:00	0:00:38	0:00:38
Vehicle 24	12:38:52 PM	2	12:39:33 PM	12:42:00 PM	0:00:41	0:02:27	0:03:08
Vehicle 25	12:39:04 PM	3	12:42:10 PM	12:42:32 PM	0:03:06	0:00:22	0:03:28
Vehicle 26	12:39:26 PM	3	12:42:39 PM	12:44:09 PM	0:03:13	0:01:30	0:04:43
Vehicle 27	12:43:34 PM	2	12:44:16 PM	12:44:47 PM	0:00:42	0:00:31	0:01:13
Vehicle 28	12:46:21 PM	1	12:46:21 PM	12:48:20 PM	0:00:00	0:01:59	0:01:59
Vehicle 29	12:48:43 PM	1	12:48:43 PM	12:49:03 PM	0:00:00	0:00:20	0:00:20
Vehicle 30	12:57:02 PM	1	12:57:02 PM	12:57:33 PM	0:00:00	0:00:31	0:00:31
Vehicle 31	1:03:05 PM	1	1:03:05 PM	1:03:30 PM	0:00:00	0:00:25	0:00:25
Vehicle 32	1:04:41 PM	1	1:04:41 PM	1:05:18 PM	0:00:00	0:00:37	0:00:37
Vehicle 33	1:05:05 PM	2	1:05:27 PM	1:05:54 PM	0:00:22	0:00:27	0:00:49
Vehicle 34	1:08:07 PM	1	1:08:07 PM	1:08:25 PM	0:00:00	0:00:18	0:00:18
Vehicle 35	1:09:40 PM	1	1:09:40 PM	1:10:11 PM	0:00:00	0:00:31	0:00:31
Vehicle 36	1:17:36 PM	1	1:17:36 PM	1:18:27 PM	0:00:00	0:00:51	0:00:51
Vehicle 37	1:18:20 PM	2	1:18:39 PM	1:18:50 PM	0:00:19	0:00:11	0:00:30
Vehicle 38	1:19:28 PM	1	1:19:28 PM	1:19:58 PM	0:00:00	0:00:30	0:00:30
Vehicle 39	1:19:44 PM	2	1:20:10 PM	1:21:35 PM	0:00:26	0:01:25	0:01:51
Vehicle 40	1:23:56 PM	1	1:23:56 PM	1:24:29 PM	0:00:00	0:00:33	0:00:33
Vehicle 41	1:25:51 PM	1	1:25:51 PM	1:26:45 PM	0:00:00	0:00:54	0:00:54
Vehicle 42	1:29:09 PM	1	1:29:09 PM	1:29:22 PM	0:00:00	0:00:13	0:00:13
Vehicle 43	1:29:17 PM	2	1:29:34 PM	1:29:39 PM	0:00:17	0:00:05	0:00:22
Vehicle 44	1:29:44 PM	1	1:29:44 PM	1:30:09 PM	0:00:00	0:00:25	0:00:25
Vehicle 45	1:32:52 PM	1	1:32:52 PM	1:33:04 PM	0:00:00	0:00:12	0:00:12
Vehicle 46	1:33:53 PM	1	1:33:53 PM	1:34:20 PM	0:00:00	0:00:27	0:00:27
Vehicle 47	1:35:06 PM	1	1:35:06 PM	1:35:13 PM	0:00:00	0:00:07	0:00:07
Vehicle 48	1:44:47 PM	1	1:44:47 PM	1:46:23 PM	0:00:00	0:01:36	0:01:36
Vehicle 49	1:49:11 PM	1	1:49:11 PM	1:50:21 PM	0:00:00	0:01:10	0:01:10
Vehicle 50	1:52:23 PM	1	1:52:23 PM	1:53:04 PM	0:00:00	0:00:41	0:00:41
Vehicle 51	1:53:19 PM	1	1:53:19 PM	1:53:40 PM	0:00:00	0:00:21	0:00:21
Vehicle 52	1:56:35 PM	1	1:56:35 PM	1:57:30 PM	0:00:00	0:00:55	0:00:55
Vehicle 53	1:56:35 PM	2	1:57:42 PM	1:58:28 PM	0:01:07	0:00:46	0:01:53
Vehicle 54	1:59:27 PM	1	1:59:27 PM	2:00:08 PM	0:00:00	0:00:41	0:00:41
Vehicle 55	2:01:05 PM	1	2:01:05 PM	2:01:25 PM	0:00:00	0:00:20	0:00:20
Vehicle 56	2:01:50 PM	1	2:01:50 PM	2:02:04 PM	0:00:00	0:00:14	0:00:14
Vehicle 57	2:06:48 PM	1	2:06:48 PM	2:07:23 PM	0:00:00	0:00:35	0:00:35
Vehicle 58	2:10:21 PM	1	2:10:21 PM	2:10:42 PM	0:00:00	0:00:21	0:00:21
Vehicle 59	2:25:35 PM	1	2:25:35 PM	2:27:52 PM	0:00:00	0:02:17	0:02:17
Vehicle 60	2:33:08 PM	1	2:33:08 PM	2:33:23 PM	0:00:00	0:00:15	0:00:15
Vehicle 61	2:33:15 PM	2	2:33:30 PM	2:33:43 PM	0:00:15	0:00:13	0:00:28
Vehicle 62	2:40:19 PM	1	2:40:19 PM	2:40:47 PM	0:00:00	0:00:28	0:00:28
Vehicle 63	2:43:01 PM	1	2:43:01 PM	2:43:51 PM	0:00:00	0:00:50	0:00:50
Vehicle 64	2:43:55 PM	1	2:43:55 PM	2:45:41 PM	0:00:00	0:01:46	0:01:46
Vehicle 65	2:44:10 PM	1	2:45:46 PM	2:46:24 PM	0:01:36	0:00:38	0:02:14
Vehicle 66	2:49:19 PM	1	2:49:19 PM	2:51:21 PM	0:00:00	0:02:02	0:02:02
Vehicle 67	2:55:30 PM	1	2:55:30 PM	2:56:17 PM	0:00:00	0:00:47	0:00:47
Vehicle 68	2:59:43 PM	1	2:59:43 PM	3:01:01 PM	0:00:00	0:01:18	0:01:18
Vehicle 69	3:00:00 PM	2	3:01:11 PM	3:01:55 PM	0:01:11	0:00:44	0:01:55
Vehicle 70	3:00:58 PM	3	3:02:05 PM	3:02:44 PM	0:01:07	0:00:39	0:01:46
Vehicle 71	3:04:32 PM	1	3:04:32 PM	3:04:42 PM	0:00:00	0:00:10	0:00:10

Vehicle 72	3:05:00 PM	1	3:05:00 PM	3:05:20 PM	0:00:00	0:00:20	0:00:20
Vehicle 73	3:08:06 PM	1	3:08:06 PM	3:08:15 PM	0:00:00	0:00:09	0:00:09
Vehicle 74	3:08:06 PM	2	3:08:22 PM	3:08:39 PM	0:00:16	0:00:17	0:00:33
Vehicle 75	3:08:50 PM	1	3:08:50 PM	3:09:09 PM	0:00:00	0:00:19	0:00:19
Vehicle 76	3:10:59 PM	1	3:10:59 PM	3:11:07 PM	0:00:00	0:00:08	0:00:08
Vehicle 77	3:15:07 PM	1	3:15:07 PM	3:16:06 PM	0:00:00	0:00:59	0:00:59
Vehicle 78	3:15:17 PM	2	3:16:17 PM	3:16:34 PM	0:01:00	0:00:17	0:01:17
Vehicle 79	3:18:19 PM	1	3:18:19 PM	3:18:52 PM	0:00:00	0:00:33	0:00:33
Vehicle 80	3:19:33 PM	1	3:19:33 PM	3:21:35 PM	0:00:00	0:02:02	0:02:02
Vehicle 81	3:21:22 PM	2	3:21:43 PM	3:22:32 PM	0:00:21	0:00:49	0:01:10
Vehicle 82	3:27:30 PM	1	3:27:30 PM	3:28:02 PM	0:00:00	0:00:32	0:00:32
Vehicle 83	3:31:37 PM	1	3:31:37 PM	3:32:01 PM	0:00:00	0:00:24	0:00:24
Vehicle 84	3:38:08 PM	1	3:38:08 PM	3:39:06 PM	0:00:00	0:00:58	0:00:58
Vehicle 85	3:38:40 PM	2	3:39:14 PM	3:40:01 PM	0:00:34	0:00:47	0:01:21
Vehicle 86	3:43:27 PM	1	3:43:27 PM	3:43:57 PM	0:00:00	0:00:30	0:00:30
Vehicle 87	4:00:09 PM	1	4:00:09 PM	4:00:27 PM	0:00:00	0:00:18	0:00:18
Vehicle 88	4:00:09 PM	2	4:00:34 PM	4:00:58 PM	0:00:25	0:00:24	0:00:49
Vehicle 89	4:01:52 PM	1	4:01:52 PM	4:02:15 PM	0:00:00	0:00:23	0:00:23
Vehicle 90	4:05:43 PM	1	4:05:43 PM	4:06:01 PM	0:00:00	0:00:18	0:00:18
Vehicle 91	4:06:10 PM	1	4:06:10 PM	4:07:51 PM	0:00:00	0:01:41	0:01:41
Vehicle 92	4:10:41 PM	1	4:10:41 PM	4:11:18 PM	0:00:00	0:00:37	0:00:37
Vehicle 93	4:12:01 PM	1	4:12:01 PM	4:12:25 PM	0:00:00	0:00:24	0:00:24
Vehicle 94	4:12:06 PM	2	4:12:31 PM	4:12:54 PM	0:00:25	0:00:23	0:00:48
Vehicle 95	4:19:56 PM	1	4:19:56 PM	4:20:13 PM	0:00:00	0:00:17	0:00:17
Vehicle 96	4:21:08 PM	1	4:21:08 PM	4:21:52 PM	0:00:00	0:00:44	0:00:44
Vehicle 97	4:25:18 PM	1	4:25:18 PM	4:25:30 PM	0:00:00	0:00:12	0:00:12
Vehicle 98	4:29:15 PM	1	4:29:15 PM	4:29:24 PM	0:00:00	0:00:09	0:00:09
Vehicle 99	4:41:08 PM	1	4:41:08 PM	4:41:20 PM	0:00:00	0:00:12	0:00:12
Vehicle 100	4:41:40 PM	1	4:41:40 PM	4:46:25 PM	0:00:00	0:04:45	0:04:45
Vehicle 101	4:43:15 PM	2	4:46:34 PM	4:47:02 PM	0:03:19	0:00:28	0:03:47
Vehicle 102	4:51:32 PM	1	4:51:32 PM	4:52:04 PM	0:00:00	0:00:32	0:00:32
Vehicle 103	4:52:29 PM	1	4:52:29 PM	4:53:18 PM	0:00:00	0:00:49	0:00:49
Vehicle 104	4:57:57 PM	1	4:57:57 PM	4:58:06 PM	0:00:00	0:00:09	0:00:09
Vehicle 105	4:59:25 PM	1	4:59:25 PM	5:04:19 PM	0:00:00	0:04:54	0:04:54
Vehicle 106	5:00:33 PM	2	5:04:28 PM	5:04:37 PM	0:03:55	0:00:09	0:04:04
Vehicle 107	5:01:19 PM	3	5:04:42 PM	5:04:57 PM	0:03:23	0:00:15	0:03:38
Vehicle 108	5:06:24 PM	1	5:06:24 PM	5:06:44 PM	0:00:00	0:00:20	0:00:20
Vehicle 109	5:06:43 PM	2	5:06:53 PM	5:07:07 PM	0:00:10	0:00:14	0:00:24
Vehicle 110	5:10:53 PM	1	5:10:53 PM	5:11:25 PM	0:00:00	0:00:32	0:00:32
Vehicle 111	5:11:08 PM	2	5:11:36 PM	5:11:59 PM	0:00:28	0:00:23	0:00:51
Vehicle 112	5:21:24 PM	1	5:21:24 PM	5:21:43 PM	0:00:00	0:00:19	0:00:19
Vehicle 113	5:21:40 PM	2	5:21:53 PM	5:22:37 PM	0:00:13	0:00:44	0:00:57
Vehicle 114	5:25:49 PM	1	5:25:49 PM	5:26:29 PM	0:00:00	0:00:40	0:00:40
Vehicle 115	5:26:05 PM	2	5:26:34 PM	5:26:47 PM	0:00:29	0:00:13	0:00:42
Vehicle 116	5:27:01 PM	1	5:27:01 PM	5:27:20 PM	0:00:00	0:00:19	0:00:19
Vehicle 117	5:31:28 PM	1	5:31:28 PM	5:31:45 PM	0:00:00	0:00:17	0:00:17
Vehicle 118	5:42:37 PM	1	5:42:37 PM	5:42:48 PM	0:00:00	0:00:11	0:00:11
Vehicle 119	5:43:21 PM	1	5:43:21 PM	5:43:39 PM	0:00:00	0:00:18	0:00:18
Vehicle 120	5:44:16 PM	1	5:44:16 PM	5:45:32 PM	0:00:00	0:01:16	0:01:16
Vehicle 121	6:07:12 PM	1	6:07:12 PM	6:07:24 PM	0:00:00	0:00:12	0:00:12
Vehicle 122	6:10:26 PM	1	6:10:26 PM	6:11:23 PM	0:00:00	0:00:57	0:00:57
Vehicle 123	6:10:37 PM	2	6:11:33 PM	6:11:40 PM	0:00:56	0:00:07	0:01:03
Vehicle 124	6:13:11 PM	1	6:13:11 PM	6:14:21 PM	0:00:00	0:01:10	0:01:10
Vehicle 125	6:15:45 PM	1	6:15:45 PM	6:16:08 PM	0:00:00	0:00:23	0:00:23
Vehicle 126	6:16:57 PM	1	6:16:57 PM	6:17:20 PM	0:00:00	0:00:23	0:00:23
Vehicle 127	6:22:25 PM	1	6:22:25 PM	6:22:49 PM	0:00:00	0:00:24	0:00:24
Vehicle 128	6:23:17 PM	1	6:23:17 PM	6:24:22 PM	0:00:00	0:01:05	0:01:05
Vehicle 129	6:23:45 PM	2	6:24:35 PM	6:24:58 PM	0:00:50	0:00:23	0:01:13
Vehicle 130	6:28:17 PM	1	6:28:17 PM	6:28:58 PM	0:00:00	0:00:41	0:00:41
Vehicle 131	6:28:55 PM	2	6:29:07 PM	6:29:34 PM	0:00:12	0:00:27	0:00:39
Vehicle 132	6:36:21 PM	1	6:36:21 PM	6:36:35 PM	0:00:00	0:00:14	0:00:14
Vehicle 133	6:39:37 PM	1	6:39:37 PM	6:40:12 PM	0:00:00	0:00:35	0:00:35
Vehicle 134	6:40:33 PM	1	6:40:33 PM	6:41:43 PM	0:00:00	0:01:10	0:01:10
Vehicle 135	6:42:15 PM	1	6:42:15 PM	6:42:56 PM	0:00:00	0:00:41	0:00:41
Vehicle 136	6:43:55 PM	1	6:43:55 PM	6:45:39 PM	0:00:00	0:01:44	0:01:44
Vehicle 137	6:48:46 PM	1	6:48:46 PM	6:49:02 PM	0:00:00	0:00:16	0:00:16
Vehicle 138	6:49:30 PM	1	6:49:30 PM	6:49:47 PM	0:00:00	0:00:17	0:00:17
Vehicle 139	6:51:01 PM	1	6:51:01 PM	6:51:30 PM	0:00:00	0:00:29	0:00:29
Vehicle 140	7:11:14 PM	1	7:11:14 PM	7:11:41 PM	0:00:00	0:00:27	0:00:27
Vehicle 141	7:12:58 PM	1	7:12:58 PM	7:13:16 PM	0:00:00	0:00:18	0:00:18
Vehicle 142	7:15:20 PM	1	7:15:20 PM	7:15:34 PM	0:00:00	0:00:14	0:00:14
Vehicle 143	7:20:25 PM	1	7:20:25 PM	7:20:38 PM	0:00:00	0:00:13	0:00:13
Vehicle 144	7:33:15 PM	1	7:33:15 PM	7:34:15 PM	0:00:00	0:01:00	0:01:00
Vehicle 145	7:34:12 PM	2	7:34:24 PM	7:34:52 PM	0:00:12	0:00:28	0:00:40
Vehicle 146	7:37:40 PM	1	7:37:40 PM	7:38:08 PM	0:00:00	0:00:28	0:00:28

Vehicle 147	7:38:05 PM	2	7:38:18 PM	7:43:15 PM	0:00:13	0:04:57	0:05:10
Vehicle 148	7:41:34 PM	2	7:43:22 PM	7:43:51 PM	0:01:48	0:00:29	0:02:17
Vehicle 149	7:44:40 PM	1	7:44:40 PM	7:44:59 PM	0:00:00	0:00:19	0:00:19
Vehicle 150	7:44:49 PM	2	7:45:06 PM	7:45:38 PM	0:00:17	0:00:32	0:00:49
Vehicle 151	7:51:15 PM	1	7:51:15 PM	7:51:59 PM	0:00:00	0:00:44	0:00:44
Vehicle 152	7:54:24 PM	1	7:54:24 PM	7:54:36 PM	0:00:00	0:00:12	0:00:12
Vehicle 153	7:56:38 PM	1	7:56:38 PM	7:57:16 PM	0:00:00	0:00:38	0:00:38
Vehicle 154	7:56:53 PM	2	7:57:26 PM	7:57:41 PM	0:00:33	0:00:15	0:00:48
Vehicle 155	7:57:36 PM	2	7:57:50 PM	7:58:23 PM	0:00:14	0:00:33	0:00:47
Vehicle 156	8:03:30 PM	1	8:03:30 PM	8:03:45 PM	0:00:00	0:00:15	0:00:15
Vehicle 157	8:06:26 PM	1	8:06:26 PM	8:06:42 PM	0:00:00	0:00:16	0:00:16
Vehicle 158	8:10:25 PM	1	8:10:25 PM	8:11:11 PM	0:00:00	0:00:46	0:00:46
Vehicle 159	8:14:00 PM	1	8:14:00 PM	8:14:13 PM	0:00:00	0:00:13	0:00:13
Vehicle 160	8:15:24 PM	1	8:15:24 PM	8:15:42 PM	0:00:00	0:00:18	0:00:18
Vehicle 161	8:22:04 PM	1	8:22:04 PM	8:22:52 PM	0:00:00	0:00:48	0:00:48
Vehicle 162	8:26:05 PM	1	8:26:05 PM	8:26:24 PM	0:00:00	0:00:19	0:00:19
Vehicle 163	8:32:07 PM	1	8:32:07 PM	8:32:23 PM	0:00:00	0:00:16	0:00:16
Vehicle 164	8:37:31 PM	1	8:37:31 PM	8:38:02 PM	0:00:00	0:00:31	0:00:31
Vehicle 165	8:42:34 PM	1	8:42:34 PM	8:45:36 PM	0:00:00	0:03:02	0:03:02
Vehicle 166	8:46:51 PM	1	8:46:51 PM	8:49:24 PM	0:00:00	0:02:33	0:02:33
Vehicle 167	8:50:13 PM	1	8:50:13 PM	8:50:42 PM	0:00:00	0:00:29	0:00:29
Vehicle 168	8:52:01 PM	1	8:52:01 PM	8:52:52 PM	0:00:00	0:00:51	0:00:51
Vehicle 169	8:54:09 PM	1	8:54:09 PM	8:56:15 PM	0:00:00	0:02:06	0:02:06
Vehicle 170	8:55:36 PM	2	8:56:26 PM	8:56:42 PM	0:00:50	0:00:16	0:01:06
Vehicle 171	8:57:35 PM	1	8:57:35 PM	8:57:53 PM	0:00:00	0:00:18	0:00:18
Vehicle 172	9:01:16 PM	1	9:01:16 PM	9:04:53 PM	0:00:00	0:03:37	0:03:37
Vehicle 173	9:01:43 PM	2	9:05:05 PM	9:08:25 PM	0:03:22	0:03:20	0:06:42
Vehicle 174	9:22:49 PM	1	9:22:49 PM	9:23:06 PM	0:00:00	0:00:17	0:00:17
Vehicle 175	9:27:40 PM	1	9:27:40 PM	9:34:06 PM	0:00:00	0:06:26	0:06:26
Vehicle 176	9:33:50 PM	2	9:34:11 PM	9:35:40 PM	0:00:21	0:01:29	0:01:50
Vehicle 177	9:45:28 PM	1	9:45:28 PM	9:50:02 PM	0:00:00	0:04:34	0:04:34

APPENDIX D
NORWICH, CT CHIPOTLANE DATA

30 Salem Turnpike, Norwich, CT 06360							
Wednesday, July 13, 2022							
Restaurant Location:	30 Salem Turnpike, Norwich, CT 06360						
Data Collection Date:	Wednesday, July 13, 2022						
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	11:03:10 AM	1	11:03:10 AM	11:04:26 AM	0:00:00	0:01:16	0:01:16
Vehicle 2	11:19:50 AM	1	11:19:50 AM	11:19:59 AM	0:00:00	0:00:09	0:00:09
Vehicle 3	11:44:45 AM	1	11:44:45 AM	11:50:26 AM	0:00:00	0:05:41	0:05:41
Vehicle 4	11:48:03 AM	2	11:50:30 AM	11:55:50 AM	0:02:27	0:05:20	0:07:47
Vehicle 5	11:52:10 AM	2	11:55:55 AM	11:56:26 AM	0:03:45	0:00:31	0:04:16
Vehicle 6	12:01:43 PM	1	12:01:43 PM	12:04:01 PM	0:00:00	0:02:18	0:02:18
Vehicle 7	12:04:22 PM	1	12:04:22 PM	12:05:11 PM	0:00:00	0:00:49	0:00:49
Vehicle 8	12:06:07 PM	1	12:06:07 PM	12:06:35 PM	0:00:00	0:00:28	0:00:28
Vehicle 9	12:14:29 PM	1	12:14:29 PM	12:15:40 PM	0:00:00	0:01:11	0:01:11
Vehicle 10	12:16:24 PM	1	12:16:24 PM	12:16:49 PM	0:00:00	0:00:25	0:00:25
Vehicle 11	12:18:50 PM	1	12:18:50 PM	12:20:14 PM	0:00:00	0:01:24	0:01:24
Vehicle 12	12:26:32 PM	1	12:26:32 PM	12:32:43 PM	0:00:00	0:06:11	0:06:11
Vehicle 13	12:31:13 PM	2	12:32:45 PM	12:35:42 PM	0:01:32	0:02:57	0:04:29
Vehicle 14	12:32:47 PM	2	12:35:50 PM	12:36:07 PM	0:03:03	0:00:17	0:03:20
Vehicle 15	12:37:03 PM	1	12:37:03 PM	12:41:36 PM	0:00:00	0:04:33	0:04:33
Vehicle 16	12:49:27 PM	1	12:49:27 PM	12:51:16 PM	0:00:00	0:01:49	0:01:49
Vehicle 17	1:17:56 PM	1	1:17:56 PM	1:19:26 PM	0:00:00	0:01:30	0:01:30
Vehicle 18	1:35:14 PM	1	1:35:14 PM	1:35:42 PM	0:00:00	0:00:28	0:00:28
Vehicle 19	1:54:08 PM	1	1:54:08 PM	1:56:16 PM	0:00:00	0:02:08	0:02:08
Vehicle 20	1:58:46 PM	1	1:58:46 PM	1:59:27 PM	0:00:00	0:00:41	0:00:41
Vehicle 21	2:10:26 PM	1	2:10:26 PM	2:11:33 PM	0:00:00	0:01:07	0:01:07
Vehicle 22	2:23:55 PM	1	2:23:55 PM	2:25:13 PM	0:00:00	0:01:18	0:01:18
Vehicle 23	2:45:02 PM	1	2:45:02 PM	2:47:00 PM	0:00:00	0:01:58	0:01:58
Vehicle 24	2:47:16 PM	1	2:47:16 PM	2:47:54 PM	0:00:00	0:00:38	0:00:38
Vehicle 25	2:48:56 PM	1	2:48:56 PM	2:50:26 PM	0:00:00	0:01:30	0:01:30
Vehicle 26	2:50:59 PM	1	2:50:59 PM	2:51:43 PM	0:00:00	0:00:44	0:00:44
Vehicle 27	3:05:07 PM	1	3:05:07 PM	3:06:31 PM	0:00:00	0:01:24	0:01:24
Vehicle 28	3:05:59 PM	2	3:06:36 PM	3:07:11 PM	0:00:37	0:00:35	0:01:12
Vehicle 29	3:08:00 PM	1	3:08:00 PM	3:09:48 PM	0:00:00	0:01:48	0:01:48
Vehicle 30	3:14:18 PM	1	3:14:18 PM	3:17:35 PM	0:00:00	0:03:17	0:03:17
Vehicle 31	3:16:45 PM	2	3:17:46 PM	3:17:54 PM	0:01:01	0:00:08	0:01:09
Vehicle 32	3:19:43 PM	1	3:19:43 PM	3:22:04 PM	0:00:00	0:02:21	0:02:21
Vehicle 33	3:25:50 PM	1	3:25:50 PM	3:28:18 PM	0:00:00	0:02:28	0:02:28
Vehicle 34	4:04:32 PM	1	4:04:32 PM	4:07:06 PM	0:00:00	0:02:34	0:02:34
Vehicle 35	4:08:40 PM	1	4:08:40 PM	4:08:54 PM	0:00:00	0:00:14	0:00:14
Vehicle 36	4:11:42 PM	1	4:11:42 PM	4:12:14 PM	0:00:00	0:00:32	0:00:32
Vehicle 37	4:37:13 PM	1	4:37:13 PM	4:37:49 PM	0:00:00	0:00:36	0:00:36
Vehicle 38	4:38:20 PM	1	4:38:20 PM	4:39:06 PM	0:00:00	0:00:46	0:00:46
Vehicle 39	5:00:36 PM	1	5:00:36 PM	5:01:33 PM	0:00:00	0:00:57	0:00:57
Vehicle 40	5:18:25 PM	1	5:18:25 PM	5:18:50 PM	0:00:00	0:00:25	0:00:25
Vehicle 41	5:18:28 PM	2	5:18:58 PM	5:20:25 PM	0:00:30	0:01:27	0:01:57
Vehicle 42	5:22:41 PM	1	5:22:41 PM	5:23:01 PM	0:00:00	0:00:20	0:00:20
Vehicle 43	5:28:22 PM	1	5:28:22 PM	5:29:26 PM	0:00:00	0:01:04	0:01:04
Vehicle 44	5:30:06 PM	1	5:30:06 PM	5:31:01 PM	0:00:00	0:00:55	0:00:55
Vehicle 45	5:32:55 PM	1	5:32:55 PM	5:33:48 PM	0:00:00	0:00:53	0:00:53
Vehicle 46	5:33:47 PM	2	5:33:54 PM	5:35:39 PM	0:00:07	0:01:45	0:01:52
Vehicle 47	5:51:52 PM	1	5:51:52 PM	5:52:35 PM	0:00:00	0:00:43	0:00:43
Vehicle 48	5:52:24 PM	2	5:52:41 PM	5:55:20 PM	0:00:17	0:02:39	0:02:56
Vehicle 49	5:57:12 PM	1	5:57:12 PM	6:00:42 PM	0:00:00	0:03:30	0:03:30
Vehicle 50	5:57:26 PM	2	6:00:55 PM	6:01:34 PM	0:03:29	0:00:39	0:04:08
Vehicle 51	5:58:02 PM	3	6:01:41 PM	6:04:35 PM	0:03:39	0:02:54	0:06:33
Vehicle 52	6:03:49 PM	2	6:04:42 PM	6:06:48 PM	0:00:53	0:02:06	0:02:59
Vehicle 53	6:05:16 PM	2	6:06:55 PM	6:13:07 PM	0:01:39	0:06:12	0:07:51
Vehicle 54	6:05:19 PM	3	6:13:13 PM	6:14:48 PM	0:07:54	0:01:35	0:09:29
Vehicle 55	6:07:08 PM	3	6:14:54 PM	6:21:18 PM	0:07:46	0:06:24	0:14:10
Vehicle 56	6:07:49 PM	4	6:21:25 PM	6:23:01 PM	0:13:36	0:01:36	0:15:12
Vehicle 57	6:10:26 PM	5	6:23:04 PM	6:26:09 PM	0:12:38	0:03:05	0:15:43
Vehicle 58	6:11:51 PM	6	6:16:15 PM	6:27:02 PM	0:04:24	0:10:47	0:15:11
Vehicle 59	6:13:11 PM	7	6:27:08 PM	6:28:13 PM	0:13:57	0:01:05	0:15:02
Vehicle 60	6:21:30 PM	6	6:28:16 PM	6:35:28 PM	0:06:46	0:07:12	0:13:58
Vehicle 61	6:22:30 PM	6	6:35:34 PM	6:35:43 PM	0:13:04	0:00:09	0:13:13
Vehicle 62	6:22:55 PM	7	6:35:49 PM	6:37:56 PM	0:12:54	0:02:07	0:15:01
Vehicle 63	6:24:40 PM	7	6:38:04 PM	6:41:10 PM	0:13:24	0:03:06	0:16:30
Vehicle 64	6:26:50 PM	7	6:41:12 PM	6:41:48 PM	0:14:22	0:00:36	0:14:58
Vehicle 65	6:26:58 PM	8	6:41:53 PM	6:42:21 PM	0:14:55	0:00:28	0:15:23
Vehicle 66	6:30:04 PM	7	6:42:21 PM	6:42:45 PM	0:12:17	0:00:24	0:12:41
Vehicle 67	6:34:48 PM	8	6:42:53 PM	6:44:22 PM	0:08:05	0:01:29	0:09:34
Vehicle 68	6:37:33 PM	7	6:44:28 PM	6:48:08 PM	0:06:55	0:03:40	0:10:35
Vehicle 69	6:39:57 PM	7	6:48:10 PM	6:48:52 PM	0:08:13	0:00:42	0:08:55
Vehicle 70	6:40:07 PM	8	6:48:56 PM	6:50:40 PM	0:08:49	0:01:44	0:10:33
Vehicle 71	6:40:27 PM	9	6:50:42 PM	6:52:27 PM	0:10:15	0:01:45	0:12:00

Vehicle 72	6:45:07 PM	5	6:51:30 PM	6:54:07 PM	0:06:23	0:02:37	0:09:00
Vehicle 73	6:47:28 PM	6	6:54:12 PM	6:55:10 PM	0:06:44	0:00:58	0:07:42
Vehicle 74	6:56:30 PM	1	6:56:30 PM	6:56:51 PM	0:00:00	0:00:21	0:00:21
Vehicle 75	6:59:56 PM	1	6:59:56 PM	7:00:15 PM	0:00:00	0:00:19	0:00:19
Vehicle 76	7:01:32 PM	1	7:01:32 PM	7:03:12 PM	0:00:00	0:01:40	0:01:40
Vehicle 77	7:03:49 PM	1	7:03:49 PM	7:04:13 PM	0:00:00	0:00:24	0:00:24
Vehicle 78	7:05:43 PM	1	7:05:43 PM	7:06:00 PM	0:00:00	0:00:17	0:00:17
Vehicle 79	7:05:59 PM	2	7:06:12 PM	7:06:30 PM	0:00:13	0:00:18	0:00:31
Vehicle 80	7:19:19 PM	1	7:19:19 PM	7:21:34 PM	0:00:00	0:02:15	0:02:15
Vehicle 81	7:19:50 PM	2	7:21:43 PM	7:22:10 PM	0:01:53	0:00:27	0:02:20
Vehicle 82	7:26:55 PM	1	7:26:55 PM	7:27:38 PM	0:00:00	0:00:43	0:00:43
Vehicle 83	7:29:53 PM	1	7:29:53 PM	7:30:50 PM	0:00:00	0:00:57	0:00:57
Vehicle 84	7:33:04 PM	1	7:33:04 PM	7:34:40 PM	0:00:00	0:01:36	0:01:36
Vehicle 85	7:36:01 PM	1	7:36:01 PM	7:36:52 PM	0:00:00	0:00:51	0:00:51
Vehicle 86	7:37:31 PM	1	7:37:31 PM	7:39:41 PM	0:00:00	0:02:10	0:02:10
Vehicle 87	7:50:31 PM	1	7:50:31 PM	8:00:18 PM	0:00:00	0:09:47	0:09:47
Vehicle 88	7:53:36 PM	2	8:00:27 PM	8:01:20 PM	0:06:51	0:00:53	0:07:44
Vehicle 89	7:58:53 PM	3	8:01:24 PM	8:02:02 PM	0:02:31	0:00:38	0:03:09
Vehicle 90	8:00:42 PM	3	8:02:08 PM	8:06:45 PM	0:01:26	0:04:37	0:06:03
Vehicle 91	8:00:44 PM	4	8:06:52 PM	8:10:16 PM	0:06:08	0:03:24	0:09:32
Vehicle 92	8:01:58 PM	4	8:10:22 PM	8:15:08 PM	0:08:24	0:04:46	0:13:10
Vehicle 93	8:05:05 PM	4	8:15:16 PM	8:23:45 PM	0:10:11	0:08:29	0:18:40
Vehicle 94	8:23:52 PM	1	8:23:52 PM	8:35:52 PM	0:00:00	0:12:00	0:12:00
Vehicle 95	8:36:56 PM	1	8:36:56 PM	8:47:08 PM	0:00:00	0:10:12	0:10:12
Vehicle 96	8:42:37 PM	2	8:47:16 PM	8:50:18 PM	0:04:39	0:03:02	0:07:41
Vehicle 97	8:53:49 PM	1	8:53:49 PM	8:54:34 PM	0:00:00	0:00:45	0:00:45
Vehicle 98	9:00:14 PM	1	9:00:14 PM	9:02:47 PM	0:00:00	0:02:33	0:02:33
Vehicle 99	9:02:00 PM	2	9:03:04 PM	9:08:38 PM	0:01:04	0:05:34	0:06:38
Vehicle 100	9:09:54 PM	1	9:09:54 PM	9:12:31 PM	0:00:00	0:02:37	0:02:37
Vehicle 101	9:15:14 PM	1	9:15:14 PM	9:22:36 PM	0:00:00	0:07:22	0:07:22
Vehicle 102	9:16:51 PM	2	9:22:43 PM	9:30:20 PM	0:05:52	0:07:37	0:13:29
Vehicle 103	9:17:37 PM	3	9:30:25 PM	9:30:39 PM	0:12:48	0:00:14	0:13:02
Vehicle 104	9:18:53 PM	4	9:30:46 PM	9:30:55 PM	0:11:53	0:00:09	0:12:02
Vehicle 105	9:30:01 PM	4	9:31:05 PM	9:32:46 PM	0:01:04	0:01:41	0:02:45

30 Salem Turnpike, Norwich, CT 06360							
Thursday, July 14, 2022							
Restaurant Location:	30 Salem Turnpike, Norwich, CT 06360						
Data Collection Date:	Thursday, July 14, 2022						
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:59:47 AM	1	10:59:47 AM	11:12:17 AM	0:00:00	0:12:30	0:12:30
Vehicle 2	11:31:15 AM	1	11:31:15 AM	11:31:49 AM	0:00:00	0:00:34	0:00:34
Vehicle 3	11:34:33 AM	1	11:34:33 AM	11:36:55 AM	0:00:00	0:02:22	0:02:22
Vehicle 4	11:40:07 AM	1	11:40:07 AM	11:45:58 AM	0:00:00	0:05:51	0:05:51
Vehicle 5	11:46:40 AM	1	11:46:40 AM	11:47:00 AM	0:00:00	0:00:20	0:00:20
Vehicle 6	11:54:11 AM	1	11:54:11 AM	12:00:09 PM	0:00:00	0:05:58	0:05:58
Vehicle 7	11:55:23 AM	2	12:00:17 PM	12:01:47 PM	0:04:54	0:01:30	0:06:24
Vehicle 8	12:01:00 PM	2	12:01:52 PM	12:04:23 PM	0:00:52	0:02:31	0:03:23
Vehicle 9	12:01:44 PM	3	12:04:31 PM	12:04:56 PM	0:02:47	0:00:25	0:03:12
Vehicle 10	12:06:15 PM	1	12:06:15 PM	12:07:22 PM	0:00:00	0:01:07	0:01:07
Vehicle 11	12:06:32 PM	2	12:07:27 PM	12:11:13 PM	0:00:55	0:03:46	0:04:41
Vehicle 12	12:11:50 PM	1	12:11:50 PM	12:13:42 PM	0:00:00	0:01:52	0:01:52
Vehicle 13	12:18:45 PM	1	12:18:45 PM	12:19:46 PM	0:00:00	0:01:01	0:01:01
Vehicle 14	12:21:46 PM	1	12:21:46 PM	12:28:37 PM	0:00:00	0:06:51	0:06:51
Vehicle 15	12:22:31 PM	2	12:22:43 PM	12:23:45 PM	0:00:12	0:01:02	0:01:14
Vehicle 16	12:23:38 PM	2	12:23:55 PM	12:24:18 PM	0:00:17	0:00:23	0:00:40
Vehicle 17	12:26:37 PM	1	12:26:37 PM	12:27:17 PM	0:00:00	0:00:40	0:00:40
Vehicle 18	12:29:31 PM	1	12:29:31 PM	12:30:02 PM	0:00:00	0:00:31	0:00:31
Vehicle 19	12:49:32 PM	1	12:49:32 PM	12:55:32 PM	0:00:00	0:06:00	0:06:00
Vehicle 20	12:51:38 PM	2	12:55:39 PM	12:57:35 PM	0:04:01	0:01:56	0:05:57
Vehicle 21	1:08:52 PM	1	1:08:52 PM	1:14:02 PM	0:00:00	0:05:10	0:05:10
Vehicle 22	1:37:08 PM	1	1:37:08 PM	1:38:17 PM	0:00:00	0:01:09	0:01:09
Vehicle 23	1:38:06 PM	2	1:38:29 PM	1:39:40 PM	0:00:23	0:01:11	0:01:34
Vehicle 24	1:43:53 PM	1	1:43:53 PM	1:44:14 PM	0:00:00	0:00:21	0:00:21
Vehicle 25	1:51:23 PM	1	1:51:23 PM	1:52:32 PM	0:00:00	0:01:09	0:01:09
Vehicle 26	1:55:15 PM	1	1:55:15 PM	1:57:26 PM	0:00:00	0:02:11	0:02:11
Vehicle 27	2:35:40 PM	1	2:35:40 PM	2:37:53 PM	0:00:00	0:02:13	0:02:13
Vehicle 28	2:53:50 PM	1	2:53:50 PM	2:54:32 PM	0:00:00	0:00:42	0:00:42
Vehicle 29	2:55:31 PM	1	2:55:31 PM	2:56:08 PM	0:00:00	0:00:37	0:00:37
Vehicle 30	3:18:20 PM	1	3:18:20 PM	3:18:38 PM	0:00:00	0:00:18	0:00:18
Vehicle 31	3:20:32 PM	1	3:20:32 PM	3:22:27 PM	0:00:00	0:01:55	0:01:55
Vehicle 32	3:21:56 PM	2	3:22:35 PM	3:22:46 PM	0:00:39	0:00:11	0:00:50
Vehicle 33	3:30:13 PM	1	3:30:13 PM	3:30:23 PM	0:00:00	0:00:10	0:00:10
Vehicle 34	3:33:12 PM	1	3:33:12 PM	3:34:46 PM	0:00:00	0:01:34	0:01:34
Vehicle 35	3:48:12 PM	1	3:48:12 PM	3:49:00 PM	0:00:00	0:00:48	0:00:48
Vehicle 36	3:52:16 PM	1	3:52:16 PM	3:54:06 PM	0:00:00	0:01:50	0:01:50
Vehicle 37	4:03:02 PM	1	4:03:02 PM	4:03:55 PM	0:00:00	0:00:53	0:00:53
Vehicle 38	4:05:52 PM	1	4:05:52 PM	4:06:52 PM	0:00:00	0:01:00	0:01:00
Vehicle 39	4:37:27 PM	1	4:37:27 PM	4:39:22 PM	0:00:00	0:01:55	0:01:55
Vehicle 40	4:46:33 PM	1	4:46:33 PM	4:46:47 PM	0:00:00	0:00:14	0:00:14
Vehicle 41	4:48:33 PM	1	4:48:33 PM	4:50:01 PM	0:00:00	0:01:28	0:01:28
Vehicle 42	4:54:26 PM	1	4:54:26 PM	4:56:51 PM	0:00:00	0:02:25	0:02:25
Vehicle 43	5:06:01 PM	1	5:06:01 PM	5:09:04 PM	0:00:00	0:03:03	0:03:03
Vehicle 44	5:11:58 PM	1	5:11:58 PM	5:12:49 PM	0:00:00	0:00:51	0:00:51
Vehicle 45	5:15:32 PM	1	5:15:32 PM	5:16:58 PM	0:00:00	0:01:26	0:01:26
Vehicle 46	5:21:20 PM	1	5:21:20 PM	5:22:52 PM	0:00:00	0:01:32	0:01:32
Vehicle 47	5:27:09 PM	1	5:27:09 PM	5:32:26 PM	0:00:00	0:05:17	0:05:17
Vehicle 48	5:28:02 PM	2	5:32:32 PM	5:34:47 PM	0:04:30	0:02:15	0:06:45
Vehicle 49	5:39:10 PM	1	5:39:10 PM	5:40:43 PM	0:00:00	0:01:33	0:01:33
Vehicle 50	5:51:34 PM	1	5:51:34 PM	5:51:58 PM	0:00:00	0:00:24	0:00:24
Vehicle 51	6:03:24 PM	1	6:03:24 PM	6:04:47 PM	0:00:00	0:01:23	0:01:23
Vehicle 52	6:24:00 PM	1	6:24:00 PM	6:25:16 PM	0:00:00	0:01:16	0:01:16
Vehicle 53	6:28:20 PM	1	6:28:20 PM	6:37:26 PM	0:00:00	0:09:06	0:09:06
Vehicle 54	6:40:09 PM	1	6:40:09 PM	6:42:37 PM	0:00:00	0:02:28	0:02:28
Vehicle 55	6:43:27 PM	1	6:43:27 PM	6:44:50 PM	0:00:00	0:01:23	0:01:23
Vehicle 56	6:46:23 PM	1	6:46:23 PM	6:49:25 PM	0:00:00	0:03:02	0:03:02
Vehicle 57	6:46:50 PM	2	6:49:30 PM	6:52:57 PM	0:02:40	0:03:27	0:06:07
Vehicle 58	6:47:26 PM	3	6:53:07 PM	6:53:32 PM	0:05:41	0:00:25	0:06:06
Vehicle 59	6:52:09 PM	3	6:53:45 PM	6:57:12 PM	0:01:36	0:03:27	0:05:03
Vehicle 60	6:54:36 PM	2	6:57:22 PM	6:59:41 PM	0:02:46	0:02:19	0:05:05
Vehicle 61	6:54:56 PM	3	6:59:47 PM	7:00:55 PM	0:04:51	0:01:08	0:05:59
Vehicle 62	6:59:29 PM	3	7:01:01 PM	7:01:10 PM	0:01:32	0:00:09	0:01:41
Vehicle 63	7:06:45 PM	1	7:06:45 PM	7:07:08 PM	0:00:00	0:00:23	0:00:23
Vehicle 64	7:15:56 PM	1	7:15:56 PM	7:16:26 PM	0:00:00	0:00:30	0:00:30
Vehicle 65	7:25:01 PM	1	7:25:01 PM	7:25:25 PM	0:00:00	0:00:24	0:00:24
Vehicle 66	7:33:03 PM	1	7:33:03 PM	7:34:40 PM	0:00:00	0:01:37	0:01:37
Vehicle 67	7:37:05 PM	1	7:37:05 PM	7:37:21 PM	0:00:00	0:00:16	0:00:16
Vehicle 68	7:47:27 PM	1	7:47:27 PM	7:47:42 PM	0:00:00	0:00:15	0:00:15
Vehicle 69	7:52:55 PM	1	7:52:55 PM	7:55:17 PM	0:00:00	0:02:22	0:02:22
Vehicle 70	8:06:03 PM	1	8:06:03 PM	8:06:16 PM	0:00:00	0:00:13	0:00:13
Vehicle 71	8:08:21 PM	1	8:08:21 PM	8:08:55 PM	0:00:00	0:00:34	0:00:34

Vehicle 72	8:10:44 PM	1	8:10:44 PM	8:11:29 PM	0:00:00	0:00:45	0:00:45
Vehicle 73	8:13:38 PM	1	8:13:38 PM	8:16:05 PM	0:00:00	0:02:27	0:02:27
Vehicle 74	8:36:17 PM	1	8:36:17 PM	8:37:31 PM	0:00:00	0:01:14	0:01:14
Vehicle 75	8:58:06 PM	1	8:58:06 PM	8:58:31 PM	0:00:00	0:00:25	0:00:25
Vehicle 76	9:06:34 PM	1	9:06:34 PM	9:18:15 PM	0:00:00	0:11:41	0:11:41
Vehicle 77	9:08:36 PM	2	9:18:23 PM	9:24:09 PM	0:09:47	0:05:46	0:15:33
Vehicle 78	9:11:06 PM	3	9:24:15 PM	9:27:28 PM	0:13:09	0:03:13	0:16:22
Vehicle 79	9:11:25 PM	4	9:27:34 PM	9:31:57 PM	0:16:09	0:04:23	0:20:32
Vehicle 80	9:11:48 PM	5	9:32:04 PM	9:32:19 PM	0:20:16	0:00:15	0:20:31
Vehicle 81	9:14:54 PM	6	9:32:27 PM	9:32:36 PM	0:17:33	0:00:09	0:17:42
Vehicle 82	9:18:50 PM	6	9:32:41 PM	9:33:00 PM	0:13:51	0:00:19	0:14:10
Vehicle 83	9:21:04 PM	7	9:33:05 PM	9:34:05 PM	0:12:01	0:01:00	0:13:01
Vehicle 84	9:45:55 PM	1	9:45:55 PM	9:46:17 PM	0:00:00	0:00:22	0:00:22

30 Salem Turnpike, Norwich, CT 06360							
Friday, July 15, 2022							
Restaurant Location:	30 Salem Turnpike, Norwich, CT 06360						
Data Collection Date:	Friday, July 15, 2022						
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	11:43:57 AM	1	11:43:57 AM	11:44:21 AM	0:00:00	0:00:24	0:00:24
Vehicle 2	12:10:45 PM	1	12:10:45 PM	12:11:18 PM	0:00:00	0:00:33	0:00:33
Vehicle 3	1:10:11 PM	1	1:10:11 PM	1:11:22 PM	0:00:00	0:01:11	0:01:11
Vehicle 4	3:50:04 PM	1	3:50:04 PM	3:54:13 PM	0:00:00	0:04:09	0:04:09
Vehicle 5	3:58:22 PM	1	3:58:22 PM	4:02:22 PM	0:00:00	0:04:00	0:04:00
Vehicle 6	4:10:22 PM	1	4:10:22 PM	4:11:10 PM	0:00:00	0:00:48	0:00:48
Vehicle 7	4:22:02 PM	1	4:22:02 PM	4:23:00 PM	0:00:00	0:00:58	0:00:58
Vehicle 8	4:55:12 PM	1	4:55:12 PM	4:55:45 PM	0:00:00	0:00:33	0:00:33
Vehicle 9	5:03:15 PM	1	5:03:15 PM	5:05:30 PM	0:00:00	0:02:15	0:02:15
Vehicle 10	5:09:23 PM	1	5:09:23 PM	5:10:42 PM	0:00:00	0:01:19	0:01:19
Vehicle 11	5:18:49 PM	1	5:18:49 PM	5:18:57 PM	0:00:00	0:00:08	0:00:08
Vehicle 12	5:26:43 PM	1	5:26:43 PM	5:26:55 PM	0:00:00	0:00:12	0:00:12
Vehicle 13	5:28:24 PM	1	5:28:24 PM	5:31:33 PM	0:00:00	0:03:09	0:03:09
Vehicle 14	5:30:03 PM	2	5:31:38 PM	5:32:00 PM	0:01:35	0:00:22	0:01:57
Vehicle 15	5:49:58 PM	1	5:49:58 PM	5:51:35 PM	0:00:00	0:01:37	0:01:37
Vehicle 16	5:53:01 PM	1	5:53:01 PM	5:53:45 PM	0:00:00	0:00:44	0:00:44
Vehicle 17	5:56:23 PM	1	5:56:23 PM	6:06:55 PM	0:00:00	0:10:32	0:10:32
Vehicle 18	6:06:12 PM	2	6:06:59 PM	6:11:47 PM	0:00:47	0:04:48	0:05:35
Vehicle 19	6:06:51 PM	3	6:11:50 PM	6:16:31 PM	0:04:59	0:04:41	0:09:40
Vehicle 20	6:07:52 PM	3	6:16:35 PM	6:29:46 PM	0:08:43	0:13:11	0:21:54
Vehicle 21	6:28:31 PM	3	6:33:28 PM	6:49:07 PM	0:04:57	0:15:39	0:20:36
Vehicle 22	6:30:05 PM	3	6:49:15 PM	6:51:34 PM	0:19:10	0:02:19	0:21:29
Vehicle 23	6:34:19 PM	3	6:51:38 PM	6:57:19 PM	0:17:19	0:05:41	0:23:00
Vehicle 24	6:40:30 PM	4	6:57:26 PM	6:59:11 PM	0:16:56	0:01:45	0:18:41
Vehicle 25	6:41:00 PM	5	6:59:16 PM	7:02:40 PM	0:18:16	0:03:24	0:21:40
Vehicle 26	6:46:09 PM	6	7:02:45 PM	7:04:50 PM	0:16:36	0:02:05	0:18:41
Vehicle 27	6:46:49 PM	7	7:04:55 PM	7:05:55 PM	0:18:06	0:01:00	0:19:06
Vehicle 28	6:48:54 PM	8	7:06:03 PM	7:07:12 PM	0:17:09	0:01:09	0:18:18
Vehicle 29	7:02:57 PM	4	7:07:20 PM	7:10:53 PM	0:04:23	0:03:33	0:07:56
Vehicle 30	7:17:05 PM	1	7:17:05 PM	7:20:03 PM	0:00:00	0:02:58	0:02:58
Vehicle 31	7:19:31 PM	1	7:20:31 PM	7:24:09 PM	0:01:00	0:03:38	0:04:38
Vehicle 32	7:26:15 PM	1	7:26:15 PM	7:26:36 PM	0:00:00	0:00:21	0:00:21
Vehicle 33	7:31:14 PM	1	7:31:14 PM	7:31:35 PM	0:00:00	0:00:21	0:00:21
Vehicle 34	7:55:10 PM	1	7:55:10 PM	7:55:31 PM	0:00:00	0:00:21	0:00:21
Vehicle 35	7:56:06 PM	1	7:56:06 PM	7:56:19 PM	0:00:00	0:00:13	0:00:13
Vehicle 36	7:56:27 PM	1	7:56:27 PM	7:56:55 PM	0:00:00	0:00:28	0:00:28
Vehicle 37	8:02:38 PM	1	8:02:38 PM	8:03:23 PM	0:00:00	0:00:45	0:00:45
Vehicle 38	8:10:07 PM	1	8:10:07 PM	8:14:04 PM	0:00:00	0:03:57	0:03:57
Vehicle 39	8:11:17 PM	2	8:14:12 PM	8:14:26 PM	0:02:55	0:00:14	0:03:09
Vehicle 40	8:26:56 PM	1	8:26:56 PM	8:27:34 PM	0:00:00	0:00:38	0:00:38
Vehicle 41	8:30:18 PM	1	8:30:18 PM	8:32:18 PM	0:00:00	0:02:00	0:02:00
Vehicle 42	8:54:53 PM	1	8:54:53 PM	8:59:51 PM	0:00:00	0:04:58	0:04:58
Vehicle 43	8:57:53 PM	2	8:59:58 PM	9:00:43 PM	0:02:05	0:00:45	0:02:50
Vehicle 44	8:57:57 PM	3	9:00:50 PM	9:04:45 PM	0:02:53	0:03:55	0:06:48
Vehicle 45	9:13:42 PM	1	9:13:42 PM	9:20:40 PM	0:00:00	0:06:58	0:06:58
Vehicle 46	9:30:17 PM	1	9:30:17 PM	9:30:36 PM	0:00:00	0:00:19	0:00:19
Vehicle 47	9:36:44 PM	1	9:36:44 PM	9:43:46 PM	0:00:00	0:07:02	0:07:02
Vehicle 48	9:37:06 PM	2	9:43:48 PM	9:45:45 PM	0:06:42	0:01:57	0:08:39
Vehicle 49	9:37:58 PM	3	9:45:50 PM	9:46:02 PM	0:07:52	0:00:12	0:08:04

30 Salem Turnpike, Norwich, CT 06360							
Saturday, July 16, 2022							
Restaurant Location:	30 Salem Turnpike, Norwich, CT 06360						
Data Collection Date:	Saturday, July 16, 2022						
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	3:58:35 PM	1	3:58:35 PM	3:59:57 PM	0:00:00	0:01:22	0:01:22
Vehicle 2	3:58:40 PM	2	4:00:09 PM	4:00:55 PM	0:01:29	0:00:46	0:02:15
Vehicle 3	3:59:06 PM	3	4:01:02 PM	4:02:02 PM	0:01:56	0:01:00	0:02:56
Vehicle 4	4:06:07 PM	1	4:06:07 PM	4:06:12 PM	0:00:00	0:00:05	0:00:05
Vehicle 5	4:10:21 PM	1	4:10:21 PM	4:10:31 PM	0:00:00	0:00:10	0:00:10
Vehicle 6	4:44:39 PM	1	4:44:39 PM	4:45:09 PM	0:00:00	0:00:30	0:00:30
Vehicle 7	4:53:38 PM	1	4:53:38 PM	4:55:25 PM	0:00:00	0:01:47	0:01:47
Vehicle 8	5:01:08 PM	1	5:01:08 PM	5:01:36 PM	0:00:00	0:00:28	0:00:28
Vehicle 9	5:02:09 PM	1	5:02:09 PM	5:03:17 PM	0:00:00	0:01:08	0:01:08
Vehicle 10	5:14:26 PM	1	5:14:26 PM	5:14:44 PM	0:00:00	0:00:18	0:00:18
Vehicle 11	5:18:40 PM	1	5:18:40 PM	5:19:20 PM	0:00:00	0:00:40	0:00:40
Vehicle 12	5:29:16 PM	1	5:29:16 PM	5:32:38 PM	0:00:00	0:03:22	0:03:22
Vehicle 13	5:29:55 PM	2	5:32:46 PM	5:33:47 PM	0:02:51	0:01:01	0:03:52
Vehicle 14	5:31:00 PM	3	5:33:54 PM	5:34:00 PM	0:02:54	0:00:06	0:03:00
Vehicle 15	5:51:27 PM	1	5:51:27 PM	5:51:50 PM	0:00:00	0:00:23	0:00:23
Vehicle 16	6:10:07 PM	1	6:10:07 PM	6:11:47 PM	0:00:00	0:01:40	0:01:40
Vehicle 17	6:11:14 PM	2	6:12:11 PM	6:12:31 PM	0:00:57	0:00:20	0:01:17
Vehicle 18	6:18:17 PM	1	6:18:17 PM	6:19:24 PM	0:00:00	0:01:07	0:01:07
Vehicle 19	6:18:37 PM	2	6:19:35 PM	6:24:22 PM	0:00:58	0:04:47	0:05:45
Vehicle 20	6:23:00 PM	2	6:24:31 PM	6:26:17 PM	0:01:31	0:01:46	0:03:17
Vehicle 21	6:32:39 PM	1	6:32:39 PM	6:35:10 PM	0:00:00	0:02:31	0:02:31
Vehicle 22	6:50:49 PM	1	6:50:49 PM	6:52:40 PM	0:00:00	0:01:51	0:01:51
Vehicle 23	6:57:37 PM	1	6:57:37 PM	6:59:40 PM	0:00:00	0:02:03	0:02:03
Vehicle 24	7:00:18 PM	1	7:00:18 PM	7:00:52 PM	0:00:00	0:00:34	0:00:34
Vehicle 25	7:04:40 PM	1	7:04:40 PM	7:06:07 PM	0:00:00	0:01:27	0:01:27
Vehicle 26	7:13:28 PM	1	7:13:28 PM	7:14:47 PM	0:00:00	0:01:19	0:01:19
Vehicle 27	7:20:55 PM	1	7:20:55 PM	7:21:57 PM	0:00:00	0:01:02	0:01:02
Vehicle 28	7:37:23 PM	1	7:37:23 PM	7:37:49 PM	0:00:00	0:00:26	0:00:26
Vehicle 29	7:40:20 PM	1	7:40:20 PM	7:40:40 PM	0:00:00	0:00:20	0:00:20
Vehicle 30	7:42:59 PM	1	7:42:59 PM	7:43:22 PM	0:00:00	0:00:23	0:00:23
Vehicle 31	7:47:56 PM	1	7:47:56 PM	7:49:06 PM	0:00:00	0:01:10	0:01:10
Vehicle 32	7:57:03 PM	1	7:57:03 PM	7:57:45 PM	0:00:00	0:00:42	0:00:42
Vehicle 33	8:04:02 PM	1	8:04:02 PM	8:04:20 PM	0:00:00	0:00:18	0:00:18
Vehicle 34	8:18:33 PM	1	8:18:33 PM	8:19:26 PM	0:00:00	0:00:53	0:00:53
Vehicle 35	8:29:27 PM	1	8:29:27 PM	8:30:43 PM	0:00:00	0:01:16	0:01:16
Vehicle 36	8:52:06 PM	1	8:52:06 PM	8:52:31 PM	0:00:00	0:00:25	0:00:25
Vehicle 37	9:03:30 PM	1	9:03:30 PM	9:06:33 PM	0:00:00	0:03:03	0:03:03
Vehicle 38	9:13:50 PM	1	9:13:50 PM	9:14:14 PM	0:00:00	0:00:24	0:00:24
Vehicle 39	9:25:18 PM	1	9:25:18 PM	9:25:39 PM	0:00:00	0:00:21	0:00:21
Vehicle 40	9:34:52 PM	1	9:34:52 PM	9:35:26 PM	0:00:00	0:00:34	0:00:34

APPENDIX **E**
PICKERINGTON, OH CHIPOTLANE DATA

Restaurant Location: 1291 Hill Road N., Pickerington, OH 43147							
Data Collection Date: Wednesday, August 3, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:51:32 AM	1	10:51:32 AM	10:57:34 AM	0:00:00	0:06:02	0:06:02
Vehicle 2	11:03:57 AM	1	11:03:57 AM	11:04:49 AM	0:00:00	0:00:52	0:00:52
Vehicle 3	11:15:05 AM	1	11:15:05 AM	11:15:54 AM	0:00:00	0:00:49	0:00:49
Vehicle 4	11:15:36 AM	2	11:16:01 AM	11:18:05 AM	0:00:25	0:02:04	0:02:29
Vehicle 5	11:17:42 AM	2	11:18:15 AM	11:19:35 AM	0:00:33	0:01:20	0:01:53
Vehicle 6	11:22:26 AM	1	11:22:26 AM	11:23:25 AM	0:00:00	0:00:59	0:00:59
Vehicle 7	11:22:26 AM	2	11:23:34 AM	11:24:44 AM	0:01:08	0:01:10	0:02:18
Vehicle 8	11:34:50 AM	1	11:34:50 AM	11:37:19 AM	0:00:00	0:02:29	0:02:29
Vehicle 9	11:34:53 AM	2	11:37:30 AM	11:38:38 AM	0:02:37	0:01:08	0:03:45
Vehicle 10	11:38:45 AM	1	11:38:45 AM	11:40:36 AM	0:00:00	0:01:51	0:01:51
Vehicle 11	11:38:52 AM	2	11:40:45 AM	11:42:26 AM	0:01:53	0:01:41	0:03:34
Vehicle 12	11:42:15 AM	2	11:42:32 AM	11:44:10 AM	0:00:17	0:01:38	0:01:55
Vehicle 13	11:45:01 AM	1	11:45:01 AM	11:45:33 AM	0:00:00	0:00:32	0:00:32
Vehicle 14	11:50:01 AM	1	11:50:01 AM	11:50:22 AM	0:00:00	0:00:21	0:00:21
Vehicle 15	11:59:00 AM	1	11:59:00 AM	12:01:52 PM	0:00:00	0:02:52	0:02:52
Vehicle 16	12:01:29 PM	2	12:02:02 PM	12:02:28 PM	0:00:33	0:00:26	0:00:59
Vehicle 17	12:04:55 PM	1	12:04:55 PM	12:05:07 PM	0:00:00	0:00:12	0:00:12
Vehicle 18	12:05:07 PM	2	12:05:13 PM	12:08:50 PM	0:00:06	0:03:37	0:03:43
Vehicle 19	12:06:40 PM	2	12:08:57 PM	12:09:28 PM	0:02:17	0:00:31	0:02:48
Vehicle 20	12:06:52 PM	3	12:09:36 PM	12:11:12 PM	0:02:44	0:01:36	0:04:20
Vehicle 21	12:08:40 PM	4	12:11:22 PM	12:11:45 PM	0:02:42	0:00:23	0:03:05
Vehicle 22	12:13:25 PM	1	12:13:25 PM	12:14:00 PM	0:00:00	0:00:35	0:00:35
Vehicle 23	12:14:33 PM	1	12:14:33 PM	12:16:52 PM	0:00:00	0:02:19	0:02:19
Vehicle 24	12:16:47 PM	2	12:16:58 PM	12:18:11 PM	0:00:11	0:01:13	0:01:24
Vehicle 25	12:19:02 PM	1	12:19:02 PM	12:19:45 PM	0:00:00	0:00:43	0:00:43
Vehicle 26	12:22:19 PM	1	12:22:19 PM	12:25:40 PM	0:00:00	0:03:21	0:03:21
Vehicle 27	12:24:53 PM	2	12:25:53 PM	12:27:13 PM	0:01:00	0:01:20	0:02:20
Vehicle 28	12:25:48 PM	2	12:27:20 PM	12:28:33 PM	0:01:32	0:01:13	0:02:45
Vehicle 29	12:26:35 PM	3	12:28:42 PM	12:31:38 PM	0:02:07	0:02:56	0:05:03
Vehicle 30	12:27:32 PM	3	12:31:46 PM	12:35:33 PM	0:04:14	0:03:47	0:08:01
Vehicle 31	12:28:40 PM	3	12:35:42 PM	12:36:42 PM	0:07:02	0:01:00	0:08:02
Vehicle 32	12:30:32 PM	4	12:36:51 PM	12:38:18 PM	0:06:19	0:01:27	0:07:46
Vehicle 33	12:30:32 PM	5	12:38:24 PM	12:38:36 PM	0:07:52	0:00:12	0:08:04
Vehicle 34	12:30:37 PM	6	12:38:45 PM	12:39:53 PM	0:08:08	0:01:08	0:09:16
Vehicle 35	12:31:15 PM	7	12:40:00 PM	12:40:12 PM	0:08:45	0:00:12	0:08:57
Vehicle 36	12:32:05 PM	7	12:40:22 PM	12:40:30 PM	0:08:17	0:00:08	0:08:25
Vehicle 37	12:33:01 PM	8	12:40:33 PM	12:40:54 PM	0:07:32	0:00:21	0:07:53
Vehicle 38	12:35:40 PM	8	12:41:00 PM	12:41:13 PM	0:05:20	0:00:13	0:05:33
Vehicle 39	12:39:55 PM	5	12:41:20 PM	12:41:39 PM	0:01:25	0:00:19	0:01:44
Vehicle 40	12:42:51 PM	1	12:42:51 PM	12:43:57 PM	0:00:00	0:01:06	0:01:06
Vehicle 41	12:49:32 PM	1	12:49:32 PM	12:51:22 PM	0:00:00	0:01:50	0:01:50
Vehicle 42	12:49:52 PM	2	12:51:26 PM	12:51:33 PM	0:01:34	0:00:07	0:01:41
Vehicle 43	12:51:49 PM	1	12:51:49 PM	12:53:04 PM	0:00:00	0:01:15	0:01:15
Vehicle 44	1:02:00 PM	1	1:02:00 PM	1:02:24 PM	0:00:00	0:00:24	0:00:24
Vehicle 45	1:07:45 PM	1	1:07:45 PM	1:08:29 PM	0:00:00	0:00:44	0:00:44
Vehicle 46	1:10:07 PM	1	1:10:07 PM	1:10:54 PM	0:00:00	0:00:47	0:00:47
Vehicle 47	1:12:00 PM	1	1:12:00 PM	1:12:30 PM	0:00:00	0:00:30	0:00:30
Vehicle 48	1:15:48 PM	1	1:15:48 PM	1:16:47 PM	0:00:00	0:00:59	0:00:59
Vehicle 49	1:17:51 PM	1	1:17:51 PM	1:18:19 PM	0:00:00	0:00:28	0:00:28
Vehicle 50	1:17:51 PM	2	1:18:27 PM	1:18:32 PM	0:00:36	0:00:05	0:00:41
Vehicle 51	1:22:27 PM	1	1:22:27 PM	1:23:06 PM	0:00:00	0:00:39	0:00:39
Vehicle 52	1:31:50 PM	1	1:31:50 PM	1:32:13 PM	0:00:00	0:00:23	0:00:23
Vehicle 53	1:32:53 PM	1	1:32:53 PM	1:32:59 PM	0:00:00	0:00:06	0:00:06
Vehicle 54	1:37:14 PM	1	1:37:14 PM	1:37:51 PM	0:00:00	0:00:37	0:00:37
Vehicle 55	1:40:25 PM	1	1:40:25 PM	1:40:37 PM	0:00:00	0:00:12	0:00:12
Vehicle 56	1:52:36 PM	1	1:52:36 PM	1:53:26 PM	0:00:00	0:00:50	0:00:50
Vehicle 57	1:58:10 PM	1	1:58:10 PM	2:00:02 PM	0:00:00	0:01:52	0:01:52
Vehicle 58	1:59:36 PM	2	2:00:10 PM	2:00:16 PM	0:00:34	0:00:06	0:00:40
Vehicle 59	2:02:06 PM	1	2:02:06 PM	2:02:38 PM	0:00:00	0:00:32	0:00:32
Vehicle 60	2:02:17 PM	2	2:02:46 PM	2:03:32 PM	0:00:29	0:00:46	0:01:15
Vehicle 61	2:16:32 PM	1	2:16:32 PM	2:18:50 PM	0:00:00	0:02:18	0:02:18
Vehicle 62	2:21:05 PM	1	2:21:05 PM	2:21:58 PM	0:00:00	0:00:53	0:00:53
Vehicle 63	2:29:10 PM	1	2:29:10 PM	2:31:30 PM	0:00:00	0:02:20	0:02:20
Vehicle 64	2:45:57 PM	1	2:45:57 PM	2:46:28 PM	0:00:00	0:00:31	0:00:31
Vehicle 65	2:48:24 PM	1	2:48:24 PM	2:49:35 PM	0:00:00	0:01:11	0:01:11
Vehicle 66	2:54:45 PM	1	2:54:45 PM	2:58:25 PM	0:00:00	0:03:40	0:03:40
Vehicle 67	2:55:57 PM	2	2:58:39 PM	2:59:15 PM	0:02:42	0:00:36	0:03:18
Vehicle 68	3:10:13 PM	1	3:10:13 PM	3:11:38 PM	0:00:00	0:01:25	0:01:25
Vehicle 69	3:10:59 PM	2	3:11:48 PM	3:12:00 PM	0:00:49	0:00:12	0:01:01
Vehicle 70	3:23:57 PM	1	3:23:57 PM	3:24:23 PM	0:00:00	0:00:26	0:00:26
Vehicle 71	3:28:38 PM	1	3:28:38 PM	3:29:13 PM	0:00:00	0:00:35	0:00:35

Vehicle 72	3:36:00 PM	1	3:36:00 PM	3:39:28 PM	0:00:00	0:03:28	0:03:28
Vehicle 73	3:38:17 PM	2	3:39:41 PM	3:42:32 PM	0:01:24	0:02:51	0:04:15
Vehicle 74	3:40:57 PM	2	3:42:44 PM	3:47:37 PM	0:01:47	0:04:53	0:06:40
Vehicle 75	3:46:53 PM	2	3:47:54 PM	3:48:51 PM	0:01:01	0:00:57	0:01:58
Vehicle 76	3:54:17 PM	1	3:54:17 PM	3:55:46 PM	0:00:00	0:01:29	0:01:29
Vehicle 77	4:07:01 PM	1	4:07:01 PM	4:10:04 PM	0:00:00	0:03:03	0:03:03
Vehicle 78	4:07:05 PM	2	4:10:11 PM	4:18:42 PM	0:03:06	0:08:31	0:11:37
Vehicle 79	4:13:06 PM	2	4:18:49 PM	4:21:03 PM	0:05:43	0:02:14	0:07:57
Vehicle 80	4:21:22 PM	1	4:21:22 PM	4:25:14 PM	0:00:00	0:03:52	0:03:52
Vehicle 81	4:22:42 PM	2	4:25:22 PM	4:27:19 PM	0:02:40	0:01:57	0:04:37
Vehicle 82	4:25:29 PM	2	4:27:31 PM	4:28:00 PM	0:02:02	0:00:29	0:02:31
Vehicle 83	4:28:34 PM	1	4:28:34 PM	4:29:28 PM	0:00:00	0:00:54	0:00:54
Vehicle 84	4:39:47 PM	1	4:39:47 PM	4:40:27 PM	0:00:00	0:00:40	0:00:40
Vehicle 85	4:46:11 PM	1	4:46:11 PM	4:46:36 PM	0:00:00	0:00:25	0:00:25
Vehicle 86	4:57:03 PM	1	4:57:03 PM	4:57:40 PM	0:00:00	0:00:37	0:00:37
Vehicle 87	4:59:16 PM	1	4:59:16 PM	5:00:02 PM	0:00:00	0:00:46	0:00:46
Vehicle 88	5:02:51 PM	1	5:02:51 PM	5:03:05 PM	0:00:00	0:00:14	0:00:14
Vehicle 89	5:05:26 PM	1	5:05:26 PM	5:06:04 PM	0:00:00	0:00:38	0:00:38
Vehicle 90	5:08:29 PM	1	5:08:29 PM	5:09:40 PM	0:00:00	0:01:11	0:01:11
Vehicle 91	5:11:24 PM	1	5:11:24 PM	5:12:00 PM	0:00:00	0:00:36	0:00:36
Vehicle 92	5:12:44 PM	1	5:12:44 PM	5:14:41 PM	0:00:00	0:01:57	0:01:57
Vehicle 93	5:13:48 PM	2	5:14:49 PM	5:15:20 PM	0:01:01	0:00:31	0:01:32
Vehicle 94	5:14:05 PM	3	5:15:28 PM	5:15:57 PM	0:01:23	0:00:29	0:01:52
Vehicle 95	5:15:17 PM	3	5:16:04 PM	5:17:47 PM	0:00:47	0:01:43	0:02:30
Vehicle 96	5:17:06 PM	2	5:17:54 PM	5:19:00 PM	0:00:48	0:01:06	0:01:54
Vehicle 97	5:17:45 PM	3	5:19:07 PM	5:20:30 PM	0:01:22	0:01:23	0:02:45
Vehicle 98	5:18:17 PM	3	5:20:40 PM	5:22:47 PM	0:02:23	0:02:07	0:04:30
Vehicle 99	5:18:40 PM	4	5:22:57 PM	5:24:25 PM	0:04:17	0:01:28	0:05:45
Vehicle 100	5:24:18 PM	2	5:24:34 PM	5:25:40 PM	0:00:16	0:01:06	0:01:22
Vehicle 101	5:24:41 PM	2	5:25:45 PM	5:27:54 PM	0:01:04	0:02:09	0:03:13
Vehicle 102	5:32:04 PM	1	5:32:04 PM	5:36:20 PM	0:00:00	0:04:16	0:04:16
Vehicle 103	5:32:27 PM	2	5:36:27 PM	5:39:01 PM	0:04:00	0:02:34	0:06:34
Vehicle 104	5:34:41 PM	3	5:39:09 PM	5:40:13 PM	0:04:28	0:01:04	0:05:32
Vehicle 105	5:38:00 PM	3	5:40:19 PM	5:41:06 PM	0:02:19	0:00:47	0:03:06
Vehicle 106	5:38:08 PM	4	5:41:15 PM	5:42:42 PM	0:03:07	0:01:27	0:04:34
Vehicle 107	5:44:32 PM	1	5:44:32 PM	5:47:59 PM	0:00:00	0:03:27	0:03:27
Vehicle 108	5:46:04 PM	2	5:48:10 PM	5:48:45 PM	0:02:06	0:00:35	0:02:41
Vehicle 109	5:46:34 PM	3	5:48:54 PM	5:49:11 PM	0:02:20	0:00:17	0:02:37
Vehicle 110	5:47:06 PM	4	5:49:17 PM	5:49:46 PM	0:02:11	0:00:29	0:02:40
Vehicle 111	5:48:27 PM	4	5:49:54 PM	5:50:17 PM	0:01:27	0:00:23	0:01:50
Vehicle 112	5:48:47 PM	5	5:50:25 PM	5:53:05 PM	0:01:38	0:02:40	0:04:18
Vehicle 113	5:50:43 PM	2	5:53:12 PM	5:53:58 PM	0:02:29	0:00:46	0:03:15
Vehicle 114	5:50:54 PM	3	5:54:07 PM	5:54:24 PM	0:03:13	0:00:17	0:03:30
Vehicle 115	5:52:27 PM	4	5:54:30 PM	5:54:54 PM	0:02:03	0:00:24	0:02:27
Vehicle 116	5:53:18 PM	4	5:55:00 PM	5:55:22 PM	0:01:42	0:00:22	0:02:04
Vehicle 117	5:56:30 PM	1	5:56:30 PM	5:57:58 PM	0:00:00	0:01:28	0:01:28
Vehicle 118	5:56:30 PM	2	5:58:04 PM	5:59:16 PM	0:01:34	0:01:12	0:02:46
Vehicle 119	5:56:51 PM	3	5:59:25 PM	5:59:52 PM	0:02:34	0:00:27	0:03:01
Vehicle 120	6:02:07 PM	1	6:02:07 PM	6:02:23 PM	0:00:00	0:00:16	0:00:16
Vehicle 121	6:03:27 PM	1	6:03:27 PM	6:04:20 PM	0:00:00	0:00:53	0:00:53
Vehicle 122	6:05:36 PM	1	6:05:36 PM	6:07:08 PM	0:00:00	0:01:32	0:01:32
Vehicle 123	6:07:20 PM	1	6:07:20 PM	6:07:55 PM	0:00:00	0:00:35	0:00:35
Vehicle 124	6:12:05 PM	1	6:12:05 PM	6:13:23 PM	0:00:00	0:01:18	0:01:18
Vehicle 125	6:17:07 PM	1	6:17:07 PM	6:20:06 PM	0:00:00	0:02:59	0:02:59
Vehicle 126	6:19:50 PM	2	6:20:11 PM	6:20:29 PM	0:00:21	0:00:18	0:00:39
Vehicle 127	6:20:17 PM	2	6:20:35 PM	6:21:11 PM	0:00:18	0:00:36	0:00:54
Vehicle 128	6:20:41 PM	2	6:21:19 PM	6:22:03 PM	0:00:38	0:00:44	0:01:22
Vehicle 129	6:25:00 PM	1	6:25:00 PM	6:25:28 PM	0:00:00	0:00:28	0:00:28
Vehicle 130	6:28:29 PM	1	6:28:29 PM	6:29:32 PM	0:00:00	0:01:03	0:01:03
Vehicle 131	6:29:40 PM	1	6:29:40 PM	6:31:23 PM	0:00:00	0:01:43	0:01:43
Vehicle 132	6:31:35 PM	1	6:31:35 PM	6:32:32 PM	0:00:00	0:00:57	0:00:57
Vehicle 133	6:33:41 PM	1	6:33:41 PM	6:35:42 PM	0:00:00	0:02:01	0:02:01
Vehicle 134	6:35:07 PM	2	6:35:52 PM	6:36:17 PM	0:00:45	0:00:25	0:01:10
Vehicle 135	6:36:38 PM	1	6:36:38 PM	6:41:19 PM	0:00:00	0:04:41	0:04:41
Vehicle 136	6:36:52 PM	2	6:41:28 PM	6:42:22 PM	0:04:36	0:00:54	0:05:30
Vehicle 137	6:37:30 PM	3	6:42:35 PM	6:42:55 PM	0:05:05	0:00:20	0:05:25
Vehicle 138	6:42:01 PM	3	6:43:01 PM	6:43:45 PM	0:01:00	0:00:44	0:01:44
Vehicle 139	6:42:13 PM	4	6:43:50 PM	6:48:17 PM	0:01:37	0:04:27	0:06:04
Vehicle 140	6:42:17 PM	5	6:48:19 PM	6:48:54 PM	0:06:02	0:00:35	0:06:37
Vehicle 141	6:43:00 PM	5	6:49:00 PM	6:49:35 PM	0:06:00	0:00:35	0:06:35
Vehicle 142	6:47:38 PM	4	6:49:43 PM	6:50:39 PM	0:02:05	0:00:56	0:03:01
Vehicle 143	6:48:18 PM	5	6:50:47 PM	6:51:31 PM	0:02:29	0:00:44	0:03:13
Vehicle 144	6:48:58 PM	4	6:51:37 PM	6:52:05 PM	0:02:39	0:00:28	0:03:07
Vehicle 145	6:50:03 PM	4	6:52:13 PM	6:52:56 PM	0:02:10	0:00:43	0:02:53
Vehicle 146	7:01:35 PM	1	7:01:35 PM	7:02:42 PM	0:00:00	0:01:07	0:01:07

Vehicle 147	7:04:34 PM	1	7:04:34 PM	7:04:53 PM	0:00:00	0:00:19	0:00:19
Vehicle 148	7:08:38 PM	1	7:08:38 PM	7:10:05 PM	0:00:00	0:01:27	0:01:27
Vehicle 149	7:11:49 PM	1	7:11:49 PM	7:12:56 PM	0:00:00	0:01:07	0:01:07
Vehicle 150	7:15:07 PM	1	7:15:07 PM	7:15:41 PM	0:00:00	0:00:34	0:00:34
Vehicle 151	7:16:20 PM	1	7:16:20 PM	7:16:42 PM	0:00:00	0:00:22	0:00:22
Vehicle 152	7:17:00 PM	1	7:17:00 PM	7:18:11 PM	0:00:00	0:01:11	0:01:11
Vehicle 153	7:19:59 PM	1	7:19:59 PM	7:20:32 PM	0:00:00	0:00:33	0:00:33
Vehicle 154	7:22:10 PM	1	7:22:10 PM	7:22:36 PM	0:00:00	0:00:26	0:00:26
Vehicle 155	7:24:50 PM	1	7:24:50 PM	7:25:52 PM	0:00:00	0:01:02	0:01:02
Vehicle 156	7:27:45 PM	1	7:27:45 PM	7:28:29 PM	0:00:00	0:00:44	0:00:44
Vehicle 157	7:30:11 PM	1	7:30:11 PM	7:33:27 PM	0:00:00	0:03:16	0:03:16
Vehicle 158	7:30:11 PM	2	7:33:33 PM	7:34:41 PM	0:03:22	0:01:08	0:04:30
Vehicle 159	7:37:15 PM	1	7:37:15 PM	7:40:19 PM	0:00:00	0:03:04	0:03:04
Vehicle 160	7:38:20 PM	2	7:40:43 PM	7:41:43 PM	0:02:23	0:01:00	0:03:23
Vehicle 161	7:38:20 PM	3	7:41:50 PM	7:42:20 PM	0:03:30	0:00:30	0:04:00
Vehicle 162	7:41:36 PM	4	7:42:25 PM	7:43:10 PM	0:00:49	0:00:45	0:01:34
Vehicle 163	7:41:42 PM	5	7:43:17 PM	7:44:05 PM	0:01:35	0:00:48	0:02:23
Vehicle 164	7:44:43 PM	1	7:44:43 PM	7:48:30 PM	0:00:00	0:03:47	0:03:47
Vehicle 165	7:44:54 PM	2	7:48:36 PM	7:49:57 PM	0:03:42	0:01:21	0:05:03
Vehicle 166	7:45:58 PM	3	7:50:04 PM	7:50:19 PM	0:04:06	0:00:15	0:04:21
Vehicle 167	7:48:09 PM	4	7:50:24 PM	7:50:49 PM	0:02:15	0:00:25	0:02:40
Vehicle 168	7:56:27 PM	1	7:56:27 PM	7:57:51 PM	0:00:00	0:01:24	0:01:24
Vehicle 169	8:02:47 PM	1	8:02:47 PM	8:04:45 PM	0:00:00	0:01:58	0:01:58
Vehicle 170	8:05:02 PM	1	8:05:02 PM	8:06:26 PM	0:00:00	0:01:24	0:01:24
Vehicle 171	8:11:36 PM	1	8:11:36 PM	8:11:49 PM	0:00:00	0:00:13	0:00:13
Vehicle 172	8:19:04 PM	1	8:19:04 PM	8:19:49 PM	0:00:00	0:00:45	0:00:45
Vehicle 173	8:20:13 PM	1	8:20:13 PM	8:23:10 PM	0:00:00	0:02:57	0:02:57
Vehicle 174	8:26:15 PM	1	8:26:15 PM	8:27:06 PM	0:00:00	0:00:51	0:00:51
Vehicle 175	8:27:23 PM	1	8:27:23 PM	8:29:36 PM	0:00:00	0:02:13	0:02:13
Vehicle 176	8:36:17 PM	1	8:36:17 PM	8:36:56 PM	0:00:00	0:00:39	0:00:39
Vehicle 177	8:37:40 PM	1	8:37:40 PM	8:39:08 PM	0:00:00	0:01:28	0:01:28
Vehicle 178	8:40:54 PM	1	8:40:54 PM	8:46:58 PM	0:00:00	0:06:04	0:06:04
Vehicle 179	8:48:46 PM	1	8:48:46 PM	8:49:31 PM	0:00:00	0:00:45	0:00:45
Vehicle 180	8:54:08 PM	1	8:54:08 PM	8:54:29 PM	0:00:00	0:00:21	0:00:21
Vehicle 181	9:00:52 PM	1	9:00:52 PM	9:01:40 PM	0:00:00	0:00:48	0:00:48
Vehicle 182	9:03:21 PM	1	9:03:21 PM	9:04:04 PM	0:00:00	0:00:43	0:00:43
Vehicle 183	9:07:54 PM	1	9:07:54 PM	9:10:07 PM	0:00:00	0:02:13	0:02:13
Vehicle 184	9:09:11 PM	2	9:10:16 PM	9:11:05 PM	0:01:05	0:00:49	0:01:54
Vehicle 185	9:10:17 PM	2	9:11:11 PM	9:11:52 PM	0:00:54	0:00:41	0:01:35
Vehicle 186	9:17:38 PM	1	9:17:38 PM	9:18:09 PM	0:00:00	0:00:31	0:00:31
Vehicle 187	9:39:00 PM	1	9:39:00 PM	9:41:00 PM	0:00:00	0:02:00	0:02:00

Restaurant Location: 1291 Hill Road N., Pickerington, OH 43147							
Data Collection Date: Thursday, August 4, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:48:23 AM	1	10:48:23 AM	10:50:55 AM	0:00:00	0:02:32	0:02:32
Vehicle 2	11:17:08 AM	1	11:17:08 AM	11:18:52 AM	0:00:00	0:01:44	0:01:44
Vehicle 3	11:28:06 AM	1	11:28:06 AM	11:30:41 AM	0:00:00	0:02:35	0:02:35
Vehicle 4	11:31:33 AM	1	11:31:33 AM	11:33:11 AM	0:00:00	0:01:38	0:01:38
Vehicle 5	11:33:24 AM	1	11:33:24 AM	11:35:17 AM	0:00:00	0:01:53	0:01:53
Vehicle 6	11:33:44 AM	2	11:35:26 AM	11:36:46 AM	0:01:42	0:01:20	0:03:02
Vehicle 7	11:34:10 AM	3	11:36:54 AM	11:38:24 AM	0:02:44	0:01:30	0:04:14
Vehicle 8	11:34:56 AM	4	11:38:31 AM	11:40:18 AM	0:03:35	0:01:47	0:05:22
Vehicle 9	11:38:57 AM	2	11:40:26 AM	11:40:46 AM	0:01:29	0:00:20	0:01:49
Vehicle 10	11:45:01 AM	1	11:45:01 AM	11:46:09 AM	0:00:00	0:01:08	0:01:08
Vehicle 11	11:47:01 AM	1	11:47:01 AM	11:48:01 AM	0:00:00	0:01:00	0:01:00
Vehicle 12	11:47:05 AM	2	11:48:09 AM	11:48:22 AM	0:01:04	0:00:13	0:01:17
Vehicle 13	11:58:29 AM	1	11:58:29 AM	11:59:17 AM	0:00:00	0:00:48	0:00:48
Vehicle 14	12:02:39 PM	1	12:02:39 PM	12:03:15 PM	0:00:00	0:00:36	0:00:36
Vehicle 15	12:07:36 PM	1	12:07:36 PM	12:08:33 PM	0:00:00	0:00:57	0:00:57
Vehicle 16	12:18:11 PM	1	12:18:11 PM	12:18:42 PM	0:00:00	0:00:31	0:00:31
Vehicle 17	12:34:00 PM	1	12:34:00 PM	12:34:22 PM	0:00:00	0:00:22	0:00:22
Vehicle 18	12:44:55 PM	1	12:44:55 PM	12:47:22 PM	0:00:00	0:02:27	0:02:27
Vehicle 19	12:45:46 PM	2	12:47:41 PM	12:48:00 PM	0:01:55	0:00:19	0:02:14
Vehicle 20	12:49:16 PM	1	12:49:16 PM	12:49:36 PM	0:00:00	0:00:20	0:00:20
Vehicle 21	12:51:50 PM	1	12:51:50 PM	12:53:31 PM	0:00:00	0:01:41	0:01:41
Vehicle 22	12:52:23 PM	2	12:53:38 PM	12:53:47 PM	0:01:15	0:00:09	0:01:24
Vehicle 23	12:55:12 PM	1	12:55:12 PM	12:56:18 PM	0:00:00	0:01:06	0:01:06
Vehicle 24	12:57:31 PM	1	12:57:31 PM	12:59:20 PM	0:00:00	0:01:49	0:01:49
Vehicle 25	12:58:14 PM	2	12:59:28 PM	12:59:46 PM	0:01:14	0:00:18	0:01:32
Vehicle 26	1:00:49 PM	1	1:00:49 PM	1:02:45 PM	0:00:00	0:01:56	0:01:56
Vehicle 27	1:03:11 PM	1	1:03:11 PM	1:04:40 PM	0:00:00	0:01:29	0:01:29
Vehicle 28	1:03:48 PM	2	1:04:44 PM	1:06:14 PM	0:00:56	0:01:30	0:02:26
Vehicle 29	1:04:53 PM	2	1:06:20 PM	1:07:27 PM	0:01:27	0:01:07	0:02:34
Vehicle 30	1:07:46 PM	1	1:07:46 PM	1:10:17 PM	0:00:00	0:02:31	0:02:31
Vehicle 31	1:14:02 PM	1	1:14:02 PM	1:14:59 PM	0:00:00	0:00:57	0:00:57
Vehicle 32	1:14:52 PM	2	1:15:03 PM	1:17:25 PM	0:00:11	0:02:22	0:02:33
Vehicle 33	1:16:35 PM	2	1:17:31 PM	1:17:51 PM	0:00:56	0:00:20	0:01:16
Vehicle 34	1:22:39 PM	1	1:22:39 PM	1:24:30 PM	0:00:00	0:01:51	0:01:51
Vehicle 35	1:25:00 PM	1	1:25:00 PM	1:26:48 PM	0:00:00	0:01:48	0:01:48
Vehicle 36	1:27:17 PM	1	1:27:17 PM	1:27:52 PM	0:00:00	0:00:35	0:00:35
Vehicle 37	1:28:42 PM	1	1:28:42 PM	1:35:51 PM	0:00:00	0:07:09	0:07:09
Vehicle 38	1:34:59 PM	2	1:36:02 PM	1:37:22 PM	0:01:03	0:01:20	0:02:23
Vehicle 39	1:38:26 PM	1	1:38:26 PM	1:38:45 PM	0:00:00	0:00:19	0:00:19
Vehicle 40	1:43:00 PM	1	1:43:00 PM	1:43:28 PM	0:00:00	0:00:28	0:00:28
Vehicle 41	1:43:46 PM	1	1:43:46 PM	1:45:41 PM	0:00:00	0:01:55	0:01:55
Vehicle 42	2:05:08 PM	1	2:05:08 PM	2:05:24 PM	0:00:00	0:00:16	0:00:16
Vehicle 43	2:05:14 PM	2	2:05:30 PM	2:05:38 PM	0:00:16	0:00:08	0:00:24
Vehicle 44	2:09:06 PM	1	2:09:06 PM	2:09:45 PM	0:00:00	0:00:39	0:00:39
Vehicle 45	2:18:41 PM	1	2:18:41 PM	2:18:55 PM	0:00:00	0:00:14	0:00:14
Vehicle 46	2:23:04 PM	1	2:23:04 PM	2:23:56 PM	0:00:00	0:00:52	0:00:52
Vehicle 47	2:23:09 PM	2	2:24:09 PM	2:28:51 PM	0:01:00	0:04:42	0:05:42
Vehicle 48	2:26:08 PM	2	2:28:55 PM	2:31:59 PM	0:02:47	0:03:04	0:05:51
Vehicle 49	2:31:21 PM	2	2:32:09 PM	2:32:45 PM	0:00:48	0:00:36	0:01:24
Vehicle 50	2:32:28 PM	2	2:32:56 PM	2:34:22 PM	0:00:28	0:01:26	0:01:54
Vehicle 51	2:40:23 PM	1	2:40:23 PM	2:40:38 PM	0:00:00	0:00:15	0:00:15
Vehicle 52	2:41:55 PM	1	2:41:55 PM	2:42:13 PM	0:00:00	0:00:18	0:00:18
Vehicle 53	2:46:01 PM	1	2:46:01 PM	2:47:43 PM	0:00:00	0:01:42	0:01:42
Vehicle 54	2:49:12 PM	1	2:49:12 PM	2:50:45 PM	0:00:00	0:01:33	0:01:33
Vehicle 55	2:59:06 PM	1	2:59:06 PM	3:00:16 PM	0:00:00	0:01:10	0:01:10
Vehicle 56	3:07:41 PM	1	3:07:41 PM	3:08:19 PM	0:00:00	0:00:38	0:00:38
Vehicle 57	3:15:30 PM	1	3:15:30 PM	3:16:05 PM	0:00:00	0:00:35	0:00:35
Vehicle 58	3:43:37 PM	1	3:43:37 PM	3:45:46 PM	0:00:00	0:02:09	0:02:09
Vehicle 59	3:50:34 PM	1	3:50:34 PM	3:51:20 PM	0:00:00	0:00:46	0:00:46
Vehicle 60	4:04:00 PM	1	4:04:00 PM	4:04:19 PM	0:00:00	0:00:19	0:00:19
Vehicle 61	4:12:12 PM	1	4:12:12 PM	4:12:55 PM	0:00:00	0:00:43	0:00:43
Vehicle 62	4:13:52 PM	1	4:13:52 PM	4:14:28 PM	0:00:00	0:00:36	0:00:36
Vehicle 63	4:14:07 PM	2	4:14:37 PM	4:15:21 PM	0:00:30	0:00:44	0:01:14
Vehicle 64	4:20:38 PM	1	4:20:38 PM	4:21:41 PM	0:00:00	0:01:03	0:01:03
Vehicle 65	4:22:09 PM	1	4:22:09 PM	4:23:02 PM	0:00:00	0:00:53	0:00:53
Vehicle 66	4:25:50 PM	1	4:25:50 PM	4:26:22 PM	0:00:00	0:00:32	0:00:32
Vehicle 67	4:26:05 PM	2	4:26:29 PM	4:26:57 PM	0:00:24	0:00:28	0:00:52
Vehicle 68	4:32:28 PM	1	4:32:28 PM	4:33:33 PM	0:00:00	0:01:05	0:01:05
Vehicle 69	4:32:53 PM	2	4:33:40 PM	4:34:22 PM	0:00:47	0:00:42	0:01:29
Vehicle 70	4:42:35 PM	1	4:42:35 PM	4:44:01 PM	0:00:00	0:01:26	0:01:26
Vehicle 71	4:46:09 PM	1	4:46:09 PM	4:47:07 PM	0:00:00	0:00:58	0:00:58

Vehicle 72	4:54:30 PM	1	4:54:30 PM	4:54:57 PM	0:00:00	0:00:27	0:00:27
Vehicle 73	4:56:22 PM	1	4:56:22 PM	4:57:35 PM	0:00:00	0:01:13	0:01:13
Vehicle 74	5:00:32 PM	1	5:00:32 PM	5:00:58 PM	0:00:00	0:00:26	0:00:26
Vehicle 75	5:03:25 PM	1	5:03:25 PM	5:03:52 PM	0:00:00	0:00:27	0:00:27
Vehicle 76	5:07:27 PM	1	5:07:27 PM	5:08:26 PM	0:00:00	0:00:59	0:00:59
Vehicle 77	5:09:00 PM	1	5:09:00 PM	5:10:02 PM	0:00:00	0:01:02	0:01:02
Vehicle 78	5:10:10 PM	1	5:10:10 PM	5:11:25 PM	0:00:00	0:01:15	0:01:15
Vehicle 79	5:12:22 PM	1	5:12:22 PM	5:13:27 PM	0:00:00	0:01:05	0:01:05
Vehicle 80	5:15:23 PM	1	5:15:23 PM	5:16:03 PM	0:00:00	0:00:40	0:00:40
Vehicle 81	5:16:38 PM	1	5:16:38 PM	5:17:18 PM	0:00:00	0:00:40	0:00:40
Vehicle 82	5:18:58 PM	1	5:18:58 PM	5:19:47 PM	0:00:00	0:00:49	0:00:49
Vehicle 83	5:22:42 PM	1	5:22:42 PM	5:24:51 PM	0:00:00	0:02:09	0:02:09
Vehicle 84	5:23:20 PM	2	5:24:58 PM	5:27:17 PM	0:01:38	0:02:19	0:03:57
Vehicle 85	5:24:07 PM	3	5:27:23 PM	5:28:58 PM	0:03:16	0:01:35	0:04:51
Vehicle 86	5:24:17 PM	4	5:29:04 PM	5:30:14 PM	0:04:47	0:01:10	0:05:57
Vehicle 87	5:25:07 PM	4	5:30:20 PM	5:30:42 PM	0:05:13	0:00:22	0:05:35
Vehicle 88	5:25:43 PM	5	5:30:52 PM	5:31:18 PM	0:05:09	0:00:26	0:05:35
Vehicle 89	5:30:20 PM	4	5:31:25 PM	5:32:06 PM	0:01:05	0:00:41	0:01:46
Vehicle 90	5:31:15 PM	3	5:32:12 PM	5:33:41 PM	0:00:57	0:01:29	0:02:26
Vehicle 91	5:35:57 PM	1	5:35:57 PM	5:36:51 PM	0:00:00	0:00:54	0:00:54
Vehicle 92	5:37:16 PM	1	5:37:16 PM	5:37:51 PM	0:00:00	0:00:35	0:00:35
Vehicle 93	5:40:58 PM	1	5:40:58 PM	5:41:35 PM	0:00:00	0:00:37	0:00:37
Vehicle 94	5:49:32 PM	1	5:49:32 PM	5:50:17 PM	0:00:00	0:00:45	0:00:45
Vehicle 95	5:51:17 PM	1	5:51:17 PM	5:52:05 PM	0:00:00	0:00:48	0:00:48
Vehicle 96	5:54:11 PM	1	5:54:11 PM	6:01:25 PM	0:00:00	0:07:14	0:07:14
Vehicle 97	5:58:21 PM	1	6:01:31 PM	6:02:16 PM	0:03:10	0:00:45	0:03:55
Vehicle 98	6:03:33 PM	1	6:03:33 PM	6:04:30 PM	0:00:00	0:00:57	0:00:57
Vehicle 99	6:04:24 PM	2	6:04:40 PM	6:04:46 PM	0:00:16	0:00:06	0:00:22
Vehicle 100	6:11:40 PM	1	6:11:40 PM	6:12:00 PM	0:00:00	0:00:20	0:00:20
Vehicle 101	6:13:14 PM	1	6:13:14 PM	6:14:53 PM	0:00:00	0:01:39	0:01:39
Vehicle 102	6:14:35 PM	2	6:14:59 PM	6:15:29 PM	0:00:24	0:00:30	0:00:54
Vehicle 103	6:15:35 PM	1	6:15:35 PM	6:17:21 PM	0:00:00	0:01:46	0:01:46
Vehicle 104	6:16:46 PM	2	6:17:26 PM	6:18:18 PM	0:00:40	0:00:52	0:01:32
Vehicle 105	6:18:05 PM	2	6:18:23 PM	6:20:01 PM	0:00:18	0:01:38	0:01:56
Vehicle 106	6:19:32 PM	2	6:20:10 PM	6:20:50 PM	0:00:38	0:00:40	0:01:18
Vehicle 107	6:22:55 PM	1	6:22:55 PM	6:26:10 PM	0:00:00	0:03:15	0:03:15
Vehicle 108	6:26:28 PM	1	6:26:28 PM	6:28:52 PM	0:00:00	0:02:24	0:02:24
Vehicle 109	6:28:37 PM	2	6:28:58 PM	6:30:03 PM	0:00:21	0:01:05	0:01:26
Vehicle 110	6:28:50 PM	3	6:30:12 PM	6:31:06 PM	0:01:22	0:00:54	0:02:16
Vehicle 111	6:32:32 PM	1	6:32:32 PM	6:37:13 PM	0:00:00	0:04:41	0:04:41
Vehicle 112	6:33:24 PM	2	6:37:22 PM	6:38:40 PM	0:03:58	0:01:18	0:05:16
Vehicle 113	6:34:07 PM	3	6:38:47 PM	6:40:12 PM	0:04:40	0:01:25	0:06:05
Vehicle 114	6:35:51 PM	3	6:40:18 PM	6:40:53 PM	0:04:27	0:00:35	0:05:02
Vehicle 115	6:37:53 PM	4	6:41:01 PM	6:41:17 PM	0:03:08	0:00:16	0:03:24
Vehicle 116	6:38:06 PM	5	6:41:22 PM	6:41:57 PM	0:03:16	0:00:35	0:03:51
Vehicle 117	6:39:05 PM	5	6:42:02 PM	6:43:06 PM	0:02:57	0:01:04	0:04:01
Vehicle 118	6:39:55 PM	6	6:43:14 PM	6:43:43 PM	0:03:19	0:00:29	0:03:48
Vehicle 119	6:40:57 PM	6	6:43:46 PM	6:44:11 PM	0:02:49	0:00:25	0:03:14
Vehicle 120	6:44:30 PM	1	6:44:30 PM	6:45:12 PM	0:00:00	0:00:42	0:00:42
Vehicle 121	6:45:55 PM	1	6:45:55 PM	6:47:01 PM	0:00:00	0:01:06	0:01:06
Vehicle 122	6:47:45 PM	1	6:47:45 PM	6:48:11 PM	0:00:00	0:00:26	0:00:26
Vehicle 123	6:49:21 PM	1	6:49:21 PM	6:50:16 PM	0:00:00	0:00:55	0:00:55
Vehicle 124	6:50:01 PM	2	6:50:28 PM	6:51:53 PM	0:00:27	0:01:25	0:01:52
Vehicle 125	6:52:07 PM	1	6:52:07 PM	6:52:34 PM	0:00:00	0:00:27	0:00:27
Vehicle 126	6:53:18 PM	1	6:53:18 PM	6:54:18 PM	0:00:00	0:01:00	0:01:00
Vehicle 127	6:58:23 PM	1	6:58:23 PM	6:59:08 PM	0:00:00	0:00:45	0:00:45
Vehicle 128	6:58:53 PM	2	6:59:14 PM	6:59:51 PM	0:00:21	0:00:37	0:00:58
Vehicle 129	6:59:06 PM	3	6:59:57 PM	7:00:34 PM	0:00:51	0:00:37	0:01:28
Vehicle 130	7:02:20 PM	1	7:02:20 PM	7:03:00 PM	0:00:00	0:00:40	0:00:40
Vehicle 131	7:07:28 PM	1	7:07:28 PM	7:07:47 PM	0:00:00	0:00:19	0:00:19
Vehicle 132	7:11:18 PM	1	7:11:18 PM	7:14:06 PM	0:00:00	0:02:48	0:02:48
Vehicle 133	7:19:22 PM	1	7:19:22 PM	7:20:36 PM	0:00:00	0:01:14	0:01:14
Vehicle 134	7:20:30 PM	2	7:20:42 PM	7:22:11 PM	0:00:12	0:01:29	0:01:41
Vehicle 135	7:29:56 PM	1	7:29:56 PM	7:30:18 PM	0:00:00	0:00:22	0:00:22
Vehicle 136	7:31:00 PM	1	7:31:00 PM	7:32:26 PM	0:00:00	0:01:26	0:01:26
Vehicle 137	7:31:40 PM	2	7:32:36 PM	7:33:39 PM	0:00:56	0:01:03	0:01:59
Vehicle 138	7:37:19 PM	1	7:37:19 PM	7:37:53 PM	0:00:00	0:00:34	0:00:34
Vehicle 139	7:39:14 PM	1	7:39:14 PM	7:39:39 PM	0:00:00	0:00:25	0:00:25
Vehicle 140	7:41:41 PM	1	7:41:41 PM	7:44:08 PM	0:00:00	0:02:27	0:02:27
Vehicle 141	7:44:40 PM	1	7:44:40 PM	7:48:23 PM	0:00:00	0:03:43	0:03:43
Vehicle 142	7:46:07 PM	2	7:48:30 PM	7:49:04 PM	0:02:23	0:00:34	0:02:57
Vehicle 143	7:48:41 PM	2	7:49:11 PM	7:50:36 PM	0:00:30	0:01:25	0:01:55
Vehicle 144	7:48:52 PM	3	7:50:41 PM	7:52:20 PM	0:01:49	0:01:39	0:03:28
Vehicle 145	7:52:44 PM	1	7:52:44 PM	8:00:01 PM	0:00:00	0:07:17	0:07:17
Vehicle 146	7:58:39 PM	2	7:58:39 PM	8:00:32 PM	0:00:00	0:01:53	0:01:53

Vehicle 147	7:59:03 PM	3	8:00:37 PM	8:01:45 PM	0:01:34	0:01:08	0:02:42
Vehicle 148	8:01:01 PM	2	8:01:55 PM	8:02:43 PM	0:00:54	0:00:48	0:01:42
Vehicle 149	8:08:53 PM	1	8:08:53 PM	8:09:16 PM	0:00:00	0:00:23	0:00:23
Vehicle 150	8:14:17 PM	1	8:14:17 PM	8:14:58 PM	0:00:00	0:00:41	0:00:41
Vehicle 151	8:16:04 PM	1	8:16:04 PM	8:22:33 PM	0:00:00	0:06:29	0:06:29
Vehicle 152	8:21:09 PM	2	8:22:42 PM	8:24:14 PM	0:01:33	0:01:32	0:03:05
Vehicle 153	8:21:38 PM	3	8:24:21 PM	8:24:56 PM	0:02:43	0:00:35	0:03:18
Vehicle 154	8:22:26 PM	4	8:25:03 PM	8:29:25 PM	0:02:37	0:04:22	0:06:59
Vehicle 155	8:22:48 PM	4	8:29:30 PM	8:31:15 PM	0:06:42	0:01:45	0:08:27
Vehicle 156	8:24:20 PM	4	8:31:22 PM	8:32:02 PM	0:07:02	0:00:40	0:07:42
Vehicle 157	8:24:34 PM	5	8:32:11 PM	8:32:55 PM	0:07:37	0:00:44	0:08:21
Vehicle 158	8:26:00 PM	5	8:33:00 PM	8:33:29 PM	0:07:00	0:00:29	0:07:29
Vehicle 159	8:29:31 PM	5	8:33:36 PM	8:33:56 PM	0:04:05	0:00:20	0:04:25
Vehicle 160	8:30:19 PM	6	8:34:05 PM	8:34:22 PM	0:03:46	0:00:17	0:04:03
Vehicle 161	8:32:50 PM	5	8:34:31 PM	8:34:45 PM	0:01:41	0:00:14	0:01:55
Vehicle 162	8:36:08 PM	1	8:36:08 PM	8:37:16 PM	0:00:00	0:01:08	0:01:08
Vehicle 163	8:40:40 PM	1	8:40:40 PM	8:43:01 PM	0:00:00	0:02:21	0:02:21
Vehicle 164	8:43:11 PM	1	8:43:11 PM	8:44:10 PM	0:00:00	0:00:59	0:00:59
Vehicle 165	8:44:02 PM	2	8:44:16 PM	8:45:00 PM	0:00:14	0:00:44	0:00:58
Vehicle 166	8:45:47 PM	1	8:45:47 PM	8:46:21 PM	0:00:00	0:00:34	0:00:34
Vehicle 167	8:47:30 PM	1	8:47:30 PM	8:50:53 PM	0:00:00	0:03:23	0:03:23
Vehicle 168	8:49:34 PM	2	8:51:03 PM	8:51:52 PM	0:01:29	0:00:49	0:02:18
Vehicle 169	8:50:42 PM	3	8:52:02 PM	8:57:06 PM	0:01:20	0:05:04	0:06:24
Vehicle 170	8:54:33 PM	2	8:57:12 PM	8:58:43 PM	0:02:39	0:01:31	0:04:10
Vehicle 171	8:58:07 PM	2	8:58:52 PM	9:01:23 PM	0:00:45	0:02:31	0:03:16
Vehicle 172	9:09:41 PM	1	9:09:41 PM	9:12:35 PM	0:00:00	0:02:54	0:02:54
Vehicle 173	9:19:52 PM	1	9:19:52 PM	9:20:50 PM	0:00:00	0:00:58	0:00:58
Vehicle 174	9:19:58 PM	2	9:20:56 PM	9:28:48 PM	0:00:58	0:07:52	0:08:50
Vehicle 175	9:21:12 PM	2	9:23:50 PM	9:25:29 PM	0:02:38	0:01:39	0:04:17
Vehicle 176	9:22:37 PM	3	9:25:54 PM	9:26:57 PM	0:03:17	0:01:03	0:04:20
Vehicle 177	9:22:55 PM	4	9:27:01 PM	9:29:07 PM	0:04:06	0:02:06	0:06:12
Vehicle 178	9:36:05 PM	1	9:36:05 PM	9:37:15 PM	0:00:00	0:01:10	0:01:10
Vehicle 179	9:36:25 PM	2	9:37:22 PM	9:39:35 PM	0:00:57	0:02:13	0:03:10
Vehicle 180	9:38:03 PM	2	9:39:41 PM	9:40:25 PM	0:01:38	0:00:44	0:02:22

Restaurant Location: 1291 Hill Road N., Pickerington, OH 43147							
Data Collection Date: Friday, August 5, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:45:00 AM	1	10:45:00 AM	10:52:18 AM	0:00:00	0:07:18	0:07:18
Vehicle 2	10:45:01 AM	2	10:52:27 AM	10:53:06 AM	0:07:26	0:00:39	0:08:05
Vehicle 3	11:12:02 AM	1	11:12:02 AM	11:13:34 AM	0:00:00	0:01:32	0:01:32
Vehicle 4	11:13:51 AM	1	11:13:51 AM	11:15:04 AM	0:00:00	0:01:13	0:01:13
Vehicle 5	11:14:46 AM	2	11:15:10 AM	11:15:46 AM	0:00:24	0:00:36	0:01:00
Vehicle 6	11:18:52 AM	1	11:18:52 AM	11:19:08 AM	0:00:00	0:00:16	0:00:16
Vehicle 7	11:25:12 AM	1	11:25:12 AM	11:25:34 AM	0:00:00	0:00:22	0:00:22
Vehicle 8	11:25:56 AM	1	11:25:56 AM	11:26:22 AM	0:00:00	0:00:26	0:00:26
Vehicle 9	11:30:22 AM	1	11:30:22 AM	11:33:51 AM	0:00:00	0:03:29	0:03:29
Vehicle 10	11:33:25 AM	2	11:33:58 AM	11:34:21 AM	0:00:33	0:00:23	0:00:56
Vehicle 11	11:35:23 AM	1	11:35:23 AM	11:35:44 AM	0:00:00	0:00:21	0:00:21
Vehicle 12	11:35:53 AM	1	11:35:53 AM	11:36:31 AM	0:00:00	0:00:38	0:00:38
Vehicle 13	11:35:58 AM	2	11:36:35 AM	11:36:51 AM	0:00:37	0:00:16	0:00:53
Vehicle 14	11:36:43 AM	2	11:36:57 AM	11:38:23 AM	0:00:14	0:01:26	0:01:40
Vehicle 15	11:41:07 AM	1	11:41:07 AM	11:41:56 AM	0:00:00	0:00:49	0:00:49
Vehicle 16	11:43:55 AM	1	11:43:55 AM	11:43:35 AM	0:00:00	0:01:40	0:01:40
Vehicle 17	11:48:00 AM	1	11:48:00 AM	11:49:15 AM	0:00:00	0:01:15	0:01:15
Vehicle 18	11:48:20 AM	2	11:49:20 AM	11:49:49 AM	0:01:00	0:00:29	0:01:29
Vehicle 19	11:50:12 AM	1	11:50:12 AM	11:50:36 AM	0:00:00	0:00:24	0:00:24
Vehicle 20	11:51:25 AM	1	11:51:25 AM	11:52:20 AM	0:00:00	0:00:55	0:00:55
Vehicle 21	11:53:56 AM	1	11:53:56 AM	11:54:51 AM	0:00:00	0:00:55	0:00:55
Vehicle 22	11:54:37 AM	2	11:54:57 AM	11:55:24 AM	0:00:20	0:00:27	0:00:47
Vehicle 23	11:55:06 AM	2	11:55:34 AM	11:56:17 AM	0:00:28	0:00:43	0:01:11
Vehicle 24	11:55:24 AM	3	11:56:25 AM	11:57:28 AM	0:01:01	0:01:03	0:02:04
Vehicle 25	12:02:17 PM	1	12:02:17 PM	12:03:14 PM	0:00:00	0:00:57	0:00:57
Vehicle 26	12:02:38 PM	2	12:03:22 PM	12:03:46 PM	0:00:44	0:00:24	0:01:08
Vehicle 27	12:05:35 PM	1	12:05:35 PM	12:07:29 PM	0:00:00	0:01:54	0:01:54
Vehicle 28	12:07:29 PM	2	12:07:37 PM	12:08:23 PM	0:00:08	0:00:46	0:00:54
Vehicle 29	12:08:34 PM	1	12:08:34 PM	12:09:20 PM	0:00:00	0:00:46	0:00:46
Vehicle 30	12:13:30 PM	1	12:13:30 PM	12:14:43 PM	0:00:00	0:01:13	0:01:13
Vehicle 31	12:15:32 PM	1	12:15:32 PM	12:16:55 PM	0:00:00	0:01:23	0:01:23
Vehicle 32	12:18:28 PM	1	12:18:28 PM	12:21:25 PM	0:00:00	0:02:57	0:02:57
Vehicle 33	12:19:07 PM	2	12:21:30 PM	12:22:18 PM	0:02:23	0:00:48	0:03:11
Vehicle 34	12:28:09 PM	1	12:28:09 PM	12:37:15 PM	0:00:00	0:09:06	0:09:06
Vehicle 35	12:30:22 PM	2	12:37:21 PM	12:41:39 PM	0:06:59	0:04:18	0:11:17
Vehicle 36	12:32:04 PM	3	12:41:49 PM	12:42:17 PM	0:09:45	0:00:28	0:10:13
Vehicle 37	12:32:04 PM	4	12:42:23 PM	12:44:31 PM	0:10:19	0:02:08	0:12:27
Vehicle 38	12:32:44 PM	5	12:44:36 PM	12:51:43 PM	0:11:52	0:07:07	0:18:59
Vehicle 39	12:47:13 PM	2	12:51:50 PM	12:53:24 PM	0:04:37	0:01:34	0:06:11
Vehicle 40	12:48:05 PM	3	12:53:30 PM	1:01:32 PM	0:05:25	0:08:02	0:13:27
Vehicle 41	12:51:33 PM	4	1:01:41 PM	1:02:26 PM	0:10:08	0:00:45	0:10:53
Vehicle 42	12:57:38 PM	3	1:02:38 PM	1:03:00 PM	0:05:00	0:00:22	0:05:22
Vehicle 43	12:58:12 PM	4	1:03:10 PM	1:04:51 PM	0:04:58	0:01:41	0:06:39
Vehicle 44	12:59:08 PM	5	1:05:00 PM	1:05:42 PM	0:05:52	0:00:42	0:06:34
Vehicle 45	1:03:26 PM	3	1:05:51 PM	1:09:43 PM	0:02:25	0:03:52	0:06:17
Vehicle 46	1:05:25 PM	3	1:09:48 PM	1:16:50 PM	0:04:23	0:07:02	0:11:25
Vehicle 47	1:05:58 PM	3	1:16:54 PM	1:18:27 PM	0:10:56	0:01:33	0:12:29
Vehicle 48	1:09:53 PM	3	1:18:32 PM	1:18:59 PM	0:08:39	0:00:27	0:09:06
Vehicle 49	1:10:23 PM	4	1:19:05 PM	1:19:28 PM	0:08:42	0:00:23	0:09:05
Vehicle 50	1:11:15 PM	5	1:19:32 PM	1:20:13 PM	0:08:17	0:00:41	0:08:58
Vehicle 51	1:18:19 PM	5	1:20:22 PM	1:22:12 PM	0:02:03	0:01:50	0:03:53
Vehicle 52	1:21:07 PM	2	1:22:20 PM	1:22:43 PM	0:01:13	0:00:23	0:01:36
Vehicle 53	1:27:17 PM	1	1:27:17 PM	1:30:32 PM	0:00:00	0:03:15	0:03:15
Vehicle 54	1:27:31 PM	2	1:30:40 PM	1:31:29 PM	0:03:09	0:00:49	0:03:58
Vehicle 55	1:33:01 PM	1	1:33:01 PM	1:33:44 PM	0:00:00	0:00:43	0:00:43
Vehicle 56	1:34:40 PM	1	1:34:40 PM	1:35:49 PM	0:00:00	0:01:09	0:01:09
Vehicle 57	1:39:03 PM	1	1:39:03 PM	1:45:58 PM	0:00:00	0:06:55	0:06:55
Vehicle 58	1:39:14 PM	2	1:46:04 PM	1:47:12 PM	0:06:50	0:01:08	0:07:58
Vehicle 59	1:48:54 PM	1	1:48:54 PM	1:50:30 PM	0:00:00	0:01:36	0:01:36
Vehicle 60	1:50:56 PM	1	1:50:56 PM	1:55:09 PM	0:00:00	0:04:13	0:04:13
Vehicle 61	1:51:41 PM	2	1:55:14 PM	1:59:29 PM	0:03:33	0:04:15	0:07:48
Vehicle 62	1:53:55 PM	3	1:59:34 PM	2:02:00 PM	0:05:39	0:02:26	0:08:05
Vehicle 63	1:53:59 PM	4	2:02:07 PM	2:02:53 PM	0:08:08	0:00:46	0:08:54
Vehicle 64	1:54:46 PM	5	2:03:01 PM	2:04:44 PM	0:08:15	0:01:43	0:09:58
Vehicle 65	2:08:40 PM	1	2:08:40 PM	2:10:47 PM	0:00:00	0:02:07	0:02:07
Vehicle 66	2:22:05 PM	1	2:22:05 PM	2:25:32 PM	0:00:00	0:03:27	0:03:27
Vehicle 67	2:22:37 PM	2	2:25:40 PM	2:26:05 PM	0:03:03	0:00:25	0:03:28
Vehicle 68	2:23:20 PM	3	2:26:12 PM	2:26:35 PM	0:02:52	0:00:23	0:03:15
Vehicle 69	2:41:53 PM	1	2:41:53 PM	2:43:00 PM	0:00:00	0:01:07	0:01:07
Vehicle 70	2:42:40 PM	2	2:43:05 PM	2:43:44 PM	0:00:25	0:00:39	0:01:04
Vehicle 71	2:48:46 PM	1	2:48:46 PM	2:54:51 PM	0:00:00	0:06:05	0:06:05

Vehicle 72	2:51:02 PM	2	2:55:05 PM	2:55:48 PM	0:04:03	0:00:43	0:04:46
Vehicle 73	3:04:27 PM	1	3:04:27 PM	3:04:47 PM	0:00:00	0:00:20	0:00:20
Vehicle 74	3:08:35 PM	1	3:08:35 PM	3:09:31 PM	0:00:00	0:00:56	0:00:56
Vehicle 75	3:09:04 PM	2	3:09:41 PM	3:10:21 PM	0:00:37	0:00:40	0:01:17
Vehicle 76	3:15:12 PM	1	3:15:12 PM	3:15:58 PM	0:00:00	0:00:46	0:00:46
Vehicle 77	3:24:40 PM	1	3:24:40 PM	3:30:49 PM	0:00:00	0:06:09	0:06:09
Vehicle 78	3:29:24 PM	2	3:30:57 PM	3:31:16 PM	0:01:33	0:00:19	0:01:52
Vehicle 79	3:40:28 PM	1	3:40:28 PM	3:42:16 PM	0:00:00	0:01:48	0:01:48
Vehicle 80	3:40:42 PM	2	3:42:21 PM	3:43:05 PM	0:01:39	0:00:44	0:02:23
Vehicle 81	3:46:05 PM	1	3:46:05 PM	3:46:28 PM	0:00:00	0:00:23	0:00:23
Vehicle 82	3:47:10 PM	1	3:47:10 PM	3:48:43 PM	0:00:00	0:01:33	0:01:33
Vehicle 83	3:51:07 PM	1	3:51:07 PM	3:52:05 PM	0:00:00	0:00:58	0:00:58
Vehicle 84	3:53:13 PM	1	3:53:13 PM	3:55:38 PM	0:00:00	0:02:25	0:02:25
Vehicle 85	3:57:30 PM	1	3:57:30 PM	4:05:11 PM	0:00:00	0:07:41	0:07:41
Vehicle 86	3:58:32 PM	2	4:05:19 PM	4:06:34 PM	0:06:47	0:01:15	0:08:02
Vehicle 87	4:02:46 PM	3	4:06:41 PM	4:08:52 PM	0:03:55	0:02:11	0:06:06
Vehicle 88	4:15:38 PM	1	4:15:38 PM	4:16:59 PM	0:00:00	0:01:21	0:01:21
Vehicle 89	4:16:45 PM	2	4:17:05 PM	4:20:02 PM	0:00:20	0:02:57	0:03:17
Vehicle 90	4:24:35 PM	1	4:24:35 PM	4:26:11 PM	0:00:00	0:01:36	0:01:36
Vehicle 91	4:26:40 PM	1	4:26:40 PM	4:27:35 PM	0:00:00	0:00:55	0:00:55
Vehicle 92	4:27:14 PM	2	4:27:43 PM	4:28:10 PM	0:00:29	0:00:27	0:00:56
Vehicle 93	4:40:53 PM	1	4:40:53 PM	4:42:47 PM	0:00:00	0:01:54	0:01:54
Vehicle 94	4:41:54 PM	2	4:42:54 PM	4:43:37 PM	0:01:00	0:00:43	0:01:43
Vehicle 95	4:44:20 PM	1	4:44:20 PM	4:47:44 PM	0:00:00	0:03:24	0:03:24
Vehicle 96	4:44:22 PM	2	4:47:50 PM	4:48:27 PM	0:03:28	0:00:37	0:04:05
Vehicle 97	4:47:35 PM	3	4:48:30 PM	4:49:45 PM	0:00:55	0:01:15	0:02:10
Vehicle 98	4:47:48 PM	3	4:49:52 PM	4:50:47 PM	0:02:04	0:00:55	0:02:59
Vehicle 99	4:50:55 PM	1	4:50:55 PM	4:52:00 PM	0:00:00	0:01:05	0:01:05
Vehicle 100	4:56:56 PM	1	4:56:56 PM	4:58:26 PM	0:00:00	0:01:30	0:01:30
Vehicle 101	4:57:31 PM	2	4:58:33 PM	4:59:28 PM	0:01:02	0:00:55	0:01:57
Vehicle 102	5:02:24 PM	1	5:02:24 PM	5:02:45 PM	0:00:00	0:00:21	0:00:21
Vehicle 103	5:08:43 PM	1	5:08:43 PM	5:11:29 PM	0:00:00	0:02:46	0:02:46
Vehicle 104	5:16:20 PM	1	5:16:20 PM	5:17:05 PM	0:00:00	0:00:45	0:00:45
Vehicle 105	5:16:00 PM	2	5:17:08 PM	5:18:52 PM	0:01:08	0:01:44	0:02:52
Vehicle 106	5:21:18 PM	1	5:21:18 PM	5:22:41 PM	0:00:00	0:01:23	0:01:23
Vehicle 107	5:21:26 PM	2	5:22:53 PM	5:23:29 PM	0:01:27	0:00:36	0:02:03
Vehicle 108	5:24:13 PM	1	5:24:13 PM	5:24:31 PM	0:00:00	0:00:18	0:00:18
Vehicle 109	5:25:30 PM	1	5:25:30 PM	5:27:40 PM	0:00:00	0:02:10	0:02:10
Vehicle 110	5:25:43 PM	2	5:27:45 PM	5:28:53 PM	0:02:02	0:01:08	0:03:10
Vehicle 111	5:28:37 PM	2	5:29:01 PM	5:29:43 PM	0:00:24	0:00:42	0:01:06
Vehicle 112	5:29:07 PM	2	5:29:50 PM	5:32:31 PM	0:00:43	0:02:41	0:03:24
Vehicle 113	5:29:12 PM	3	5:32:40 PM	5:35:44 PM	0:03:28	0:03:04	0:06:32
Vehicle 114	5:34:12 PM	2	5:35:48 PM	5:37:42 PM	0:01:36	0:01:54	0:03:30
Vehicle 115	5:34:24 PM	3	5:37:49 PM	5:39:40 PM	0:03:25	0:01:51	0:05:16
Vehicle 116	5:34:30 PM	4	5:39:42 PM	5:40:01 PM	0:05:12	0:00:19	0:05:31
Vehicle 117	5:38:05 PM	3	5:40:07 PM	5:40:25 PM	0:02:02	0:00:18	0:02:20
Vehicle 118	5:40:29 PM	1	5:40:29 PM	5:41:42 PM	0:00:00	0:01:13	0:01:13
Vehicle 119	5:44:52 PM	1	5:44:52 PM	5:48:55 PM	0:00:00	0:04:03	0:04:03
Vehicle 120	5:46:14 PM	2	5:49:00 PM	5:50:12 PM	0:02:46	0:01:12	0:03:58
Vehicle 121	5:47:34 PM	3	5:50:21 PM	5:51:14 PM	0:02:47	0:00:53	0:03:40
Vehicle 122	5:47:37 PM	4	5:51:19 PM	5:51:31 PM	0:03:42	0:00:12	0:03:54
Vehicle 123	5:48:16 PM	5	5:51:39 PM	5:52:36 PM	0:03:23	0:00:57	0:04:20
Vehicle 124	5:52:17 PM	2	5:52:41 PM	5:53:07 PM	0:00:24	0:00:26	0:00:50
Vehicle 125	5:53:29 PM	1	5:53:29 PM	5:53:55 PM	0:00:00	0:00:26	0:00:26
Vehicle 126	5:58:35 PM	1	5:58:35 PM	6:00:25 PM	0:00:00	0:01:50	0:01:50
Vehicle 127	6:00:22 PM	2	6:00:30 PM	6:03:00 PM	0:00:08	0:02:30	0:02:38
Vehicle 128	6:00:36 PM	2	6:03:37 PM	6:05:32 PM	0:03:01	0:01:55	0:04:56
Vehicle 129	6:02:31 PM	3	6:05:37 PM	6:06:30 PM	0:03:06	0:00:53	0:03:59
Vehicle 130	6:04:25 PM	3	6:06:36 PM	6:07:52 PM	0:02:11	0:01:16	0:03:27
Vehicle 131	6:05:05 PM	4	6:07:59 PM	6:08:25 PM	0:02:54	0:00:26	0:03:20
Vehicle 132	6:07:46 PM	3	6:08:36 PM	6:12:26 PM	0:00:50	0:03:50	0:04:40
Vehicle 133	6:09:25 PM	2	6:12:32 PM	6:12:57 PM	0:03:07	0:00:25	0:03:32
Vehicle 134	6:12:50 PM	2	6:13:06 PM	6:13:20 PM	0:00:16	0:00:14	0:00:30
Vehicle 135	6:13:37 PM	1	6:13:37 PM	6:16:04 PM	0:00:00	0:02:27	0:02:27
Vehicle 136	6:16:15 PM	1	6:16:15 PM	6:18:15 PM	0:00:00	0:02:00	0:02:00
Vehicle 137	6:18:07 PM	2	6:18:18 PM	6:19:21 PM	0:00:11	0:01:03	0:01:14
Vehicle 138	6:18:07 PM	3	6:19:25 PM	6:25:17 PM	0:01:18	0:05:52	0:07:10
Vehicle 139	6:23:57 PM	2	6:25:22 PM	6:25:46 PM	0:01:25	0:00:24	0:01:49
Vehicle 140	6:24:16 PM	3	6:25:54 PM	6:26:49 PM	0:01:38	0:00:55	0:02:33
Vehicle 141	6:30:29 PM	1	6:30:29 PM	6:33:22 PM	0:00:00	0:02:53	0:02:53
Vehicle 142	6:31:44 PM	2	6:33:29 PM	6:35:52 PM	0:01:45	0:02:23	0:04:08
Vehicle 143	6:35:17 PM	2	6:36:00 PM	6:36:48 PM	0:00:43	0:00:48	0:01:31
Vehicle 144	6:36:11 PM	2	6:36:58 PM	6:37:24 PM	0:00:47	0:00:26	0:01:13
Vehicle 145	6:38:36 PM	1	6:38:36 PM	6:39:15 PM	0:00:00	0:00:39	0:00:39
Vehicle 146	6:42:16 PM	1	6:42:16 PM	6:43:00 PM	0:00:00	0:00:44	0:00:44

Vehicle 147	6:47:54 PM	1	6:47:54 PM	6:49:48 PM	0:00:00	0:01:54	0:01:54
Vehicle 148	6:49:20 PM	2	6:49:59 PM	6:50:37 PM	0:00:39	0:00:38	0:01:17
Vehicle 149	6:50:17 PM	2	6:50:42 PM	6:51:10 PM	0:00:25	0:00:28	0:00:53
Vehicle 150	6:51:32 PM	1	6:51:32 PM	6:52:44 PM	0:00:00	0:01:12	0:01:12
Vehicle 151	6:55:16 PM	1	6:55:16 PM	6:56:45 PM	0:00:00	0:01:29	0:01:29
Vehicle 152	6:59:13 PM	1	6:59:13 PM	7:02:24 PM	0:00:00	0:03:11	0:03:11
Vehicle 153	7:01:10 PM	2	7:02:29 PM	7:03:01 PM	0:01:19	0:00:32	0:01:51
Vehicle 154	7:01:54 PM	3	7:03:07 PM	7:03:28 PM	0:01:13	0:00:21	0:01:34
Vehicle 155	7:03:37 PM	1	7:03:37 PM	7:05:25 PM	0:00:00	0:01:48	0:01:48
Vehicle 156	7:03:47 PM	2	7:05:30 PM	7:10:37 PM	0:01:43	0:05:07	0:06:50
Vehicle 157	7:05:59 PM	2	7:10:42 PM	7:11:12 PM	0:04:43	0:00:30	0:05:13
Vehicle 158	7:06:34 PM	3	7:11:17 PM	7:12:46 PM	0:04:43	0:01:29	0:06:12
Vehicle 159	7:10:08 PM	4	7:12:52 PM	7:13:27 PM	0:02:44	0:00:35	0:03:19
Vehicle 160	7:16:22 PM	1	7:16:22 PM	7:19:12 PM	0:00:00	0:02:50	0:02:50
Vehicle 161	7:17:21 PM	2	7:19:18 PM	7:20:44 PM	0:01:57	0:01:26	0:03:23
Vehicle 162	7:21:41 PM	1	7:21:41 PM	7:22:59 PM	0:00:00	0:01:18	0:01:18
Vehicle 163	7:22:19 PM	2	7:23:07 PM	7:23:46 PM	0:00:48	0:00:39	0:01:27
Vehicle 164	7:22:26 PM	3	7:23:52 PM	7:25:25 PM	0:01:26	0:01:33	0:02:59
Vehicle 165	7:24:03 PM	2	7:25:33 PM	7:26:04 PM	0:01:30	0:00:31	0:02:01
Vehicle 166	7:28:06 PM	1	7:28:06 PM	7:28:49 PM	0:00:00	0:00:43	0:00:43
Vehicle 167	7:30:31 PM	1	7:30:31 PM	7:32:06 PM	0:00:00	0:01:35	0:01:35
Vehicle 168	7:34:30 PM	1	7:34:30 PM	7:35:03 PM	0:00:00	0:00:33	0:00:33
Vehicle 169	7:35:27 PM	1	7:35:27 PM	7:37:42 PM	0:00:00	0:02:15	0:02:15
Vehicle 170	7:37:38 PM	2	7:37:51 PM	7:39:02 PM	0:00:13	0:01:11	0:01:24
Vehicle 171	7:37:53 PM	2	7:39:10 PM	7:39:49 PM	0:01:17	0:00:39	0:01:56
Vehicle 172	7:39:20 PM	2	7:39:52 PM	7:40:44 PM	0:00:32	0:00:52	0:01:24
Vehicle 173	7:40:27 PM	2	7:40:49 PM	7:42:48 PM	0:00:22	0:01:59	0:02:21
Vehicle 174	7:41:03 PM	2	7:42:54 PM	7:43:47 PM	0:01:51	0:00:53	0:02:44
Vehicle 175	7:41:21 PM	3	7:43:52 PM	7:44:48 PM	0:02:31	0:00:56	0:03:27
Vehicle 176	7:44:59 PM	1	7:44:59 PM	7:49:20 PM	0:00:00	0:04:21	0:04:21
Vehicle 177	7:59:03 PM	1	7:59:03 PM	7:59:55 PM	0:00:00	0:00:52	0:00:52
Vehicle 178	7:59:27 PM	2	8:00:00 PM	8:00:46 PM	0:00:33	0:00:46	0:01:19
Vehicle 179	8:03:37 PM	1	8:03:37 PM	8:05:20 PM	0:00:00	0:01:43	0:01:43
Vehicle 180	8:09:11 PM	1	8:09:11 PM	8:18:45 PM	0:00:00	0:09:34	0:09:34
Vehicle 181	8:11:04 PM	2	8:18:52 PM	8:19:51 PM	0:07:48	0:00:59	0:08:47
Vehicle 182	8:13:53 PM	3	8:20:00 PM	8:21:38 PM	0:06:07	0:01:38	0:07:45
Vehicle 183	8:15:11 PM	4	8:21:43 PM	8:22:29 PM	0:06:32	0:00:46	0:07:18
Vehicle 184	8:16:56 PM	5	8:22:34 PM	8:23:56 PM	0:05:38	0:01:22	0:07:00
Vehicle 185	8:27:19 PM	1	8:27:19 PM	8:28:11 PM	0:00:00	0:00:52	0:00:52
Vehicle 186	8:37:09 PM	1	8:37:09 PM	8:38:56 PM	0:00:00	0:01:47	0:01:47
Vehicle 187	8:37:29 PM	2	8:39:00 PM	8:40:30 PM	0:01:31	0:01:30	0:03:01
Vehicle 188	8:38:01 PM	3	8:40:37 PM	8:41:18 PM	0:02:36	0:00:41	0:03:17
Vehicle 189	8:42:26 PM	1	8:42:26 PM	8:45:15 PM	0:00:00	0:02:49	0:02:49
Vehicle 190	8:43:33 PM	2	8:45:22 PM	8:46:33 PM	0:01:49	0:01:11	0:03:00
Vehicle 191	8:45:37 PM	2	8:46:38 PM	8:47:37 PM	0:01:01	0:00:59	0:02:00
Vehicle 192	8:47:10 PM	2	8:47:44 PM	8:53:45 PM	0:00:34	0:06:01	0:06:35
Vehicle 193	8:53:33 PM	2	8:53:54 PM	8:55:27 PM	0:00:21	0:01:33	0:01:54
Vehicle 194	8:54:33 PM	2	8:55:34 PM	8:56:17 PM	0:01:01	0:00:43	0:01:44
Vehicle 195	9:00:38 PM	1	9:00:38 PM	9:03:16 PM	0:00:00	0:02:38	0:02:38
Vehicle 196	9:02:26 PM	2	9:03:24 PM	9:08:29 PM	0:00:58	0:05:05	0:06:03
Vehicle 197	9:02:45 PM	3	9:08:35 PM	9:09:19 PM	0:05:50	0:00:44	0:06:34
Vehicle 198	9:02:45 PM	4	9:09:23 PM	9:12:19 PM	0:06:38	0:02:56	0:09:34
Vehicle 199	9:06:01 PM	4	9:12:24 PM	9:16:26 PM	0:06:23	0:04:02	0:10:25
Vehicle 200	9:09:25 PM	3	9:16:32 PM	9:19:39 PM	0:07:07	0:03:07	0:10:14
Vehicle 201	9:16:42 PM	2	9:19:46 PM	9:22:18 PM	0:03:04	0:02:32	0:05:36
Vehicle 202	9:17:16 PM	3	9:22:24 PM	9:24:20 PM	0:05:08	0:01:56	0:07:04
Vehicle 203	9:18:57 PM	4	9:24:26 PM	9:27:24 PM	0:05:29	0:02:58	0:08:27
Vehicle 204	9:32:46 PM	1	9:32:46 PM	9:34:05 PM	0:00:00	0:01:19	0:01:19
Vehicle 205	9:33:44 PM	2	9:34:11 PM	9:37:38 PM	0:00:27	0:03:27	0:03:54
Vehicle 206	9:37:04 PM	2	9:37:46 PM	9:41:41 PM	0:00:42	0:03:55	0:04:37
Vehicle 207	9:42:42 PM	1	9:42:42 PM	9:47:36 PM	0:00:00	0:04:54	0:04:54
Vehicle 208	9:48:43 PM	1	9:48:43 PM	9:51:10 PM	0:00:00	0:02:27	0:02:27

Restaurant Location: 1291 Hill Road N., Pickerington, OH 43147							
Data Collection Date: Saturday, August 6, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:45:00 AM	1	10:45:00 AM	10:51:46 AM	0:00:00	0:06:46	0:06:46
Vehicle 2	10:45:01 AM	2	10:51:52 AM	10:53:35 AM	0:06:51	0:01:43	0:08:34
Vehicle 3	10:53:32 AM	2	10:53:44 AM	10:54:40 AM	0:00:12	0:00:56	0:01:08
Vehicle 4	10:56:39 AM	1	10:56:39 AM	10:58:52 AM	0:00:00	0:02:13	0:02:13
Vehicle 5	10:57:10 AM	2	10:58:58 AM	11:00:30 AM	0:01:48	0:01:32	0:03:20
Vehicle 6	11:09:23 AM	1	11:09:23 AM	11:10:55 AM	0:00:00	0:01:32	0:01:32
Vehicle 7	11:22:58 AM	1	11:22:58 AM	11:24:11 AM	0:00:00	0:01:13	0:01:13
Vehicle 8	11:23:15 AM	2	11:24:19 AM	11:25:18 AM	0:01:04	0:00:59	0:02:03
Vehicle 9	11:29:11 AM	1	11:29:11 AM	11:29:47 AM	0:00:00	0:00:36	0:00:36
Vehicle 10	11:31:00 AM	1	11:31:00 AM	11:33:14 AM	0:00:00	0:02:14	0:02:14
Vehicle 11	11:34:38 AM	1	11:34:38 AM	11:35:08 AM	0:00:00	0:00:30	0:00:30
Vehicle 12	11:35:58 AM	1	11:35:58 AM	11:36:11 AM	0:00:00	0:00:13	0:00:13
Vehicle 13	11:47:10 AM	1	11:47:10 AM	11:48:41 AM	0:00:00	0:01:31	0:01:31
Vehicle 14	11:50:49 AM	1	11:50:49 AM	11:51:05 AM	0:00:00	0:00:16	0:00:16
Vehicle 15	11:53:00 AM	1	11:53:00 AM	11:53:15 AM	0:00:00	0:00:15	0:00:15
Vehicle 16	11:56:45 AM	1	11:56:45 AM	11:58:42 AM	0:00:00	0:01:57	0:01:57
Vehicle 17	11:58:33 AM	2	11:58:50 AM	12:00:08 PM	0:00:17	0:01:18	0:01:35
Vehicle 18	12:00:10 PM	1	12:00:10 PM	12:01:03 PM	0:00:00	0:00:53	0:00:53
Vehicle 19	12:06:46 PM	1	12:06:46 PM	12:07:28 PM	0:00:00	0:00:42	0:00:42
Vehicle 20	12:07:50 PM	1	12:07:50 PM	12:12:20 PM	0:00:00	0:04:30	0:04:30
Vehicle 21	12:10:14 PM	2	12:12:25 PM	12:12:40 PM	0:02:11	0:00:15	0:02:26
Vehicle 22	12:15:17 PM	1	12:15:17 PM	12:20:17 PM	0:00:00	0:05:00	0:05:00
Vehicle 23	12:19:48 PM	2	12:20:23 PM	12:21:49 PM	0:00:35	0:01:26	0:02:01
Vehicle 24	12:28:52 PM	1	12:28:52 PM	12:29:38 PM	0:00:00	0:00:46	0:00:46
Vehicle 25	12:29:24 PM	2	12:29:46 PM	12:29:54 PM	0:00:22	0:00:08	0:00:30
Vehicle 26	12:34:40 PM	1	12:34:40 PM	12:34:57 PM	0:00:00	0:00:17	0:00:17
Vehicle 27	12:42:27 PM	1	12:42:27 PM	12:43:00 PM	0:00:00	0:00:33	0:00:33
Vehicle 28	12:43:15 PM	1	12:43:15 PM	12:43:46 PM	0:00:00	0:00:31	0:00:31
Vehicle 29	12:44:41 PM	1	12:44:41 PM	12:46:02 PM	0:00:00	0:01:21	0:01:21
Vehicle 30	12:51:22 PM	1	12:51:22 PM	12:54:18 PM	0:00:00	0:02:56	0:02:56
Vehicle 31	12:52:02 PM	2	12:54:30 PM	12:57:31 PM	0:02:28	0:03:01	0:05:29
Vehicle 32	1:01:00 PM	1	1:01:00 PM	1:02:20 PM	0:00:00	0:01:20	0:01:20
Vehicle 33	1:17:50 PM	1	1:17:50 PM	1:19:00 PM	0:00:00	0:01:10	0:01:10
Vehicle 34	1:19:26 PM	1	1:19:26 PM	1:21:41 PM	0:00:00	0:02:15	0:02:15
Vehicle 35	1:21:32 PM	2	1:21:48 PM	1:23:49 PM	0:00:16	0:02:01	0:02:17
Vehicle 36	1:26:22 PM	1	1:26:22 PM	1:27:21 PM	0:00:00	0:00:59	0:00:59
Vehicle 37	1:41:12 PM	1	1:41:12 PM	1:42:35 PM	0:00:00	0:01:23	0:01:23
Vehicle 38	1:45:32 PM	1	1:45:32 PM	1:46:28 PM	0:00:00	0:00:56	0:00:56
Vehicle 39	1:48:59 PM	1	1:48:59 PM	1:49:21 PM	0:00:00	0:00:22	0:00:22
Vehicle 40	1:49:17 PM	2	1:49:32 PM	1:52:52 PM	0:00:15	0:03:20	0:03:35
Vehicle 41	1:57:41 PM	1	1:57:41 PM	2:03:13 PM	0:00:00	0:05:32	0:05:32
Vehicle 42	1:58:22 PM	2	2:03:17 PM	2:06:45 PM	0:04:55	0:03:28	0:08:23
Vehicle 43	1:59:59 PM	3	2:06:49 PM	2:07:08 PM	0:06:50	0:00:19	0:07:09
Vehicle 44	2:00:59 PM	4	2:07:13 PM	2:14:40 PM	0:06:14	0:07:27	0:13:41
Vehicle 45	2:02:58 PM	5	2:14:45 PM	2:15:25 PM	0:11:47	0:00:40	0:12:27
Vehicle 46	2:02:38 PM	6	2:15:31 PM	2:16:34 PM	0:12:53	0:01:03	0:13:56
Vehicle 47	2:03:54 PM	6	2:16:39 PM	2:17:25 PM	0:12:45	0:00:46	0:13:31
Vehicle 48	2:06:10 PM	7	2:17:30 PM	2:19:03 PM	0:11:20	0:01:33	0:12:53
Vehicle 49	2:07:48 PM	6	2:19:09 PM	2:20:32 PM	0:11:21	0:01:23	0:12:44
Vehicle 50	2:13:47 PM	7	2:20:39 PM	2:21:31 PM	0:06:52	0:00:52	0:07:44
Vehicle 51	2:16:27 PM	6	2:21:37 PM	2:22:45 PM	0:05:10	0:01:08	0:06:18
Vehicle 52	2:19:17 PM	4	2:22:53 PM	2:23:36 PM	0:03:36	0:00:43	0:04:19
Vehicle 53	2:26:55 PM	1	2:26:55 PM	2:30:07 PM	0:00:00	0:03:12	0:03:12
Vehicle 54	2:28:00 PM	2	2:30:13 PM	2:32:00 PM	0:02:13	0:01:47	0:04:00
Vehicle 55	2:30:37 PM	2	2:32:13 PM	2:32:54 PM	0:01:36	0:00:41	0:02:17
Vehicle 56	2:32:14 PM	2	2:33:02 PM	2:34:27 PM	0:00:48	0:01:25	0:02:13
Vehicle 57	2:34:50 PM	1	2:34:50 PM	2:35:00 PM	0:00:00	0:00:10	0:00:10
Vehicle 58	3:02:07 PM	1	3:02:07 PM	3:03:00 PM	0:00:00	0:00:53	0:00:53
Vehicle 59	3:04:21 PM	1	3:04:21 PM	3:04:38 PM	0:00:00	0:00:17	0:00:17
Vehicle 60	3:11:36 PM	1	3:11:36 PM	3:15:56 PM	0:00:00	0:04:20	0:04:20
Vehicle 61	3:11:39 PM	2	3:14:04 PM	3:14:47 PM	0:02:25	0:00:43	0:03:08
Vehicle 62	3:19:31 PM	1	3:19:31 PM	3:20:14 PM	0:00:00	0:00:43	0:00:43
Vehicle 63	3:19:50 PM	2	3:20:17 PM	3:21:05 PM	0:00:27	0:00:48	0:01:15
Vehicle 64	3:22:25 PM	1	3:22:25 PM	3:22:58 PM	0:00:00	0:00:33	0:00:33
Vehicle 65	3:24:37 PM	1	3:24:37 PM	3:29:16 PM	0:00:00	0:04:39	0:04:39
Vehicle 66	3:27:09 PM	2	3:29:21 PM	3:29:37 PM	0:02:12	0:00:16	0:02:28
Vehicle 67	3:51:36 PM	1	3:51:36 PM	3:52:25 PM	0:00:00	0:00:49	0:00:49
Vehicle 68	3:53:38 PM	1	3:53:38 PM	3:59:39 PM	0:00:00	0:06:01	0:06:01
Vehicle 69	3:59:04 PM	2	3:59:43 PM	4:05:46 PM	0:00:39	0:06:03	0:06:42
Vehicle 70	3:59:54 PM	3	4:05:54 PM	4:07:15 PM	0:06:00	0:01:21	0:07:21
Vehicle 71	4:00:21 PM	4	4:07:23 PM	4:07:50 PM	0:07:02	0:00:27	0:07:29

Vehicle 72	4:10:04 PM	1	4:10:04 PM	4:12:24 PM	0:00:00	0:02:20	0:02:20
Vehicle 73	4:16:08 PM	1	4:16:08 PM	4:17:14 PM	0:00:00	0:01:06	0:01:06
Vehicle 74	4:16:23 PM	2	4:17:20 PM	4:17:51 PM	0:00:57	0:00:31	0:01:28
Vehicle 75	4:24:14 PM	1	4:24:14 PM	4:25:28 PM	0:00:00	0:01:14	0:01:14
Vehicle 76	4:29:22 PM	1	4:29:22 PM	4:30:24 PM	0:00:00	0:01:02	0:01:02
Vehicle 77	4:35:24 PM	1	4:35:24 PM	4:36:03 PM	0:00:00	0:00:39	0:00:39
Vehicle 78	4:42:18 PM	1	4:42:18 PM	4:43:18 PM	0:00:00	0:01:00	0:01:00
Vehicle 79	4:42:33 PM	2	4:43:23 PM	4:43:53 PM	0:00:50	0:00:30	0:01:20
Vehicle 80	4:48:48 PM	1	4:48:48 PM	4:49:28 PM	0:00:00	0:00:40	0:00:40
Vehicle 81	4:51:08 PM	1	4:51:08 PM	4:53:38 PM	0:00:00	0:02:30	0:02:30
Vehicle 82	4:53:05 PM	2	4:53:50 PM	4:54:34 PM	0:00:45	0:00:44	0:01:29
Vehicle 83	4:54:00 PM	2	4:54:43 PM	4:55:59 PM	0:00:43	0:01:16	0:01:59
Vehicle 84	4:57:53 PM	1	4:57:53 PM	4:58:55 PM	0:00:00	0:01:02	0:01:02
Vehicle 85	4:58:44 PM	2	4:59:04 PM	5:02:49 PM	0:00:20	0:03:45	0:04:05
Vehicle 86	5:03:04 PM	1	5:03:04 PM	5:06:57 PM	0:00:00	0:03:53	0:03:53
Vehicle 87	5:11:05 PM	1	5:11:05 PM	5:14:15 PM	0:00:00	0:03:10	0:03:10
Vehicle 88	5:11:29 PM	2	5:14:21 PM	5:15:09 PM	0:02:52	0:00:48	0:03:40
Vehicle 89	5:11:58 PM	3	5:15:14 PM	5:16:02 PM	0:03:16	0:00:48	0:04:04
Vehicle 90	5:12:25 PM	4	5:16:07 PM	5:16:27 PM	0:03:42	0:00:20	0:04:02
Vehicle 91	5:17:42 PM	1	5:17:42 PM	5:18:02 PM	0:00:00	0:00:20	0:00:20
Vehicle 92	5:19:39 PM	1	5:19:39 PM	5:23:15 PM	0:00:00	0:03:36	0:03:36
Vehicle 93	5:30:08 PM	1	5:30:08 PM	5:31:00 PM	0:00:00	0:00:52	0:00:52
Vehicle 94	5:34:52 PM	1	5:34:52 PM	5:35:07 PM	0:00:00	0:00:15	0:00:15
Vehicle 95	5:41:42 PM	1	5:41:42 PM	5:42:53 PM	0:00:00	0:01:11	0:01:11
Vehicle 96	5:50:32 PM	1	5:50:32 PM	5:53:13 PM	0:00:00	0:02:41	0:02:41
Vehicle 97	5:51:16 PM	2	5:53:18 PM	5:54:41 PM	0:02:02	0:01:23	0:03:25
Vehicle 98	5:54:46 PM	1	5:54:46 PM	5:57:05 PM	0:00:00	0:02:19	0:02:19
Vehicle 99	5:58:28 PM	1	5:58:28 PM	5:59:08 PM	0:00:00	0:00:40	0:00:40
Vehicle 100	5:59:25 PM	1	5:59:25 PM	6:01:42 PM	0:00:00	0:02:17	0:02:17
Vehicle 101	6:01:48 PM	1	6:01:48 PM	6:08:14 PM	0:00:00	0:06:26	0:06:26
Vehicle 102	6:03:53 PM	2	6:08:20 PM	6:10:10 PM	0:04:27	0:01:50	0:06:17
Vehicle 103	6:04:53 PM	3	6:10:25 PM	6:10:53 PM	0:05:32	0:00:28	0:06:00
Vehicle 104	6:05:22 PM	4	6:11:01 PM	6:12:28 PM	0:05:39	0:01:27	0:07:06
Vehicle 105	6:11:16 PM	2	6:12:38 PM	6:18:54 PM	0:01:22	0:06:16	0:07:38
Vehicle 106	6:14:37 PM	2	6:19:00 PM	6:19:45 PM	0:04:23	0:00:45	0:05:08
Vehicle 107	6:15:49 PM	3	6:19:51 PM	6:20:06 PM	0:04:02	0:00:15	0:04:17
Vehicle 108	6:16:52 PM	4	6:20:13 PM	6:22:17 PM	0:03:21	0:02:04	0:05:25
Vehicle 109	6:18:34 PM	5	6:22:23 PM	6:24:34 PM	0:03:49	0:02:11	0:06:00
Vehicle 110	6:25:03 PM	1	6:25:03 PM	6:26:25 PM	0:00:00	0:01:22	0:01:22
Vehicle 111	6:27:46 PM	1	6:27:46 PM	6:31:52 PM	0:00:00	0:04:06	0:04:06
Vehicle 112	6:32:30 PM	1	6:32:30 PM	6:34:21 PM	0:00:00	0:01:51	0:01:51
Vehicle 113	6:34:27 PM	1	6:34:27 PM	6:34:57 PM	0:00:00	0:00:30	0:00:30
Vehicle 114	6:35:04 PM	1	6:35:04 PM	6:35:33 PM	0:00:00	0:00:29	0:00:29
Vehicle 115	6:37:51 PM	1	6:37:51 PM	6:39:40 PM	0:00:00	0:01:49	0:01:49
Vehicle 116	6:38:02 PM	2	6:39:47 PM	6:40:52 PM	0:01:45	0:01:05	0:02:50
Vehicle 117	6:38:39 PM	3	6:40:57 PM	6:44:24 PM	0:02:18	0:03:27	0:05:45
Vehicle 118	6:40:03 PM	3	6:44:30 PM	6:45:24 PM	0:04:27	0:00:54	0:05:21
Vehicle 119	6:46:54 PM	1	6:46:54 PM	6:48:51 PM	0:00:00	0:01:57	0:01:57
Vehicle 120	6:48:09 PM	2	6:48:58 PM	6:52:26 PM	0:00:49	0:03:28	0:04:17
Vehicle 121	6:48:20 PM	3	6:52:33 PM	6:53:51 PM	0:04:13	0:01:18	0:05:31
Vehicle 122	6:48:20 PM	4	6:53:29 PM	6:54:44 PM	0:05:09	0:01:15	0:06:24
Vehicle 123	6:50:42 PM	4	6:54:51 PM	6:57:01 PM	0:04:09	0:02:10	0:06:19
Vehicle 124	6:54:33 PM	3	6:57:11 PM	6:59:11 PM	0:02:38	0:02:00	0:04:38
Vehicle 125	6:56:19 PM	3	6:59:16 PM	6:59:54 PM	0:02:57	0:00:38	0:03:35
Vehicle 126	6:59:34 PM	2	7:00:00 PM	7:00:49 PM	0:00:26	0:00:49	0:01:15
Vehicle 127	7:07:41 PM	1	7:07:41 PM	7:08:07 PM	0:00:00	0:00:26	0:00:26
Vehicle 128	7:12:52 PM	1	7:12:52 PM	7:14:26 PM	0:00:00	0:01:34	0:01:34
Vehicle 129	7:13:01 PM	2	7:14:40 PM	7:16:20 PM	0:01:39	0:01:40	0:03:19
Vehicle 130	7:18:35 PM	1	7:18:35 PM	7:20:06 PM	0:00:00	0:01:31	0:01:31
Vehicle 131	7:20:03 PM	2	7:20:11 PM	7:21:38 PM	0:00:08	0:01:27	0:01:35
Vehicle 132	7:21:10 PM	2	7:21:45 PM	7:22:52 PM	0:00:35	0:01:07	0:01:42
Vehicle 133	7:22:39 PM	2	7:22:58 PM	7:23:18 PM	0:00:19	0:00:20	0:00:39
Vehicle 134	7:23:01 PM	2	7:23:21 PM	7:23:44 PM	0:00:20	0:00:23	0:00:43
Vehicle 135	7:24:20 PM	1	7:24:20 PM	7:25:44 PM	0:00:00	0:01:24	0:01:24
Vehicle 136	7:31:11 PM	1	7:31:11 PM	7:33:09 PM	0:00:00	0:01:58	0:01:58
Vehicle 137	7:41:47 PM	1	7:41:47 PM	7:43:08 PM	0:00:00	0:01:21	0:01:21
Vehicle 138	7:48:02 PM	1	7:48:02 PM	7:49:26 PM	0:00:00	0:01:24	0:01:24
Vehicle 139	7:51:19 PM	1	7:51:19 PM	7:52:31 PM	0:00:00	0:01:12	0:01:12
Vehicle 140	7:51:29 PM	1	7:52:45 PM	7:53:03 PM	0:01:16	0:00:18	0:01:34
Vehicle 141	7:53:23 PM	1	7:53:23 PM	7:53:58 PM	0:00:00	0:00:35	0:00:35
Vehicle 142	8:00:51 PM	1	8:00:51 PM	8:01:32 PM	0:00:00	0:00:41	0:00:41
Vehicle 143	8:02:42 PM	1	8:02:42 PM	8:07:28 PM	0:00:00	0:04:46	0:04:46
Vehicle 144	8:03:43 PM	2	8:07:40 PM	8:09:44 PM	0:03:57	0:02:04	0:06:01
Vehicle 145	8:06:40 PM	3	8:09:52 PM	8:12:18 PM	0:03:12	0:02:26	0:05:38
Vehicle 146	8:08:12 PM	3	8:12:22 PM	8:12:59 PM	0:04:10	0:00:37	0:04:47

Vehicle 147	8:10:44 PM	3	8:13:11 PM	8:16:06 PM	0:02:27	0:02:55	0:05:22
Vehicle 148	8:11:25 PM	4	8:16:15 PM	8:23:29 PM	0:04:50	0:07:14	0:12:04
Vehicle 149	8:11:37 PM	5	8:23:36 PM	8:25:41 PM	0:11:59	0:02:05	0:14:04
Vehicle 150	8:11:47 PM	6	8:25:49 PM	8:27:59 PM	0:14:02	0:02:10	0:16:12
Vehicle 151	8:12:19 PM	7	8:28:05 PM	8:28:58 PM	0:15:46	0:00:53	0:16:39
Vehicle 152	8:13:00 PM	6	8:29:03 PM	8:29:21 PM	0:16:03	0:00:18	0:16:21
Vehicle 153	8:17:31 PM	7	8:29:08 PM	8:29:58 PM	0:11:37	0:00:50	0:12:27
Vehicle 154	8:20:13 PM	8	8:30:02 PM	8:30:50 PM	0:09:49	0:00:48	0:10:37
Vehicle 155	8:22:28 PM	9	8:30:55 PM	8:32:42 PM	0:08:27	0:01:47	0:10:14
Vehicle 156	8:31:42 PM	2	8:32:48 PM	8:34:24 PM	0:01:06	0:01:36	0:02:42
Vehicle 157	8:36:43 PM	1	8:36:43 PM	8:39:23 PM	0:00:00	0:02:40	0:02:40
Vehicle 158	8:37:50 PM	2	8:39:33 PM	8:44:25 PM	0:01:43	0:04:52	0:06:35
Vehicle 159	8:43:18 PM	2	8:44:34 PM	8:47:12 PM	0:01:16	0:02:38	0:03:54
Vehicle 160	8:44:01 PM	3	8:47:17 PM	8:48:45 PM	0:03:16	0:01:28	0:04:44
Vehicle 161	8:51:54 PM	1	8:51:54 PM	8:52:50 PM	0:00:00	0:00:56	0:00:56
Vehicle 162	8:56:45 PM	1	8:56:45 PM	8:59:09 PM	0:00:00	0:02:24	0:02:24
Vehicle 163	9:02:22 PM	1	9:02:22 PM	9:03:17 PM	0:00:00	0:00:55	0:00:55
Vehicle 164	9:05:46 PM	1	9:05:46 PM	9:08:36 PM	0:00:00	0:02:50	0:02:50
Vehicle 165	9:10:43 PM	1	9:10:43 PM	9:11:02 PM	0:00:00	0:00:19	0:00:19
Vehicle 166	9:15:36 PM	1	9:15:36 PM	9:16:38 PM	0:00:00	0:01:02	0:01:02
Vehicle 167	9:18:10 PM	1	9:18:10 PM	9:19:09 PM	0:00:00	0:00:59	0:00:59
Vehicle 168	9:18:44 PM	2	9:19:15 PM	9:23:28 PM	0:00:31	0:04:13	0:04:44
Vehicle 169	9:30:21 PM	1	9:30:21 PM	9:30:58 PM	0:00:00	0:00:37	0:00:37
Vehicle 170	9:32:53 PM	1	9:32:53 PM	9:34:11 PM	0:00:00	0:01:18	0:01:18
Vehicle 171	9:39:06 PM	1	9:39:06 PM	9:39:36 PM	0:00:00	0:00:30	0:00:30

APPENDIX **F**
OBETZ, OH CHIPOTLANE DATA

Restaurant Location:		5051 Groveport Road, Obetz, Ohio 43207					
Data Collection Date:		Wednesday, August 3, 2022					
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:52:04 AM	1	10:52:04 AM	10:55:17 AM	0:00:00	0:03:13	0:03:13
Vehicle 2	10:57:45 AM	1	10:57:45 AM	10:58:33 AM	0:00:00	0:00:48	0:00:48
Vehicle 3	10:58:40 AM	1	10:58:40 AM	10:58:55 AM	0:00:00	0:00:15	0:00:15
Vehicle 4	10:58:47 AM	2	10:59:04 AM	10:59:15 AM	0:00:17	0:00:11	0:00:28
Vehicle 5	11:03:31 AM	1	11:03:31 AM	11:04:26 AM	0:00:00	0:00:55	0:00:55
Vehicle 6	11:04:40 AM	1	11:04:40 AM	11:05:14 AM	0:00:00	0:00:34	0:00:34
Vehicle 7	11:04:49 AM	2	11:05:21 AM	11:06:58 AM	0:00:32	0:01:37	0:02:09
Vehicle 8	11:04:50 AM	3	11:07:09 AM	11:07:30 AM	0:02:19	0:00:21	0:02:40
Vehicle 9	11:05:38 AM	3	11:07:36 AM	11:07:57 AM	0:01:58	0:00:21	0:02:19
Vehicle 10	11:05:45 AM	4	11:08:04 AM	11:08:42 AM	0:02:19	0:00:38	0:02:57
Vehicle 11	11:06:47 AM	4	11:08:50 AM	11:09:27 AM	0:02:03	0:00:37	0:02:40
Vehicle 12	11:10:06 AM	1	11:10:06 AM	11:10:21 AM	0:00:00	0:00:15	0:00:15
Vehicle 13	11:10:27 AM	1	11:10:27 AM	11:10:38 AM	0:00:00	0:00:11	0:00:11
Vehicle 14	11:11:39 AM	1	11:11:39 AM	11:12:36 AM	0:00:00	0:00:57	0:00:57
Vehicle 15	11:14:14 AM	1	11:14:14 AM	11:14:50 AM	0:00:00	0:00:36	0:00:36
Vehicle 16	11:15:11 AM	1	11:15:11 AM	11:16:42 AM	0:00:00	0:01:31	0:01:31
Vehicle 17	11:16:33 AM	2	11:16:51 AM	11:17:33 AM	0:00:18	0:00:42	0:01:00
Vehicle 18	11:18:26 AM	1	11:18:26 AM	11:18:57 AM	0:00:00	0:00:31	0:00:31
Vehicle 19	11:19:24 AM	1	11:19:24 AM	11:19:48 AM	0:00:00	0:00:24	0:00:24
Vehicle 20	11:19:36 AM	2	11:19:57 AM	11:20:03 AM	0:00:21	0:00:06	0:00:27
Vehicle 21	11:20:32 AM	1	11:20:32 AM	11:24:24 AM	0:00:00	0:03:52	0:03:52
Vehicle 22	11:20:47 AM	2	11:24:34 AM	11:24:54 AM	0:03:47	0:00:20	0:04:07
Vehicle 23	11:22:23 AM	3	11:25:00 AM	11:25:40 AM	0:02:37	0:00:40	0:03:17
Vehicle 24	11:25:21 AM	3	11:25:48 AM	11:26:21 AM	0:00:27	0:00:33	0:01:00
Vehicle 25	11:25:18 AM	3	11:25:26 AM	11:26:36 AM	0:00:08	0:01:10	0:01:18
Vehicle 26	11:25:57 AM	3	11:26:43 AM	11:27:18 AM	0:00:46	0:00:35	0:01:21
Vehicle 27	11:28:00 AM	1	11:28:00 AM	11:29:02 AM	0:00:00	0:01:02	0:01:02
Vehicle 28	11:29:40 AM	1	11:29:40 AM	11:30:15 AM	0:00:00	0:00:35	0:00:35
Vehicle 29	11:30:04 AM	2	11:30:22 AM	11:31:55 AM	0:00:18	0:01:33	0:01:51
Vehicle 30	11:30:06 AM	3	11:32:03 AM	11:33:04 AM	0:01:57	0:01:01	0:02:58
Vehicle 31	11:32:03 AM	2	11:33:10 AM	11:33:51 AM	0:01:07	0:00:41	0:01:48
Vehicle 32	11:34:38 AM	1	11:34:38 AM	11:35:26 AM	0:00:00	0:00:48	0:00:48
Vehicle 33	11:36:25 AM	1	11:36:25 AM	11:36:45 AM	0:00:00	0:00:20	0:00:20
Vehicle 34	11:39:29 AM	1	11:39:29 AM	11:39:59 AM	0:00:00	0:00:30	0:00:30
Vehicle 35	11:39:33 AM	2	11:40:10 AM	11:41:06 AM	0:00:37	0:00:56	0:01:33
Vehicle 36	11:40:47 AM	2	11:41:21 AM	11:41:59 AM	0:00:34	0:00:38	0:01:12
Vehicle 37	11:40:50 AM	3	11:42:08 AM	11:43:26 AM	0:01:18	0:01:18	0:02:36
Vehicle 38	11:43:02 AM	2	11:43:37 AM	11:44:18 AM	0:00:35	0:00:41	0:01:16
Vehicle 39	11:43:22 AM	3	11:44:24 AM	11:45:04 AM	0:01:02	0:00:40	0:01:42
Vehicle 40	11:46:09 AM	1	11:46:09 AM	11:46:39 AM	0:00:00	0:00:30	0:00:30
Vehicle 41	11:48:00 AM	1	11:48:00 AM	11:48:32 AM	0:00:00	0:00:32	0:00:32
Vehicle 42	11:49:12 AM	1	11:49:12 AM	11:49:47 AM	0:00:00	0:00:35	0:00:35
Vehicle 43	11:50:24 AM	1	11:50:24 AM	11:51:25 AM	0:00:00	0:01:01	0:01:01
Vehicle 44	11:50:28 AM	2	11:51:34 AM	11:51:50 AM	0:01:06	0:00:16	0:01:22
Vehicle 45	11:53:42 AM	1	11:53:42 AM	11:54:17 AM	0:00:00	0:00:35	0:00:35
Vehicle 46	11:55:17 AM	1	11:55:17 AM	11:55:26 AM	0:00:00	0:00:09	0:00:09
Vehicle 47	11:57:19 AM	1	11:57:19 AM	11:58:22 AM	0:00:00	0:01:03	0:01:03
Vehicle 48	12:04:48 PM	1	12:04:48 PM	12:05:27 PM	0:00:00	0:00:39	0:00:39
Vehicle 49	12:07:02 PM	1	12:07:02 PM	12:07:54 PM	0:00:00	0:00:52	0:00:52
Vehicle 50	12:08:10 PM	1	12:08:10 PM	12:09:02 PM	0:00:00	0:00:52	0:00:52
Vehicle 51	12:08:14 PM	2	12:09:12 PM	12:09:48 PM	0:00:58	0:00:36	0:01:34
Vehicle 52	12:10:09 PM	1	12:10:09 PM	12:10:31 PM	0:00:00	0:00:22	0:00:22
Vehicle 53	12:10:09 PM	2	12:10:41 PM	12:11:06 PM	0:00:32	0:00:25	0:00:57
Vehicle 54	12:12:20 PM	1	12:12:20 PM	12:13:59 PM	0:00:00	0:01:39	0:01:39
Vehicle 55	12:17:30 PM	1	12:17:30 PM	12:18:04 PM	0:00:00	0:00:34	0:00:34
Vehicle 56	12:19:24 PM	1	12:19:24 PM	12:19:58 PM	0:00:00	0:00:34	0:00:34
Vehicle 57	12:19:53 PM	2	12:20:06 PM	12:20:58 PM	0:00:13	0:00:52	0:01:05
Vehicle 58	12:20:14 PM	2	12:21:10 PM	12:21:28 PM	0:00:56	0:00:18	0:01:14
Vehicle 59	12:20:57 PM	3	12:21:35 PM	12:24:36 PM	0:00:38	0:03:01	0:03:39
Vehicle 60	12:21:15 PM	3	12:24:44 PM	12:25:39 PM	0:03:29	0:00:55	0:04:24
Vehicle 61	12:24:46 PM	2	12:25:49 PM	12:28:50 PM	0:01:03	0:03:01	0:04:04
Vehicle 62	12:25:09 PM	3	12:29:01 PM	12:29:20 PM	0:03:52	0:00:19	0:04:11
Vehicle 63	12:26:08 PM	3	12:29:26 PM	12:30:25 PM	0:03:18	0:00:59	0:04:17
Vehicle 64	12:29:01 PM	3	12:30:36 PM	12:30:52 PM	0:01:35	0:00:16	0:01:51
Vehicle 65	12:35:38 PM	1	12:35:38 PM	12:36:31 PM	0:00:00	0:00:53	0:00:53
Vehicle 66	12:36:43 PM	1	12:36:43 PM	12:37:56 PM	0:00:00	0:01:13	0:01:13
Vehicle 67	12:37:27 PM	2	12:38:02 PM	12:40:03 PM	0:00:35	0:02:01	0:02:36
Vehicle 68	12:37:32 PM	3	12:40:13 PM	12:40:47 PM	0:02:41	0:00:34	0:03:15
Vehicle 69	12:38:10 PM	3	12:40:56 PM	12:42:55 PM	0:02:46	0:01:59	0:04:45
Vehicle 70	12:40:20 PM	3	12:43:06 PM	12:43:26 PM	0:02:46	0:00:20	0:03:06
Vehicle 71	12:41:30 PM	3	12:43:31 PM	12:45:18 PM	0:02:01	0:01:47	0:03:48

Vehicle 72	12:41:44 PM	4	12:45:26 PM	12:48:02 PM	0:03:42	0:02:36	0:06:18
Vehicle 73	12:42:51 PM	5	12:48:09 PM	12:49:02 PM	0:05:18	0:00:53	0:06:11
Vehicle 74	12:45:35 PM	3	12:49:08 PM	12:49:41 PM	0:03:33	0:00:33	0:04:06
Vehicle 75	12:46:18 PM	4	12:49:48 PM	12:50:56 PM	0:03:30	0:01:08	0:04:38
Vehicle 76	12:48:30 PM	4	12:51:04 PM	12:53:56 PM	0:02:34	0:02:52	0:05:26
Vehicle 77	12:48:47 PM	5	12:54:03 PM	12:55:03 PM	0:05:16	0:01:00	0:06:16
Vehicle 78	12:53:08 PM	3	12:55:11 PM	12:55:40 PM	0:02:03	0:00:29	0:02:32
Vehicle 79	12:53:47 PM	4	12:55:51 PM	12:56:28 PM	0:02:04	0:00:37	0:02:41
Vehicle 80	12:59:47 PM	1	12:59:47 PM	1:02:52 PM	0:00:00	0:03:05	0:03:05
Vehicle 81	1:01:10 PM	2	1:03:06 PM	1:04:25 PM	0:01:56	0:01:19	0:03:15
Vehicle 82	1:03:37 PM	2	1:04:34 PM	1:04:51 PM	0:00:57	0:00:17	0:01:14
Vehicle 83	1:05:22 PM	1	1:05:22 PM	1:05:55 PM	0:00:00	0:00:33	0:00:33
Vehicle 84	1:07:50 PM	1	1:07:50 PM	1:08:00 PM	0:00:00	0:00:10	0:00:10
Vehicle 85	1:09:09 PM	1	1:09:09 PM	1:09:37 PM	0:00:00	0:00:28	0:00:28
Vehicle 86	1:10:37 PM	1	1:10:37 PM	1:11:27 PM	0:00:00	0:00:50	0:00:50
Vehicle 87	1:13:10 PM	1	1:13:10 PM	1:13:56 PM	0:00:00	0:00:46	0:00:46
Vehicle 88	1:14:23 PM	1	1:14:23 PM	1:15:00 PM	0:00:00	0:00:37	0:00:37
Vehicle 89	1:14:53 PM	2	1:15:08 PM	1:15:29 PM	0:00:15	0:00:21	0:00:36
Vehicle 90	1:17:13 PM	1	1:17:13 PM	1:17:25 PM	0:00:00	0:00:12	0:00:12
Vehicle 91	1:17:53 PM	1	1:17:53 PM	1:19:17 PM	0:00:00	0:01:24	0:01:24
Vehicle 92	1:18:51 PM	2	1:19:33 PM	1:19:45 PM	0:00:42	0:00:12	0:00:54
Vehicle 93	1:22:37 PM	1	1:22:37 PM	1:24:03 PM	0:00:00	0:01:26	0:01:26
Vehicle 94	1:25:00 PM	1	1:25:00 PM	1:25:44 PM	0:00:00	0:00:44	0:00:44
Vehicle 95	1:29:02 PM	1	1:29:02 PM	1:29:21 PM	0:00:00	0:00:19	0:00:19
Vehicle 96	1:34:25 PM	1	1:34:25 PM	1:35:04 PM	0:00:00	0:00:39	0:00:39
Vehicle 97	1:38:11 PM	1	1:38:11 PM	1:39:43 PM	0:00:00	0:01:32	0:01:32
Vehicle 98	1:43:02 PM	1	1:43:02 PM	1:43:19 PM	0:00:00	0:00:17	0:00:17
Vehicle 99	1:46:51 PM	1	1:46:51 PM	1:48:55 PM	0:00:00	0:02:04	0:02:04
Vehicle 100	2:01:39 PM	1	2:01:39 PM	2:02:59 PM	0:00:00	0:01:20	0:01:20
Vehicle 101	2:03:49 PM	1	2:03:49 PM	2:04:39 PM	0:00:00	0:00:50	0:00:50
Vehicle 102	2:08:13 PM	1	2:08:13 PM	2:08:31 PM	0:00:00	0:00:18	0:00:18
Vehicle 103	2:26:08 PM	1	2:26:08 PM	2:26:10 PM	0:00:00	0:00:02	0:00:02
Vehicle 104	2:30:13 PM	1	2:30:13 PM	2:30:57 PM	0:00:00	0:00:44	0:00:44
Vehicle 105	2:34:29 PM	1	2:34:29 PM	2:35:30 PM	0:00:00	0:01:01	0:01:01
Vehicle 106	2:50:48 PM	1	2:50:48 PM	2:52:12 PM	0:00:00	0:01:24	0:01:24
Vehicle 107	2:58:02 PM	1	2:58:02 PM	2:58:35 PM	0:00:00	0:00:33	0:00:33
Vehicle 108	3:06:03 PM	1	3:06:03 PM	3:06:26 PM	0:00:00	0:00:23	0:00:23
Vehicle 109	3:09:33 PM	1	3:09:33 PM	3:10:18 PM	0:00:00	0:00:45	0:00:45
Vehicle 110	3:43:32 PM	1	3:43:32 PM	3:43:50 PM	0:00:00	0:00:18	0:00:18
Vehicle 111	3:44:20 PM	1	3:44:20 PM	3:50:18 PM	0:00:00	0:05:58	0:05:58
Vehicle 112	4:05:03 PM	1	4:05:03 PM	4:06:40 PM	0:00:00	0:01:37	0:01:37
Vehicle 113	4:16:00 PM	1	4:16:00 PM	4:17:57 PM	0:00:00	0:01:57	0:01:57
Vehicle 114	4:27:17 PM	1	4:27:17 PM	4:27:57 PM	0:00:00	0:00:40	0:00:40
Vehicle 115	4:38:38 PM	1	4:38:38 PM	4:39:01 PM	0:00:00	0:00:23	0:00:23
Vehicle 116	4:56:49 PM	1	4:56:49 PM	4:57:41 PM	0:00:00	0:00:52	0:00:52
Vehicle 117	4:58:53 PM	1	4:58:53 PM	4:59:15 PM	0:00:00	0:00:22	0:00:22
Vehicle 118	5:03:13 PM	1	5:03:13 PM	5:04:48 PM	0:00:00	0:01:35	0:01:35
Vehicle 119	5:05:40 PM	1	5:05:40 PM	5:08:02 PM	0:00:00	0:02:22	0:02:22
Vehicle 120	5:20:49 PM	1	5:20:49 PM	5:21:32 PM	0:00:00	0:00:43	0:00:43
Vehicle 121	5:20:50 PM	1	5:21:41 PM	5:22:59 PM	0:00:51	0:01:18	0:02:09
Vehicle 122	5:34:22 PM	1	5:34:22 PM	5:34:45 PM	0:00:00	0:00:23	0:00:23
Vehicle 123	5:45:13 PM	1	5:45:13 PM	5:47:15 PM	0:00:00	0:02:02	0:02:02
Vehicle 124	5:48:46 PM	1	5:48:46 PM	5:49:38 PM	0:00:00	0:00:52	0:00:52
Vehicle 125	5:50:28 PM	1	5:50:28 PM	5:52:45 PM	0:00:00	0:02:17	0:02:17
Vehicle 126	6:00:03 PM	1	6:00:03 PM	6:01:40 PM	0:00:00	0:01:37	0:01:37
Vehicle 127	6:04:17 PM	1	6:04:17 PM	6:06:13 PM	0:00:00	0:01:56	0:01:56
Vehicle 128	6:05:20 PM	2	6:06:20 PM	6:06:30 PM	0:01:00	0:00:10	0:01:10
Vehicle 129	6:08:53 PM	1	6:08:53 PM	6:09:29 PM	0:00:00	0:00:36	0:00:36
Vehicle 130	6:09:08 PM	2	6:09:37 PM	6:09:49 PM	0:00:29	0:00:12	0:00:41
Vehicle 131	6:10:13 PM	1	6:10:13 PM	6:10:36 PM	0:00:00	0:00:23	0:00:23
Vehicle 132	6:14:10 PM	1	6:14:10 PM	6:16:25 PM	0:00:00	0:02:15	0:02:15
Vehicle 133	6:19:42 PM	1	6:19:42 PM	6:20:40 PM	0:00:00	0:00:58	0:00:58
Vehicle 134	6:19:42 PM	2	6:20:47 PM	6:22:33 PM	0:01:05	0:01:46	0:02:51
Vehicle 135	6:20:06 PM	3	6:22:43 PM	6:23:26 PM	0:02:37	0:00:43	0:03:20
Vehicle 136	6:22:00 PM	3	6:23:32 PM	6:24:24 PM	0:01:32	0:00:52	0:02:24
Vehicle 137	6:23:35 PM	2	6:24:32 PM	6:25:23 PM	0:00:57	0:00:51	0:01:48
Vehicle 138	6:26:17 PM	1	6:26:17 PM	6:32:28 PM	0:00:00	0:06:11	0:06:11
Vehicle 139	6:30:12 PM	2	6:32:40 PM	6:33:59 PM	0:02:28	0:01:19	0:03:47
Vehicle 140	6:30:39 PM	3	6:34:11 PM	6:34:44 PM	0:03:32	0:00:33	0:04:05
Vehicle 141	6:32:25 PM	4	6:34:52 PM	6:35:22 PM	0:02:27	0:00:30	0:02:57
Vehicle 142	6:44:47 PM	1	6:44:47 PM	6:45:20 PM	0:00:00	0:00:33	0:00:33
Vehicle 143	6:48:51 PM	1	6:48:51 PM	6:50:33 PM	0:00:00	0:01:42	0:01:42
Vehicle 144	6:49:41 PM	2	6:50:43 PM	6:51:06 PM	0:01:02	0:00:23	0:01:25
Vehicle 145	6:50:06 PM	3	6:51:16 PM	6:52:43 PM	0:01:10	0:01:27	0:02:37
Vehicle 146	6:50:06 PM	4	6:52:49 PM	6:53:15 PM	0:02:43	0:00:26	0:03:09

Vehicle 147	6:51:05 PM	4	6:53:22 PM	6:53:42 PM	0:02:17	0:00:20	0:02:37
Vehicle 148	6:51:05 PM	5	6:53:50 PM	6:54:08 PM	0:02:45	0:00:18	0:03:03
Vehicle 149	6:55:29 PM	1	6:55:29 PM	6:55:44 PM	0:00:00	0:00:15	0:00:15
Vehicle 150	7:12:04 PM	1	7:12:04 PM	7:12:40 PM	0:00:00	0:00:36	0:00:36
Vehicle 151	7:21:13 PM	1	7:21:13 PM	7:22:34 PM	0:00:00	0:01:21	0:01:21
Vehicle 152	7:35:15 PM	1	7:35:15 PM	7:37:01 PM	0:00:00	0:01:46	0:01:46
Vehicle 153	7:45:44 PM	1	7:45:44 PM	7:48:18 PM	0:00:00	0:02:34	0:02:34
Vehicle 154	7:46:44 PM	2	7:48:28 PM	7:48:57 PM	0:01:44	0:00:29	0:02:13
Vehicle 155	7:51:51 PM	1	7:51:51 PM	7:52:47 PM	0:00:00	0:00:56	0:00:56
Vehicle 156	7:59:26 PM	1	7:59:26 PM	8:01:21 PM	0:00:00	0:01:55	0:01:55
Vehicle 157	8:04:25 PM	1	8:04:25 PM	8:05:08 PM	0:00:00	0:00:43	0:00:43
Vehicle 158	8:05:43 PM	1	8:05:43 PM	8:07:03 PM	0:00:00	0:01:20	0:01:20
Vehicle 159	8:09:11 PM	1	8:09:11 PM	8:11:16 PM	0:00:00	0:02:05	0:02:05
Vehicle 160	8:11:09 PM	2	8:11:25 PM	8:13:25 PM	0:00:16	0:02:00	0:02:16
Vehicle 161	8:12:17 PM	2	8:13:38 PM	8:16:22 PM	0:01:21	0:02:44	0:04:05
Vehicle 162	8:12:56 PM	3	8:16:33 PM	8:18:39 PM	0:03:37	0:02:06	0:05:43
Vehicle 163	8:15:33 PM	3	8:18:46 PM	8:20:42 PM	0:03:13	0:01:56	0:05:09
Vehicle 164	8:16:00 PM	4	8:20:51 PM	8:22:05 PM	0:04:51	0:01:14	0:06:05
Vehicle 165	8:21:00 PM	2	8:22:23 PM	8:25:23 PM	0:01:23	0:03:00	0:04:23
Vehicle 166	8:21:36 PM	3	8:25:34 PM	8:30:36 PM	0:03:58	0:05:02	0:09:00
Vehicle 167	8:22:34 PM	3	8:30:43 PM	8:32:33 PM	0:08:09	0:01:50	0:09:59
Vehicle 168	8:35:35 PM	1	8:35:35 PM	8:37:36 PM	0:00:00	0:02:01	0:02:01
Vehicle 169	8:37:25 PM	2	8:37:46 PM	8:39:20 PM	0:00:21	0:01:34	0:01:55
Vehicle 170	8:37:52 PM	2	8:39:30 PM	8:40:52 PM	0:01:38	0:01:22	0:03:00
Vehicle 171	8:40:21 PM	2	8:41:02 PM	8:42:11 PM	0:00:41	0:01:09	0:01:50
Vehicle 172	8:46:15 PM	1	8:46:15 PM	8:49:54 PM	0:00:00	0:03:39	0:03:39
Vehicle 173	8:48:56 PM	2	8:50:03 PM	8:52:37 PM	0:01:07	0:02:34	0:03:41
Vehicle 174	8:50:49 PM	2	8:52:45 PM	8:54:40 PM	0:01:56	0:01:55	0:03:51
Vehicle 175	9:15:35 PM	1	9:15:35 PM	9:16:28 PM	0:00:00	0:00:53	0:00:53
Vehicle 176	9:15:35 PM	2	9:16:38 PM	9:17:42 PM	0:01:03	0:01:04	0:02:07
Vehicle 177	9:16:13 PM	3	9:17:53 PM	9:18:17 PM	0:01:40	0:00:24	0:02:04
Vehicle 178	9:20:39 PM	1	9:20:39 PM	9:21:25 PM	0:00:00	0:00:46	0:00:46
Vehicle 179	9:26:38 PM	1	9:26:38 PM	9:32:59 PM	0:00:00	0:06:21	0:06:21
Vehicle 180	9:34:04 PM	1	9:34:04 PM	9:38:23 PM	0:00:00	0:04:19	0:04:19

Restaurant Location: 5051 Groveport Road, Obetz, Ohio 43207							
Data Collection Date: Thursday, August 4, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:47:25 AM	1	10:47:25 AM	10:54:04 AM	0:00:00	0:06:39	0:06:39
Vehicle 2	10:48:08 AM	2	10:54:13 AM	10:55:59 AM	0:06:05	0:01:46	0:07:51
Vehicle 3	10:54:27 AM	2	10:56:07 AM	11:02:24 AM	0:01:40	0:06:17	0:07:57
Vehicle 4	10:56:50 AM	2	11:02:32 AM	11:04:26 AM	0:05:42	0:01:54	0:07:36
Vehicle 5	11:05:50 AM	1	11:05:50 AM	11:06:52 AM	0:00:00	0:01:02	0:01:02
Vehicle 6	11:05:50 AM	2	11:07:01 AM	11:07:49 AM	0:01:11	0:00:48	0:01:59
Vehicle 7	11:05:50 AM	3	11:07:57 AM	11:08:39 AM	0:02:07	0:00:42	0:02:49
Vehicle 8	11:06:43 AM	4	11:08:47 AM	11:09:24 AM	0:02:04	0:00:37	0:02:41
Vehicle 9	11:07:41 AM	4	11:09:30 AM	11:12:40 AM	0:01:49	0:03:10	0:04:59
Vehicle 10	11:09:22 AM	3	11:12:45 AM	11:15:31 AM	0:03:23	0:02:46	0:06:09
Vehicle 11	11:09:42 AM	3	11:15:38 AM	11:15:50 AM	0:05:56	0:00:12	0:06:08
Vehicle 12	11:09:42 AM	4	11:16:01 AM	11:16:08 AM	0:06:19	0:00:07	0:06:26
Vehicle 13	11:10:40 AM	5	11:16:17 AM	11:16:41 AM	0:05:37	0:00:24	0:06:01
Vehicle 14	11:17:00 AM	1	11:17:00 AM	11:19:15 AM	0:00:00	0:02:15	0:02:15
Vehicle 15	11:20:39 AM	1	11:20:39 AM	11:22:38 AM	0:00:00	0:01:59	0:01:59
Vehicle 16	11:22:23 AM	2	11:22:48 AM	11:24:19 AM	0:00:25	0:01:31	0:01:56
Vehicle 17	11:22:23 AM	3	11:24:25 AM	11:28:19 AM	0:02:02	0:03:54	0:05:56
Vehicle 18	11:22:45 AM	4	11:28:27 AM	11:30:47 AM	0:05:42	0:02:20	0:08:02
Vehicle 19	11:25:53 AM	3	11:30:57 AM	11:31:19 AM	0:05:04	0:00:22	0:05:26
Vehicle 20	11:25:56 AM	4	11:31:25 AM	11:32:32 AM	0:05:29	0:01:07	0:06:36
Vehicle 21	11:27:22 AM	5	11:32:40 AM	11:33:36 AM	0:05:18	0:00:56	0:06:14
Vehicle 22	11:28:10 AM	6	11:33:42 AM	11:34:04 AM	0:05:32	0:00:22	0:05:54
Vehicle 23	11:30:16 AM	6	11:34:14 AM	11:34:24 AM	0:03:58	0:00:10	0:04:08
Vehicle 24	11:33:44 AM	3	11:34:32 AM	11:34:39 AM	0:00:48	0:00:07	0:00:55
Vehicle 25	11:34:00 AM	4	11:34:46 AM	11:34:57 AM	0:00:46	0:00:11	0:00:57
Vehicle 26	11:36:31 AM	1	11:36:31 AM	11:37:49 AM	0:00:00	0:01:18	0:01:18
Vehicle 27	11:43:20 AM	1	11:43:20 AM	11:43:50 AM	0:00:00	0:00:30	0:00:30
Vehicle 28	11:47:00 AM	1	11:47:00 AM	11:47:14 AM	0:00:00	0:00:14	0:00:14
Vehicle 29	11:48:32 AM	1	11:48:32 AM	11:48:55 AM	0:00:00	0:00:23	0:00:23
Vehicle 30	11:54:04 AM	1	11:54:04 AM	11:59:11 AM	0:00:00	0:05:07	0:05:07
Vehicle 31	11:55:37 AM	2	11:59:19 AM	12:02:12 PM	0:03:42	0:02:53	0:06:35
Vehicle 32	11:56:56 AM	3	12:02:20 PM	12:03:40 PM	0:05:24	0:01:20	0:06:44
Vehicle 33	11:58:54 AM	4	12:03:51 PM	12:04:39 PM	0:04:57	0:00:48	0:05:45
Vehicle 34	12:01:25 PM	5	12:04:47 PM	12:04:54 PM	0:03:22	0:00:07	0:03:29
Vehicle 35	12:02:50 PM	4	12:05:00 PM	12:07:14 PM	0:02:10	0:02:14	0:04:24
Vehicle 36	12:09:17 PM	1	12:09:17 PM	12:09:45 PM	0:00:00	0:00:28	0:00:28
Vehicle 37	12:09:17 PM	2	12:09:52 PM	12:14:24 PM	0:00:35	0:04:32	0:05:07
Vehicle 38	12:10:59 PM	2	12:14:32 PM	12:16:49 PM	0:03:33	0:02:17	0:05:50
Vehicle 39	12:11:18 PM	3	12:16:57 PM	12:17:13 PM	0:05:39	0:00:16	0:05:55
Vehicle 40	12:17:12 PM	2	12:17:18 PM	12:19:46 PM	0:00:06	0:02:28	0:02:34
Vehicle 41	12:17:28 PM	2	12:19:54 PM	12:20:09 PM	0:02:26	0:00:15	0:02:41
Vehicle 42	12:18:20 PM	3	12:20:22 PM	12:20:33 PM	0:02:02	0:00:11	0:02:13
Vehicle 43	12:19:26 PM	4	12:20:41 PM	12:20:55 PM	0:01:15	0:00:14	0:01:29
Vehicle 44	12:19:34 PM	5	12:21:02 PM	12:21:26 PM	0:01:28	0:00:24	0:01:52
Vehicle 45	12:21:45 PM	1	12:21:45 PM	12:25:12 PM	0:00:00	0:03:27	0:03:27
Vehicle 46	12:22:41 PM	2	12:25:28 PM	12:25:40 PM	0:02:47	0:00:12	0:02:59
Vehicle 47	12:23:03 PM	3	12:25:49 PM	12:26:31 PM	0:02:46	0:00:42	0:03:28
Vehicle 48	12:23:46 PM	4	12:26:38 PM	12:26:57 PM	0:02:52	0:00:19	0:03:11
Vehicle 49	12:24:52 PM	5	12:27:05 PM	12:28:48 PM	0:02:13	0:01:43	0:03:56
Vehicle 50	12:26:15 PM	4	12:28:55 PM	12:29:19 PM	0:02:40	0:00:24	0:03:04
Vehicle 51	12:27:12 PM	3	12:29:27 PM	12:30:06 PM	0:02:15	0:00:39	0:02:54
Vehicle 52	12:28:25 PM	4	12:30:17 PM	12:30:50 PM	0:01:52	0:00:33	0:02:25
Vehicle 53	12:33:36 PM	1	12:33:36 PM	12:34:27 PM	0:00:00	0:00:51	0:00:51
Vehicle 54	12:37:53 PM	1	12:37:53 PM	12:38:31 PM	0:00:00	0:00:38	0:00:38
Vehicle 55	12:43:07 PM	1	12:43:07 PM	12:44:28 PM	0:00:00	0:01:21	0:01:21
Vehicle 56	12:43:43 PM	2	12:44:34 PM	12:45:27 PM	0:00:51	0:00:53	0:01:44
Vehicle 57	12:50:48 PM	1	12:50:48 PM	12:51:11 PM	0:00:00	0:00:23	0:00:23
Vehicle 58	12:55:36 PM	1	12:55:36 PM	12:55:50 PM	0:00:00	0:00:14	0:00:14
Vehicle 59	12:55:41 PM	2	12:56:03 PM	12:56:25 PM	0:00:22	0:00:22	0:00:44
Vehicle 60	12:56:47 PM	1	12:56:47 PM	12:56:47 PM	0:00:00	0:00:00	0:00:00
Vehicle 61	12:57:17 PM	1	12:57:17 PM	12:57:51 PM	0:00:00	0:00:34	0:00:34
Vehicle 62	1:00:52 PM	1	1:00:52 PM	1:02:09 PM	0:00:00	0:01:17	0:01:17
Vehicle 63	1:03:40 PM	1	1:03:40 PM	1:05:02 PM	0:00:00	0:01:22	0:01:22
Vehicle 64	1:05:33 PM	1	1:05:33 PM	1:08:01 PM	0:00:00	0:02:28	0:02:28
Vehicle 65	1:14:25 PM	1	1:14:25 PM	1:14:32 PM	0:00:00	0:00:07	0:00:07
Vehicle 66	1:17:26 PM	1	1:17:26 PM	1:17:36 PM	0:00:00	0:00:10	0:00:10
Vehicle 67	1:23:36 PM	1	1:23:36 PM	1:24:53 PM	0:00:00	0:01:17	0:01:17
Vehicle 68	1:25:30 PM	1	1:25:30 PM	1:26:31 PM	0:00:00	0:01:01	0:01:01
Vehicle 69	1:31:17 PM	1	1:31:17 PM	1:32:24 PM	0:00:00	0:01:07	0:01:07
Vehicle 70	1:35:46 PM	1	1:35:46 PM	1:39:14 PM	0:00:00	0:03:28	0:03:28
Vehicle 71	1:37:55 PM	2	1:39:21 PM	1:39:42 PM	0:01:26	0:00:21	0:01:47

Vehicle 72	1:38:36 PM	3	1:39:50 PM	1:40:21 PM	0:01:14	0:00:31	0:01:45
Vehicle 73	1:41:27 PM	1	1:41:27 PM	1:42:06 PM	0:00:00	0:00:39	0:00:39
Vehicle 74	1:41:35 PM	2	1:42:18 PM	1:42:45 PM	0:00:43	0:00:27	0:01:10
Vehicle 75	1:46:48 PM	1	1:46:48 PM	1:46:55 PM	0:00:00	0:00:07	0:00:07
Vehicle 76	1:47:27 PM	1	1:47:27 PM	1:47:49 PM	0:00:00	0:00:22	0:00:22
Vehicle 77	1:50:57 PM	1	1:50:57 PM	1:52:21 PM	0:00:00	0:01:24	0:01:24
Vehicle 78	1:54:51 PM	1	1:54:51 PM	1:55:08 PM	0:00:00	0:00:17	0:00:17
Vehicle 79	1:55:37 PM	1	1:55:37 PM	1:55:57 PM	0:00:00	0:00:20	0:00:20
Vehicle 80	2:04:15 PM	1	2:04:15 PM	2:05:51 PM	0:00:00	0:01:36	0:01:36
Vehicle 81	2:05:10 PM	2	2:06:01 PM	2:06:16 PM	0:00:51	0:00:15	0:01:06
Vehicle 82	2:15:05 PM	1	2:15:05 PM	2:15:13 PM	0:00:00	0:00:08	0:00:08
Vehicle 83	2:22:47 PM	1	2:22:47 PM	2:23:19 PM	0:00:00	0:00:32	0:00:32
Vehicle 84	2:22:49 PM	2	2:23:26 PM	2:23:35 PM	0:00:37	0:00:09	0:00:46
Vehicle 85	2:24:23 PM	1	2:24:23 PM	2:26:08 PM	0:00:00	0:01:45	0:01:45
Vehicle 86	2:45:44 PM	1	2:45:44 PM	2:46:29 PM	0:00:00	0:00:45	0:00:45
Vehicle 87	2:46:41 PM	1	2:46:41 PM	2:47:13 PM	0:00:00	0:00:32	0:00:32
Vehicle 88	2:46:53 PM	2	2:47:23 PM	2:47:28 PM	0:00:30	0:00:05	0:00:35
Vehicle 89	2:52:13 PM	1	2:52:13 PM	2:53:14 PM	0:00:00	0:01:01	0:01:01
Vehicle 90	3:01:35 PM	1	3:01:35 PM	3:01:48 PM	0:00:00	0:00:13	0:00:13
Vehicle 91	3:02:40 PM	1	3:02:40 PM	3:02:58 PM	0:00:00	0:00:18	0:00:18
Vehicle 92	3:10:20 PM	1	3:10:20 PM	3:12:42 PM	0:00:00	0:02:22	0:02:22
Vehicle 93	3:17:36 PM	1	3:17:36 PM	3:17:51 PM	0:00:00	0:00:15	0:00:15
Vehicle 94	3:28:57 PM	1	3:28:57 PM	3:29:14 PM	0:00:00	0:00:17	0:00:17
Vehicle 95	3:46:43 PM	1	3:46:43 PM	3:47:35 PM	0:00:00	0:00:52	0:00:52
Vehicle 96	3:57:22 PM	1	3:57:22 PM	3:57:47 PM	0:00:00	0:00:25	0:00:25
Vehicle 97	4:04:27 PM	1	4:04:27 PM	4:04:46 PM	0:00:00	0:00:19	0:00:19
Vehicle 98	4:07:16 PM	1	4:07:16 PM	4:09:03 PM	0:00:00	0:01:47	0:01:47
Vehicle 99	4:16:43 PM	1	4:16:43 PM	4:17:27 PM	0:00:00	0:00:44	0:00:44
Vehicle 100	4:30:45 PM	1	4:30:45 PM	4:31:00 PM	0:00:00	0:00:15	0:00:15
Vehicle 101	4:32:06 PM	1	4:32:06 PM	4:32:31 PM	0:00:00	0:00:25	0:00:25
Vehicle 102	4:32:09 PM	2	4:32:40 PM	4:33:02 PM	0:00:31	0:00:22	0:00:53
Vehicle 103	4:39:14 PM	1	4:39:14 PM	4:39:27 PM	0:00:00	0:00:13	0:00:13
Vehicle 104	4:40:43 PM	1	4:40:43 PM	4:40:54 PM	0:00:00	0:00:11	0:00:11
Vehicle 105	4:50:37 PM	1	4:50:37 PM	4:51:44 PM	0:00:00	0:01:07	0:01:07
Vehicle 106	4:55:01 PM	1	4:55:01 PM	4:55:42 PM	0:00:00	0:00:41	0:00:41
Vehicle 107	4:58:23 PM	1	4:58:23 PM	4:58:44 PM	0:00:00	0:00:21	0:00:21
Vehicle 108	5:10:32 PM	1	5:10:32 PM	5:10:59 PM	0:00:00	0:00:27	0:00:27
Vehicle 109	5:10:36 PM	2	5:11:07 PM	5:11:23 PM	0:00:31	0:00:16	0:00:47
Vehicle 110	5:20:35 PM	1	5:20:35 PM	5:21:25 PM	0:00:00	0:00:50	0:00:50
Vehicle 111	5:20:35 PM	2	5:21:32 PM	5:21:43 PM	0:00:57	0:00:11	0:01:08
Vehicle 112	5:21:37 PM	2	5:21:57 PM	5:23:09 PM	0:00:20	0:01:12	0:01:32
Vehicle 113	5:22:08 PM	2	5:23:17 PM	5:23:26 PM	0:01:09	0:00:09	0:01:18
Vehicle 114	5:23:43 PM	1	5:23:43 PM	5:25:24 PM	0:00:00	0:01:41	0:01:41
Vehicle 115	5:31:29 PM	1	5:31:29 PM	5:31:59 PM	0:00:00	0:00:30	0:00:30
Vehicle 116	5:35:05 PM	1	5:35:05 PM	5:35:27 PM	0:00:00	0:00:22	0:00:22
Vehicle 117	5:37:53 PM	1	5:37:53 PM	5:38:17 PM	0:00:00	0:00:24	0:00:24
Vehicle 118	5:39:01 PM	1	5:39:01 PM	5:39:14 PM	0:00:00	0:00:13	0:00:13
Vehicle 119	5:39:38 PM	1	5:39:38 PM	5:40:38 PM	0:00:00	0:01:00	0:01:00
Vehicle 120	5:53:45 PM	1	5:53:45 PM	5:54:40 PM	0:00:00	0:00:55	0:00:55
Vehicle 121	6:03:23 PM	1	6:03:23 PM	6:05:36 PM	0:00:00	0:02:13	0:02:13
Vehicle 122	6:03:30 PM	2	6:05:47 PM	6:06:34 PM	0:02:17	0:00:47	0:03:04
Vehicle 123	6:03:35 PM	3	6:06:43 PM	6:06:59 PM	0:03:08	0:00:16	0:03:24
Vehicle 124	6:03:22 PM	4	6:07:06 PM	6:07:42 PM	0:03:44	0:00:36	0:04:20
Vehicle 125	6:04:52 PM	5	6:07:47 PM	6:09:00 PM	0:02:55	0:01:13	0:04:08
Vehicle 126	6:08:32 PM	2	6:09:11 PM	6:09:41 PM	0:00:39	0:00:30	0:01:09
Vehicle 127	6:15:33 PM	1	6:15:33 PM	6:16:11 PM	0:00:00	0:00:38	0:00:38
Vehicle 128	6:16:34 PM	1	6:16:34 PM	6:16:55 PM	0:00:00	0:00:21	0:00:21
Vehicle 129	6:26:20 PM	1	6:26:20 PM	6:29:15 PM	0:00:00	0:02:55	0:02:55
Vehicle 130	6:29:22 PM	1	6:29:22 PM	6:30:05 PM	0:00:00	0:00:43	0:00:43
Vehicle 131	6:29:50 PM	2	6:30:12 PM	6:30:27 PM	0:00:22	0:00:15	0:00:37
Vehicle 132	6:31:09 PM	1	6:31:09 PM	6:32:11 PM	0:00:00	0:01:02	0:01:02
Vehicle 133	6:32:42 PM	1	6:32:42 PM	6:33:47 PM	0:00:00	0:01:05	0:01:05
Vehicle 134	6:47:42 PM	1	6:47:42 PM	6:48:34 PM	0:00:00	0:00:52	0:00:52
Vehicle 135	6:48:27 PM	2	6:48:46 PM	6:49:11 PM	0:00:19	0:00:25	0:00:44
Vehicle 136	6:50:02 PM	1	6:50:02 PM	6:51:02 PM	0:00:00	0:01:00	0:01:00
Vehicle 137	6:51:52 PM	1	6:51:52 PM	6:52:53 PM	0:00:00	0:01:01	0:01:01
Vehicle 138	6:54:58 PM	1	6:54:58 PM	6:56:57 PM	0:00:00	0:01:59	0:01:59
Vehicle 139	6:59:49 PM	1	6:59:49 PM	7:00:57 PM	0:00:00	0:01:08	0:01:08
Vehicle 140	7:08:16 PM	1	7:08:16 PM	7:08:25 PM	0:00:00	0:00:09	0:00:09
Vehicle 141	7:09:01 PM	1	7:09:01 PM	7:09:58 PM	0:00:00	0:00:57	0:00:57
Vehicle 142	7:11:46 PM	1	7:11:46 PM	7:12:10 PM	0:00:00	0:00:24	0:00:24
Vehicle 143	7:11:52 PM	2	7:12:23 PM	7:12:31 PM	0:00:31	0:00:08	0:00:39
Vehicle 144	7:13:25 PM	1	7:13:25 PM	7:13:45 PM	0:00:00	0:00:20	0:00:20
Vehicle 145	7:13:28 PM	2	7:13:52 PM	7:14:01 PM	0:00:24	0:00:09	0:00:33
Vehicle 146	7:18:51 PM	1	7:18:51 PM	7:19:10 PM	0:00:00	0:00:19	0:00:19

Vehicle 147	7:21:19 PM	1	7:21:19 PM	7:22:20 PM	0:00:00	0:01:01	0:01:01
Vehicle 148	7:28:50 PM	1	7:28:50 PM	7:29:23 PM	0:00:00	0:00:33	0:00:33
Vehicle 149	7:42:46 PM	1	7:42:46 PM	7:43:11 PM	0:00:00	0:00:25	0:00:25
Vehicle 150	7:54:33 PM	1	7:54:33 PM	7:54:42 PM	0:00:00	0:00:09	0:00:09
Vehicle 151	8:05:15 PM	1	8:05:15 PM	8:08:15 PM	0:00:00	0:03:00	0:03:00
Vehicle 152	8:05:28 PM	1	8:08:24 PM	8:10:17 PM	0:02:56	0:01:53	0:04:49
Vehicle 153	8:12:13 PM	1	8:12:13 PM	8:13:15 PM	0:00:00	0:01:02	0:01:02
Vehicle 154	8:15:53 PM	1	8:15:53 PM	8:16:35 PM	0:00:00	0:00:42	0:00:42
Vehicle 155	8:34:10 PM	1	8:34:10 PM	8:34:30 PM	0:00:00	0:00:20	0:00:20
Vehicle 156	8:37:00 PM	1	8:37:00 PM	8:38:04 PM	0:00:00	0:01:04	0:01:04
Vehicle 157	8:42:12 PM	1	8:42:12 PM	8:50:11 PM	0:00:00	0:07:59	0:07:59
Vehicle 158	8:47:40 PM	3	8:50:18 PM	8:50:55 PM	0:02:38	0:00:37	0:03:15
Vehicle 159	8:48:59 PM	4	8:51:03 PM	8:52:35 PM	0:02:04	0:01:32	0:03:36
Vehicle 160	8:52:50 PM	1	8:52:50 PM	8:53:57 PM	0:00:00	0:01:07	0:01:07
Vehicle 161	9:22:45 PM	1	9:22:45 PM	9:23:19 PM	0:00:00	0:00:34	0:00:34
Vehicle 162	9:22:59 PM	2	9:23:25 PM	9:23:48 PM	0:00:26	0:00:23	0:00:49
Vehicle 163	9:31:39 PM	1	9:31:39 PM	9:32:52 PM	0:00:00	0:01:13	0:01:13
Vehicle 164	9:45:28 PM	1	9:45:28 PM	9:45:50 PM	0:00:00	0:00:22	0:00:22
Vehicle 165	9:46:37 PM	1	9:46:37 PM	9:47:41 PM	0:00:00	0:01:04	0:01:04
Vehicle 166	9:47:55 PM	1	9:47:55 PM	9:48:37 PM	0:00:00	0:00:42	0:00:42
Vehicle 167	9:48:30 PM	2	9:48:45 PM	9:49:12 PM	0:00:15	0:00:27	0:00:42
Vehicle 168	9:49:00 PM	2	9:49:32 PM	9:49:41 PM	0:00:32	0:00:09	0:00:41

Restaurant Location: 5051 Groveport Road, Obetz, Ohio 43207							
Data Collection Date: Friday, August 5, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:51:22 AM	1	10:51:22 AM	10:55:54 AM	0:00:00	0:04:32	0:04:32
Vehicle 2	11:02:15 AM	1	11:02:15 AM	11:05:00 AM	0:00:00	0:02:45	0:02:45
Vehicle 3	11:04:33 AM	2	11:05:07 AM	11:06:54 AM	0:00:34	0:01:47	0:02:21
Vehicle 4	11:05:54 AM	2	11:07:04 AM	11:07:51 AM	0:01:10	0:00:47	0:01:57
Vehicle 5	11:06:49 AM	3	11:08:00 AM	11:09:01 AM	0:01:11	0:01:01	0:02:12
Vehicle 6	11:11:25 AM	1	11:11:25 AM	11:15:01 AM	0:00:00	0:03:36	0:03:36
Vehicle 7	11:13:04 AM	2	11:15:13 AM	11:16:37 AM	0:02:09	0:01:24	0:03:33
Vehicle 8	11:13:50 AM	3	11:16:45 AM	11:20:05 AM	0:02:55	0:03:20	0:06:15
Vehicle 9	11:16:51 AM	2	11:20:15 AM	11:21:11 AM	0:03:24	0:00:56	0:04:20
Vehicle 10	11:21:33 AM	1	11:21:33 AM	11:24:05 AM	0:00:00	0:02:32	0:02:32
Vehicle 11	11:24:43 AM	1	11:24:43 AM	11:26:39 AM	0:00:00	0:01:56	0:01:56
Vehicle 12	11:26:37 AM	2	11:26:49 AM	11:29:45 AM	0:00:12	0:02:56	0:03:08
Vehicle 13	11:26:46 AM	2	11:29:55 AM	11:32:52 AM	0:03:09	0:02:57	0:06:06
Vehicle 14	11:29:35 AM	3	11:33:00 AM	11:39:41 AM	0:03:25	0:06:41	0:10:06
Vehicle 15	11:31:18 AM	3	11:39:49 AM	11:42:41 AM	0:08:31	0:02:52	0:11:23
Vehicle 16	11:31:27 AM	4	11:42:52 AM	11:43:46 AM	0:11:25	0:00:54	0:12:19
Vehicle 17	11:31:27 AM	5	11:43:55 AM	11:44:09 AM	0:12:28	0:00:14	0:12:42
Vehicle 18	11:37:46 AM	5	11:44:18 AM	11:44:50 AM	0:06:32	0:00:32	0:07:04
Vehicle 19	11:38:56 AM	7	11:45:01 AM	11:46:37 AM	0:06:05	0:01:36	0:07:41
Vehicle 20	11:38:56 AM	8	11:46:46 AM	11:48:42 AM	0:07:50	0:01:56	0:09:46
Vehicle 21	11:42:47 AM	6	11:48:50 AM	11:49:30 AM	0:06:03	0:00:40	0:06:43
Vehicle 22	11:44:20 AM	5	11:49:38 AM	11:51:24 AM	0:05:18	0:01:46	0:07:04
Vehicle 23	11:45:59 AM	5	11:51:29 AM	11:53:07 AM	0:05:30	0:01:38	0:07:08
Vehicle 24	11:46:18 AM	6	11:53:15 AM	11:55:41 AM	0:06:57	0:02:26	0:09:23
Vehicle 25	11:46:20 AM	7	11:55:49 AM	11:56:01 AM	0:09:29	0:00:12	0:09:41
Vehicle 26	11:54:03 AM	1	11:56:11 AM	11:58:17 AM	0:02:08	0:02:06	0:04:14
Vehicle 27	11:57:29 AM	2	11:58:27 AM	12:06:26 PM	0:00:58	0:07:59	0:08:57
Vehicle 28	11:59:02 AM	2	12:06:34 PM	12:09:49 PM	0:07:32	0:03:15	0:10:47
Vehicle 29	12:01:42 PM	3	12:09:59 PM	12:10:23 PM	0:08:17	0:00:24	0:08:41
Vehicle 30	12:03:30 PM	4	12:10:31 PM	12:11:27 PM	0:07:01	0:00:56	0:07:57
Vehicle 31	12:10:10 PM	3	12:11:34 PM	12:13:04 PM	0:01:24	0:01:30	0:02:54
Vehicle 32	12:10:18 PM	4	12:13:11 PM	12:13:27 PM	0:02:53	0:00:16	0:03:09
Vehicle 33	12:11:41 PM	3	12:13:38 PM	12:18:19 PM	0:01:57	0:04:41	0:06:38
Vehicle 34	12:12:05 PM	4	12:18:25 PM	12:19:56 PM	0:06:20	0:01:31	0:07:51
Vehicle 35	12:12:07 PM	5	12:20:05 PM	12:21:19 PM	0:07:58	0:01:14	0:09:12
Vehicle 36	12:12:07 PM	6	12:21:25 PM	12:22:12 PM	0:09:18	0:00:47	0:10:05
Vehicle 37	12:12:07 PM	7	12:22:20 PM	12:23:58 PM	0:10:13	0:01:38	0:11:51
Vehicle 38	12:13:26 PM	7	12:24:06 PM	12:26:34 PM	0:10:40	0:02:28	0:13:08
Vehicle 39	12:16:43 PM	7	12:26:45 PM	12:27:57 PM	0:10:02	0:01:12	0:11:14
Vehicle 40	12:22:12 PM	5	12:28:05 PM	12:38:04 PM	0:05:53	0:09:59	0:15:52
Vehicle 41	12:24:15 PM	4	12:38:16 PM	12:40:45 PM	0:14:01	0:02:29	0:16:30
Vehicle 42	12:24:35 PM	5	12:40:56 PM	12:41:03 PM	0:16:21	0:00:07	0:16:28
Vehicle 43	12:25:37 PM	6	12:41:08 PM	12:41:58 PM	0:15:31	0:00:50	0:16:21
Vehicle 44	12:28:57 PM	5	12:42:07 PM	12:48:26 PM	0:13:10	0:06:19	0:19:29
Vehicle 45	12:34:43 PM	6	12:48:45 PM	12:51:30 PM	0:14:02	0:02:45	0:16:47
Vehicle 46	12:37:33 PM	7	12:51:36 PM	12:53:48 PM	0:14:03	0:02:12	0:16:15
Vehicle 47	12:38:41 PM	9	12:53:58 PM	12:58:06 PM	0:15:17	0:04:08	0:19:25
Vehicle 48	12:38:41 PM	10	12:58:12 PM	12:58:50 PM	0:19:31	0:00:38	0:20:09
Vehicle 49	12:39:13 PM	11	12:58:55 PM	12:59:40 PM	0:19:42	0:00:45	0:20:27
Vehicle 50	12:40:44 PM	12	12:59:50 PM	1:00:34 PM	0:19:06	0:00:44	0:19:50
Vehicle 51	12:41:35 PM	10	1:00:49 PM	1:01:51 PM	0:19:14	0:01:02	0:20:16
Vehicle 52	12:41:35 PM	11	1:01:57 PM	1:02:04 PM	0:20:22	0:00:07	0:20:29
Vehicle 53	12:45:20 PM	11	1:02:12 PM	1:02:43 PM	0:16:52	0:00:31	0:17:23
Vehicle 54	12:53:45 PM	8	1:02:52 PM	1:03:35 PM	0:09:07	0:00:43	0:09:50
Vehicle 55	12:54:20 PM	9	1:03:45 PM	1:05:28 PM	0:09:25	0:01:43	0:11:08
Vehicle 56	12:59:13 PM	8	1:05:38 PM	1:06:16 PM	0:06:25	0:00:38	0:07:03
Vehicle 57	1:00:45 PM	7	1:06:26 PM	1:06:51 PM	0:05:41	0:00:25	0:06:06
Vehicle 58	1:01:12 PM	8	1:07:04 PM	1:07:19 PM	0:05:52	0:00:15	0:06:07
Vehicle 59	1:03:52 PM	5	1:07:32 PM	1:08:07 PM	0:03:40	0:00:35	0:04:15
Vehicle 60	1:04:15 PM	6	1:08:14 PM	1:08:27 PM	0:03:59	0:00:13	0:04:12
Vehicle 61	1:06:36 PM	6	1:08:35 PM	1:09:00 PM	0:01:59	0:00:25	0:02:24
Vehicle 62	1:07:23 PM	7	1:09:09 PM	1:09:09 PM	0:01:46	0:00:00	0:01:46
Vehicle 63	1:11:35 PM	1	1:11:35 PM	1:11:57 PM	0:00:00	0:00:22	0:00:22
Vehicle 64	1:12:53 PM	1	1:12:53 PM	1:13:12 PM	0:00:00	0:00:19	0:00:19
Vehicle 65	1:14:27 PM	1	1:14:27 PM	1:15:00 PM	0:00:00	0:00:33	0:00:33
Vehicle 66	1:14:30 PM	2	1:15:09 PM	1:15:15 PM	0:00:39	0:00:06	0:00:45
Vehicle 67	1:20:56 PM	1	1:20:56 PM	1:21:22 PM	0:00:00	0:00:26	0:00:26
Vehicle 68	1:21:43 PM	1	1:21:43 PM	1:22:05 PM	0:00:00	0:00:22	0:00:22
Vehicle 69	1:23:42 PM	1	1:23:42 PM	1:24:52 PM	0:00:00	0:01:10	0:01:10
Vehicle 70	1:23:56 PM	2	1:25:00 PM	1:25:27 PM	0:01:04	0:00:27	0:01:31
Vehicle 71	1:25:38 PM	1	1:25:38 PM	1:26:43 PM	0:00:00	0:01:05	0:01:05

Vehicle 72	1:27:27 PM	1	1:27:27 PM	1:28:40 PM	0:00:00	0:01:13	0:01:13
Vehicle 73	1:28:02 PM	2	1:28:47 PM	1:29:52 PM	0:00:45	0:01:05	0:01:50
Vehicle 74	1:28:30 PM	3	1:30:02 PM	1:31:03 PM	0:01:32	0:01:01	0:02:33
Vehicle 75	1:28:40 PM	4	1:31:09 PM	1:31:25 PM	0:02:29	0:00:16	0:02:45
Vehicle 76	1:38:23 PM	1	1:38:23 PM	1:39:58 PM	0:00:00	0:01:35	0:01:35
Vehicle 77	1:40:05 PM	1	1:40:05 PM	1:42:15 PM	0:00:00	0:02:10	0:02:10
Vehicle 78	1:40:32 PM	2	1:42:26 PM	1:44:46 PM	0:01:54	0:02:20	0:04:14
Vehicle 79	1:42:23 PM	2	1:44:55 PM	1:48:50 PM	0:02:32	0:03:55	0:06:27
Vehicle 80	1:47:03 PM	2	1:48:58 PM	1:52:35 PM	0:01:55	0:03:37	0:05:32
Vehicle 81	1:52:43 PM	1	1:52:43 PM	1:56:36 PM	0:00:00	0:03:53	0:03:53
Vehicle 82	1:56:27 PM	2	1:56:50 PM	2:00:12 PM	0:00:23	0:03:22	0:03:45
Vehicle 83	1:59:25 PM	2	2:00:19 PM	2:02:01 PM	0:00:54	0:01:42	0:02:36
Vehicle 84	2:01:56 PM	2	2:02:07 PM	2:05:59 PM	0:00:11	0:03:52	0:04:03
Vehicle 85	2:01:58 PM	3	2:06:05 PM	2:08:14 PM	0:04:07	0:02:09	0:06:16
Vehicle 86	2:04:50 PM	3	2:08:23 PM	2:11:49 PM	0:03:33	0:03:26	0:06:59
Vehicle 87	2:08:41 PM	2	2:12:01 PM	2:12:39 PM	0:03:20	0:00:38	0:03:58
Vehicle 88	2:11:03 PM	3	2:12:46 PM	2:15:39 PM	0:01:43	0:02:53	0:04:36
Vehicle 89	2:11:03 PM	4	2:15:51 PM	2:16:58 PM	0:04:48	0:01:07	0:05:55
Vehicle 90	2:23:08 PM	1	2:23:08 PM	2:35:15 PM	0:00:00	0:12:07	0:12:07
Vehicle 91	2:28:11 PM	3	2:35:21 PM	2:45:45 PM	0:07:10	0:10:24	0:17:34
Vehicle 92	2:37:13 PM	2	2:45:06 PM	2:47:00 PM	0:07:53	0:01:54	0:09:47
Vehicle 93	2:59:48 PM	1	2:59:48 PM	3:01:27 PM	0:00:00	0:01:39	0:01:39
Vehicle 94	3:12:18 PM	1	3:12:18 PM	3:14:15 PM	0:00:00	0:01:57	0:01:57
Vehicle 95	3:12:39 PM	2	3:14:21 PM	3:14:28 PM	0:01:42	0:00:07	0:01:49
Vehicle 96	3:14:16 PM	2	3:14:36 PM	3:14:51 PM	0:00:20	0:00:15	0:00:35
Vehicle 97	3:22:43 PM	1	3:22:43 PM	3:25:52 PM	0:00:00	0:03:09	0:03:09
Vehicle 98	3:42:26 PM	1	3:42:26 PM	3:43:16 PM	0:00:00	0:00:50	0:00:50
Vehicle 99	3:42:26 PM	2	3:43:23 PM	3:43:50 PM	0:00:57	0:00:27	0:01:24
Vehicle 100	3:51:20 PM	1	3:51:20 PM	3:52:05 PM	0:00:00	0:00:45	0:00:45
Vehicle 101	3:58:19 PM	1	3:58:19 PM	3:58:53 PM	0:00:00	0:00:34	0:00:34
Vehicle 102	4:05:44 PM	1	4:05:44 PM	4:05:52 PM	0:00:00	0:00:08	0:00:08
Vehicle 103	4:24:57 PM	1	4:24:57 PM	4:25:25 PM	0:00:00	0:00:28	0:00:28
Vehicle 104	4:25:08 PM	2	4:25:34 PM	4:26:22 PM	0:00:26	0:00:48	0:01:14
Vehicle 105	4:36:34 PM	1	4:36:34 PM	4:36:52 PM	0:00:00	0:00:18	0:00:18
Vehicle 106	5:22:15 PM	1	5:22:15 PM	5:22:26 PM	0:00:00	0:00:11	0:00:11
Vehicle 107	7:29:03 PM	1	7:29:03 PM	7:29:13 PM	0:00:00	0:00:10	0:00:10
Vehicle 108	7:37:42 PM	1	7:37:42 PM	7:44:07 PM	0:00:00	0:06:25	0:06:25
Vehicle 109	7:38:33 PM	2	7:44:13 PM	7:44:29 PM	0:05:40	0:00:16	0:05:56
Vehicle 110	7:52:17 PM	1	7:52:17 PM	7:52:41 PM	0:00:00	0:00:24	0:00:24
Vehicle 111	7:59:36 PM	1	7:59:36 PM	8:01:16 PM	0:00:00	0:01:40	0:01:40
Vehicle 112	8:21:54 PM	1	8:21:54 PM	8:28:26 PM	0:00:00	0:06:32	0:06:32
Vehicle 113	8:24:26 PM	2	8:28:35 PM	8:31:34 PM	0:04:09	0:02:59	0:07:08
Vehicle 114	8:37:24 PM	1	8:37:24 PM	8:38:06 PM	0:00:00	0:00:42	0:00:42
Vehicle 115	8:43:03 PM	1	8:43:03 PM	8:44:39 PM	0:00:00	0:01:36	0:01:36
Vehicle 116	8:46:31 PM	1	8:46:31 PM	8:48:26 PM	0:00:00	0:01:55	0:01:55
Vehicle 117	9:00:56 PM	1	9:00:56 PM	9:01:23 PM	0:00:00	0:00:27	0:00:27
Vehicle 118	9:02:23 PM	1	9:02:23 PM	9:03:17 PM	0:00:00	0:00:54	0:00:54
Vehicle 119	9:03:06 PM	2	9:03:25 PM	9:04:06 PM	0:00:19	0:00:41	0:01:00
Vehicle 120	9:03:29 PM	2	9:04:16 PM	9:05:03 PM	0:00:47	0:00:47	0:01:34
Vehicle 121	9:03:47 PM	3	9:05:11 PM	9:06:27 PM	0:01:24	0:01:16	0:02:40
Vehicle 122	9:15:05 PM	1	9:15:05 PM	9:15:31 PM	0:00:00	0:00:26	0:00:26
Vehicle 123	9:19:25 PM	1	9:19:25 PM	9:19:48 PM	0:00:00	0:00:23	0:00:23
Vehicle 124	9:30:40 PM	1	9:30:40 PM	9:34:19 PM	0:00:00	0:03:39	0:03:39
Vehicle 125	9:31:07 PM	2	9:34:27 PM	9:34:46 PM	0:03:20	0:00:19	0:03:39
Vehicle 126	9:41:45 PM	1	9:41:45 PM	9:42:30 PM	0:00:00	0:00:45	0:00:45

Restaurant Location: 5051 Groveport Road, Obetz, Ohio 43207							
Data Collection Date: Saturday, August 6, 2022							
	Time Entering Pick-Up Lane	Number of Vehicles in Queue	Time Arriving At Window	Time Exiting Pick-Up Lane	Time In Queue Prior To Window	Time At Window	Total Service Time
Vehicle 1	10:49:09 AM	1	10:49:09 AM	10:54:01 AM	0:00:00	0:04:52	0:04:52
Vehicle 2	10:49:18 AM	2	10:54:08 AM	10:54:42 AM	0:04:50	0:00:34	0:05:24
Vehicle 3	10:54:54 AM	1	10:54:54 AM	10:55:05 AM	0:00:00	0:00:11	0:00:11
Vehicle 4	11:07:34 AM	1	11:07:34 AM	11:08:06 AM	0:00:00	0:00:32	0:00:32
Vehicle 5	11:07:49 AM	2	11:08:13 AM	11:08:34 AM	0:00:24	0:00:21	0:00:45
Vehicle 6	11:07:56 AM	3	11:08:44 AM	11:08:58 AM	0:00:48	0:00:14	0:01:02
Vehicle 7	11:17:58 AM	1	11:17:58 AM	11:19:11 AM	0:00:00	0:01:13	0:01:13
Vehicle 8	11:27:50 AM	1	11:27:50 AM	11:28:07 AM	0:00:00	0:00:17	0:00:17
Vehicle 9	11:28:28 AM	1	11:28:28 AM	11:28:51 AM	0:00:00	0:00:23	0:00:23
Vehicle 10	11:31:02 AM	1	11:31:02 AM	11:31:38 AM	0:00:00	0:00:36	0:00:36
Vehicle 11	11:31:10 AM	2	11:31:50 AM	11:36:11 AM	0:00:40	0:04:21	0:05:01
Vehicle 12	11:55:29 AM	1	11:55:29 AM	11:55:42 AM	0:00:00	0:00:13	0:00:13
Vehicle 13	11:55:50 AM	1	11:55:50 AM	11:56:36 AM	0:00:00	0:00:46	0:00:46
Vehicle 14	12:04:54 PM	1	12:04:54 PM	12:06:12 PM	0:00:00	0:01:18	0:01:18
Vehicle 15	12:07:32 PM	1	12:07:32 PM	12:07:54 PM	0:00:00	0:00:22	0:00:22
Vehicle 16	12:09:18 PM	1	12:09:18 PM	12:10:12 PM	0:00:00	0:00:54	0:00:54
Vehicle 17	12:18:13 PM	1	12:18:13 PM	12:19:47 PM	0:00:00	0:01:34	0:01:34
Vehicle 18	12:18:13 PM	2	12:19:54 PM	12:21:32 PM	0:01:41	0:01:38	0:03:19
Vehicle 19	12:23:30 PM	1	12:23:30 PM	12:25:11 PM	0:00:00	0:01:41	0:01:41
Vehicle 20	12:24:26 PM	2	12:25:24 PM	12:25:46 PM	0:00:58	0:00:22	0:01:20
Vehicle 21	12:43:22 PM	1	12:43:22 PM	12:44:08 PM	0:00:00	0:00:46	0:00:46
Vehicle 22	12:45:03 PM	1	12:45:03 PM	12:45:46 PM	0:00:00	0:00:43	0:00:43
Vehicle 23	12:54:06 PM	1	12:54:06 PM	12:54:53 PM	0:00:00	0:00:47	0:00:47
Vehicle 24	1:00:16 PM	1	1:00:16 PM	1:02:12 PM	0:00:00	0:01:56	0:01:56
Vehicle 25	1:08:42 PM	1	1:08:42 PM	1:08:56 PM	0:00:00	0:00:14	0:00:14
Vehicle 26	1:12:26 PM	1	1:12:26 PM	1:12:47 PM	0:00:00	0:00:21	0:00:21
Vehicle 27	1:55:57 PM	1	1:55:57 PM	1:56:29 PM	0:00:00	0:00:32	0:00:32
Vehicle 28	1:59:43 PM	1	1:59:43 PM	2:00:50 PM	0:00:00	0:01:07	0:01:07
Vehicle 29	2:01:37 PM	1	2:01:37 PM	2:01:47 PM	0:00:00	0:00:10	0:00:10
Vehicle 30	2:27:54 PM	1	2:27:54 PM	2:29:02 PM	0:00:00	0:01:08	0:01:08
Vehicle 31	2:48:12 PM	1	2:48:12 PM	2:49:07 PM	0:00:00	0:00:55	0:00:55
Vehicle 32	2:59:26 PM	1	2:59:26 PM	3:01:57 PM	0:00:00	0:02:31	0:02:31
Vehicle 33	3:00:57 PM	2	3:02:13 PM	3:03:10 PM	0:01:16	0:00:57	0:02:13
Vehicle 34	3:07:08 PM	1	3:07:08 PM	3:11:41 PM	0:00:00	0:04:33	0:04:33
Vehicle 35	3:12:25 PM	1	3:12:25 PM	3:18:01 PM	0:00:00	0:05:36	0:05:36
Vehicle 36	3:18:22 PM	1	3:18:22 PM	3:19:31 PM	0:00:00	0:01:09	0:01:09
Vehicle 37	3:26:56 PM	1	3:26:56 PM	3:29:25 PM	0:00:00	0:02:29	0:02:29
Vehicle 38	3:40:49 PM	1	3:40:49 PM	3:41:10 PM	0:00:00	0:00:21	0:00:21
Vehicle 39	3:54:56 PM	1	3:54:56 PM	3:55:12 PM	0:00:00	0:00:16	0:00:16
Vehicle 40	4:08:09 PM	1	4:08:09 PM	4:09:32 PM	0:00:00	0:01:23	0:01:23
Vehicle 41	4:15:03 PM	1	4:15:03 PM	4:15:35 PM	0:00:00	0:00:32	0:00:32
Vehicle 42	4:17:12 PM	1	4:17:12 PM	4:17:25 PM	0:00:00	0:00:13	0:00:13
Vehicle 43	4:27:30 PM	1	4:27:30 PM	4:28:27 PM	0:00:00	0:00:57	0:00:57
Vehicle 44	4:36:30 PM	1	4:36:30 PM	4:36:50 PM	0:00:00	0:00:20	0:00:20
Vehicle 45	4:36:37 PM	2	4:36:58 PM	4:37:31 PM	0:00:21	0:00:33	0:00:54
Vehicle 46	5:07:35 PM	1	5:07:35 PM	5:10:22 PM	0:00:00	0:02:47	0:02:47
Vehicle 47	5:10:54 PM	1	5:10:54 PM	5:11:29 PM	0:00:00	0:00:35	0:00:35
Vehicle 48	5:11:04 PM	2	5:11:38 PM	5:11:44 PM	0:00:34	0:00:06	0:00:40
Vehicle 49	5:31:16 PM	1	5:31:16 PM	5:32:22 PM	0:00:00	0:01:06	0:01:06
Vehicle 50	5:32:34 PM	1	5:32:34 PM	5:32:52 PM	0:00:00	0:00:18	0:00:18
Vehicle 51	5:36:44 PM	1	5:36:44 PM	5:37:54 PM	0:00:00	0:01:10	0:01:10
Vehicle 52	5:37:31 PM	2	5:38:00 PM	5:39:20 PM	0:00:29	0:01:20	0:01:49
Vehicle 53	5:46:42 PM	1	5:46:42 PM	5:48:18 PM	0:00:00	0:01:36	0:01:36
Vehicle 54	5:50:54 PM	1	5:50:54 PM	5:54:24 PM	0:00:00	0:03:30	0:03:30
Vehicle 55	5:56:30 PM	1	5:56:30 PM	5:57:09 PM	0:00:00	0:00:39	0:00:39
Vehicle 56	5:58:14 PM	1	5:58:14 PM	6:01:25 PM	0:00:00	0:03:11	0:03:11
Vehicle 57	6:05:06 PM	1	6:05:06 PM	6:05:26 PM	0:00:00	0:00:20	0:00:20
Vehicle 58	6:08:22 PM	1	6:08:22 PM	6:08:49 PM	0:00:00	0:00:27	0:00:27
Vehicle 59	6:15:37 PM	1	6:15:37 PM	6:17:09 PM	0:00:00	0:01:32	0:01:32
Vehicle 60	6:19:55 PM	1	6:19:55 PM	6:20:10 PM	0:00:00	0:00:15	0:00:15
Vehicle 61	6:22:05 PM	1	6:22:05 PM	6:23:05 PM	0:00:00	0:01:00	0:01:00
Vehicle 62	6:34:30 PM	1	6:34:30 PM	6:34:43 PM	0:00:00	0:00:13	0:00:13
Vehicle 63	6:39:15 PM	1	6:39:15 PM	6:39:42 PM	0:00:00	0:00:27	0:00:27
Vehicle 64	6:58:53 PM	1	6:58:53 PM	7:00:39 PM	0:00:00	0:01:46	0:01:46
Vehicle 65	7:02:27 PM	1	7:02:27 PM	7:02:58 PM	0:00:00	0:00:31	0:00:31
Vehicle 66	7:02:56 PM	2	7:03:06 PM	7:08:52 PM	0:00:10	0:05:46	0:05:56
Vehicle 67	7:05:37 PM	2	7:09:02 PM	7:09:56 PM	0:03:25	0:00:54	0:04:19
Vehicle 68	7:18:21 PM	1	7:18:21 PM	7:19:51 PM	0:00:00	0:01:30	0:01:30
Vehicle 69	7:19:40 PM	2	7:20:00 PM	7:21:52 PM	0:00:20	0:01:52	0:02:12
Vehicle 70	7:31:06 PM	1	7:31:06 PM	7:31:23 PM	0:00:00	0:00:17	0:00:17
Vehicle 71	7:40:39 PM	1	7:40:39 PM	7:42:28 PM	0:00:00	0:01:49	0:01:49

Vehicle 72	7:49:37 PM	1	7:49:37 PM	7:50:51 PM	0:00:00	0:01:14	0:01:14
Vehicle 73	7:52:35 PM	1	7:52:35 PM	7:53:12 PM	0:00:00	0:00:37	0:00:37
Vehicle 74	8:14:40 PM	1	8:14:40 PM	8:20:30 PM	0:00:00	0:05:50	0:05:50
Vehicle 75	8:24:23 PM	1	8:24:23 PM	8:26:12 PM	0:00:00	0:01:49	0:01:49
Vehicle 76	8:24:56 PM	1	8:26:21 PM	8:26:50 PM	0:01:25	0:00:29	0:01:54
Vehicle 77	8:43:58 PM	1	8:43:58 PM	8:49:13 PM	0:00:00	0:05:15	0:05:15
Vehicle 78	8:50:32 PM	1	8:50:32 PM	8:51:54 PM	0:00:00	0:01:22	0:01:22
Vehicle 79	8:58:51 PM	1	8:58:51 PM	9:02:14 PM	0:00:00	0:03:23	0:03:23
Vehicle 80	9:23:05 PM	1	9:23:05 PM	9:24:21 PM	0:00:00	0:01:16	0:01:16
Vehicle 81	9:38:37 PM	1	9:38:37 PM	9:39:39 PM	0:00:00	0:01:02	0:01:02
Vehicle 82	9:39:23 PM	2	9:39:44 PM	9:39:58 PM	0:00:21	0:00:14	0:00:35
Vehicle 83	9:42:14 PM	1	9:42:14 PM	9:43:29 PM	0:00:00	0:01:15	0:01:15



At the Heart of Community

COMMUNITY DEVELOPMENT DEPARTMENT

505 Telsler Road
Lake Zurich, Illinois 60047

Phone (847) 540-1696
Fax (847) 726-2182
LakeZurich.org

APPLICATION PZC 2023-09
PZC Hearing Date: June 21, 2023

AGENDA ITEM 4.C

STAFF REPORT

To: Chairperson Stratman and Members of the Planning & Zoning Commission
From: Sarosh Saher, Community Development Director
CC: Mary Meyer, Building Services Supervisor
Tim Verbeke, Planner
Date: June 21, 2023
Re: Zoning Application for 22843 North Lakewood Lane (2023-09)
Annexation, Zoning and Planned Unit Development (PUD)
Midlothian Manor

SUBJECT

Mr. Richard Koenig, FAICP, Executive Director of the Housing Opportunity Development Corporation (HODC) (the “Applicant”) requests approval of Annexation, Zoning and Development Concept Plan (Preliminary Plan) Approval to redevelop the property commonly known as Midlothian Manor with a new two-story building containing 24 affordable rental residential apartments at the property commonly known as Midlothian Manor at 22843 Lakewood Lane, and legally described in Exhibit A attached hereto (the “Subject Property”).

GENERAL INFORMATION

Requested Action: Annexation, Zoning Classification
Development Concept Plan Approval through a PUD
Current Zoning: Unincorporated R-1 Residential District (Lake County)
Proposed Zoning: R-6 Multiple-family Residential District
Existing Use Vacant former assisted living/supportive housing facility

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Proposed Uses: Rental Residential Apartments

Property Location: 22843 North Lakewood Lane

Applicant: Housing Opportunity Development Corporation (HODC)

Owner: Lake County Housing Authority

Staff Coordinator: Sarosh Saher, Community Development Director

LIST OF EXHIBITS

- A. Legal Description
- B. Public Hearing Sign
- C. Site Photos
- D. Aerial Map
- E. Zoning Map
- F. Parcel Map
- G. Development Application and Attachments
- H. Development Review Comments

BACKGROUND

HODC (the “Applicant”), is the Applicant for the proposed rental residential apartment building at 22843 North Lakewood Lane, and legally described in Exhibit A attached hereto (the “Subject Property”). The Applicant filed an application with the Village of Lake Zurich dated March 14, 2023 (the “Application”) specifically seeking:

- Amendment to the Zoning Map of the Village of Lake Zurich to classify property to be annexed within an R-6 Multiple-Family Residential Zoning District
- Special Use Permit for a Planned Unit Development providing for Development Concept Plan (Preliminary Plan) approval with modifications to the Zoning and Land Development Code for certain bulk and parking requirements.

Housing Opportunity Development Corporation (HODC) is a community-based nonprofit organization whose mission is to create affordable housing in the Chicagoland suburbs. The organization was founded in 1983 and is overseen by a board of directors. HODC has completed over 30 housing developments with more than 500 units in 18 communities. The organization is a Community Housing Development Organization (CHDO) as well as a HUD approved housing counseling agency that also serves in north suburban Cook, Lake and McHenry Counties. HODC currently manages 409 affordable apartments with more developments in the pipeline. HODC would own and manage this property upon completion.

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HODC proposes to model the new development after their other nearby facilities - Heart's Place in Arlington Heights (2019) and Axley Place in Glenview (2016). Information about the organization and their facilities is also available at www.hodc.org.

The Subject Property at 22843 North Lakewood Lane comprises an irregularly-shaped assemblage of two contiguous parcels under single ownership with a land area of 111,795 square feet (approx. 2.6 acres). The Subject Property is improved with a 1-story residential building containing 14 units, common areas, a parking lot containing 18 spaces. The building and its parking lot are located along the westerly end of the property. The front entrance faces east. Vehicular access is provided from North Lakewood Lane.

The property was operated as an assisted living/supportive housing facility. Residents lived in individual apartments and shared a common space in which they could receive services from an on-site service provider. For a number of years, the occupants were low-income seniors, often with disabilities.

Proposal

Housing Opportunity Development Corporation (HODC) is proposing the acquisition and redevelopment of the property with a new rental apartment development. As part of the development the developer would like access to Village water and sanitary sewer services and have therefore requested annexation. The project would include the demolition of the existing building to be replaced with the proposed 2-story building containing 24 residential units.

The new building will be oriented in an east-west direction to benefit solar power as well as reduce the façade exposure of the building to a minimum as it faces the west lot line, thereby minimizing impact on the adjacent residential property. The site will be landscaped, provided with fences along the interior lot lines and sidewalks for pedestrian access.

The apartments will comprise a mix of 1-bedroom, 2-bedroom and 3-bedroom units as follows:

- 1-Bedroom Units (8 units)
- 2-Bedroom Units (12 units)
- 3-Bedroom Units (4 units)

The facility will also be provided with a community room, tenant storage, utility rooms and offices for staff. The exterior of the building will be designed with a hipped roof and clad with a combination of architectural stone and cement board siding. Balconies are proposed on specific units and also to provide design relief to the exterior elevation. The building would be energy efficient and obtain green certification, be accessible and fully sprinklered. Rents per unit would average \$600 for 1-bedroom units, \$750 for 2-bedroom units, and \$950 for 3-bedroom units.

The development will include 41 parking spaces, with four handicap accessible spaces. One full access driveway will be provided, utilizing the existing driveway access point located on North Lakewood Lane. Per the zoning code, parking is based on the unit mix and will need to be provided as follows:

- 2 Spaces per 1-Bedroom Unit (8 units): 16 Spaces
- 2 Spaces per 2-Bedroom Unit (12 units): 24 Spaces

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- 3 Spaces per 3-Bedroom Unit (4 units): 12 Spaces
 - 1 Space for Every 10 Spaces for Visitor Parking: 5 Spaces
- Total Required: 57 Spaces, with a multiple-family residential code reduction to 48 spaces. The development has proposed a total of 41 Spaces indicating a deficiency of 7 spaces.

The Applicant has indicated that in general, residents of affordable housing tend to have lower vehicle ownership rates as opposed to market rate housing, thus generating less traffic.

The site will be designed with a stormwater detention facility to prevent any negative impact of drainage onto adjacent downstream properties. Stormwater facilities will be constructed in compliance with the Lake County Watershed Development Ordinance (Stormwater Ordinance).

Pursuant to public notice published on June 3, 2023, in the Daily Herald, a public hearing has been scheduled with the Lake Zurich Planning & Zoning Commission for June 21, 2023, to consider the Application. On June 5, 2023, the Village posted a public hearing sign on the Subject Property (Exhibit B).

Staff offers the following additional information:

- A. **Courtesy Review.** On April 18, 2022, Mr. Koenig of HODC presented their concept to the Village Board at a Courtesy Review and received feedback on the potential annexation and redevelopment of the property. The video from the Village Board meeting can be accessed via the following link:
<https://play.champds.com/lakezurichil/event/53>
- B. **Public Engagement.** HODC also held two Community meetings at Hope Collective Church at 23153 Miller Road to present the proposal to the neighborhood and to answer questions regarding the project. The first of these meetings was held on January 28, 2023 and a follow-up meeting on March 6, 2023 to follow up on questions raised at the January meeting. A summary of discussion as well as an FAQ document listing responses to the questions is attached along with this report.
- C. **Zoning History.** The property is currently located within unincorporated Lake County and zoned within an R-1 residential district. It has been under the ownership of the Lake County Housing Authority since 2001 when the construction of the existing building was completed. From historical aerial maps it appeared that a majority of the residences in the area along North Lakewood Lane had been constructed prior to this development.
- D. **Land Use History.** Since its development in 2001, the property was operated as an assisted living/supportive housing facility. Residents lived in individual apartments and shared a common space in which they could receive services from an on-site service provider. For a number of years, the occupants were low-income seniors, often with disabilities. In 2010, the Housing Authority decided to close the building and it has remained vacant since that time under their maintenance.

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Following its closure, Lake County engaged in discussion about the potential sale of the property with a number of buyers/agencies including PADS Lake County, Youth Build Lake County, A Safe Place, Lambs Farm, Lake County Center for Independent Living and the members of the Lake County Homeless Coalition. In 2014, after having identified the best use of the property for housing the homeless with the support of a nonprofit organization dedicated to providing permanent supportive housing, Lake County issued an RFP for a non-profit agency to occupy the property. However, that proposed use did not come to fruition and the property has continued to remain vacant.

- E. Surrounding Land Use and Zoning.** The Subject Property is located at the southwest corner of the intersection of Church Street/Midlothian Road and North Lakewood Lane, and across the street from the Village's corporate and industrial park. The areas to the north and south of the property are zoned within Lake County's R-1 residential district and improved with single-family homes constructed between the 1960s and 1990s with a few homes dating back to an earlier construction period. The properties to the northeast are zoned within Lake Zurich's OS Open Space and R-6 multiple-family residential district and developed with the Village's Wicklow Ball Field and Wicklow Village Townhomes respectively. The property to the east is zoned within the Village's I Industrial District and contains an approximately 109,750 square-foot industrial manufacturing and warehouse facility operated by G2 Revolution.
- F. Trend of Development.** The property is located in an area that contains a mix of residential, recreational and industrial properties, the earliest of which are single-family homes developed within the county.
- G. Zoning District.** Five (5) zoning districts are provided for all types of residential development. Four (4) zoning districts are provided for single-family residential development and one (1) for multiple-family residential development.

The Applicant is requesting a zoning classification within the R-6 multiple-family residential district. The R-6 district provides for townhouse, two-family, and multiple-family residential development. The R-6 district is intended to function principally as a transition between single-family detached houses and other zoning districts and to provide for lower density townhouse and two-family building types, which may result in higher densities than in single-family developments. The existing multiple-family development in the village is mapped in the R-6 district.

- H. Annexation of Property.** Annexation is a function of the corporate authorities (Village Board) of the municipality. By statute, all land annexed to the village is typically classified automatically after such annexation within the R-1/2 single-family residential district, unless the petitioner requests a different classification (which in this case is R-6 zoning). The process of annexation involves the undertaking of an annexation agreement requiring a public hearing of the Village Board. For every annexation agreement hearing, there must also be a notice of public hearing held before the Village Board. An annexation agreement can only be approved by a two-thirds vote of the Village Board (5 out of 7). Once approved, an annexation agreement can only be amended after the appropriate public hearings and by

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a similar extra majority vote. An annexation agreement is typically authorized for a period not exceeding 20 years.

Additionally, when an annexation agreement contains a promise of a zoning classification (R-6, as in this case), all public hearings regarding zoning, including special uses and variances where necessary, need to take place before the annexation agreement can be considered and approved.

The Planning and Zoning Commission reviews a petition for annexation with a proposed development only if a zoning classification other than R-1/2, special use or otherwise a variation or modification in the zoning and/or subdivision ordinance is sought. In the case of the subject development, the request for classification within the R-6 zoning district (through an amendment of the village zoning map) and modifications to the zoning and land development code via a Development Concept Plan approval requires the review by the Planning and Zoning Commission at this public hearing.

GENERAL FINDINGS

Staff of the Village's Development Review Team (DRT) including the Village Engineer, has evaluated the development against the various standards and provisions of the Lake Zurich Municipal Code and offers findings on specific sections of the Code.

9-18-3: STANDARDS FOR AMENDMENTS TO THE ZONING MAP:

Amending the zoning map or the text of the zoning code is a matter committed to the sound legislative discretion of the board of trustees and is not dictated by any set standard. However, in determining whether a proposed amendment should be granted or denied, the board of trustees (with the recommendation of the PZC) should act in what it reasonably believes to be in the best interest of the general public, and may consider, among other factors, the following factors as they may be relevant to the application.

In the case of the Subject Property, the boundary of the zoning map is being amended to add a zoning classification to property that is being annexed to the village.

A. The consistency of the proposed amendment with the purposes of this zoning code.

Staff Response: Standard met. The proposed map amendment meets the purpose of the zoning code whose overall purpose is to maintain Lake Zurich as a community comprised principally of well-maintained residential neighborhoods and separately located, thriving business areas, and in particular with respect to land use patterns, public infrastructure, community expectations and value.

The current comprehensive plan calls for the property to be developed with low density single-family residential development. However, the developer is requesting

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development with a low density multiple-family residential configuration in keeping with the requested R-6 residential zoning classification.

The amendment will continue to promote and protect the public health, safety, morals, and the general welfare of the village.

- B. The community need for the proposed amendment and for the uses and development it would allow.

Staff Response: Standard met. The proposed uses allowed by the zoning map amendment are residential uses. These uses fill the need for affordable housing in the community while meeting the purpose and intent of the zoning code as it relates to the development of property with residential uses.

- C. If a specific parcel of property is the subject of the proposed amendment, then the following factors:

1. Existing Uses and Classifications: The existing uses and zoning classifications for properties in the immediate vicinity of the subject property.

Staff Response: Standard met. The Subject Property is located at the southwest corner of the intersection of Church Street/Midlothian Road and North Lakewood Lane, and across the street from the Village's corporate and industrial park. The areas to the north and south of the property are zoned within Lake County's R-1 residential district and improved with single-family homes constructed between the 1960s and 1990s with a few homes dating back to an earlier construction period. The properties to the northeast are zoned within Lake Zurich's OS Open Space and R-6 multiple-family residential district and developed with the Village's Wicklow Ball Field and Wicklow Village Townhomes respectively. The property to the east is zoned within the Village's I Industrial District and contains an approximately 109,750 square-foot industrial manufacturing and warehouse facility operated by G2 Revolution.

2. Trend of Development: The trend of development in the immediate vicinity of the subject property, including changes, if any, in such trend since the subject property was placed in its present zoning classification.

Staff Response: Standard met. The property is located in an area that contains a mix of residential, recreational and industrial properties, the earliest of which are single-family homes developed within the county.

3. Diminution of Values: The extent to which the value of the subject property is diminished by the existing zoning classification applicable to it.

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Staff Response: Standard met. The current zoning district R-1 in the County does not allow for development that can yield the necessary return on investment given its zoning district requirements. Therefore, the current zoning classification negatively affects the value of the Subject Property as developed or proposed to be developed.

The Subject Property is improved with a 1-story residential building containing 14 units, common areas, a parking lot containing 18 spaces. The building and its parking lot are located along the westerly end of the property. The front entrance faces east. Vehicular access is provided from North Lakewood Lane.

The proposed development of the property with a new two-story building constructed to present day codes and requirements will increase the overall value of the property.

4. Increase in Health, Safety, And Welfare: The extent, to which any such diminution in value is offset by an increase in the public health, safety, and welfare.

Staff Response: Standard met. There is no evidence that this diminution in value is offset by an increase in the overall public health, safety, and welfare. However, the development will be designed in compliance with current Village codes and ordinance that will benefit the public health, safety, and welfare of the community.

5. Effects On Adjacent Properties: The extent to which the use and enjoyment of adjacent properties would be affected by the proposed amendment.

Staff Response: Standard met. The proposed development will not have a negative impact on the use and enjoyment of adjacent properties. The development is proposed to be constructed in conformance with the requirements of the zoning classification that is being requested. The requested zoning classification contains proper standards for land use and bulk considerations that will prevent the subject development from creating a negative impact on the surrounding properties.

6. Value Of Adjacent Properties: The extent to which the value of adjacent properties would be affected by the proposed amendment.

Staff Response: Standard met. No evidence has been provided to demonstrate that the proposed development will have a negative impact on the value of adjacent properties. The development of the property with a new building, parking lot, landscaped areas and stormwater management facilities that are constructed to present day codes and serviced with Village utilities and stormwater facilities will serve to enhance property values of those that surround it.

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7. Future Development: The extent to which the future orderly development of adjacent properties would be affected by the proposed amendment.

Staff Response: Not applicable. The properties surrounding the Subject Property have been developed to their full extent as allowable by Lake County codes and policies to the north and south, and Lake Zurich codes and policies to the east and northeast.

8. Suitability Of Text Amendment: The suitability of the proposed text amendment for the zoning district in which the amendment is being proposed.

Staff Response: Not Applicable. No amendment to the text of the Zoning or Land Development Code is being requested at this time.

9. Ingress and Egress: The availability, where relevant, of adequate ingress to and egress from the subject property and the extent to which traffic conditions in the immediate vicinity of the subject property would be affected by the proposed amendment.

Staff Response: Standard met. The development is located on Midlothian Road and North Lakewood Lane. Midlothian Road is a regional arterial road which experiences moderate volumes of traffic for an arterial road. North Lakewood Lane is a collector street serving the older residential areas within unincorporated Lake County and portions of Lake Zurich.

The Developer has proposed one point of vehicular access to the property from North Lakewood Lane.

10. Utilities and Services: The availability, where relevant, of adequate utilities and essential public services to the subject property to accommodate the uses permitted or permissible under its present zoning classification.

Staff Response: Standard met. The development will be served with new water, sanitary and storm water utilities in accordance with the standards provided in the land development code.

11. Length of Vacancy: The length of time that the subject property has been vacant, considered in the context of the pace of development in the vicinity of the subject property.

Staff Response: Standard met. The building on the property has remained vacant since 2010, despite the numerous efforts by the present owner to re-occupy the premises in their existing configuration.

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12. Positive Effect: The proposed amendment creating a positive effect for the zoning district, its purposes, and adjacent properties shall be placed before the benefits of the petitioner.

Staff Response: Standard met. The proposed development will assist in providing residents of Lake Zurich and surrounding areas new options for housing.

ADDITIONAL GENERAL FINDINGS

9-22-5: STANDARDS FOR PLANNED UNIT DEVELOPMENTS.

Planned unit developments are included in the zoning code as a distinct category of special use. As such, they are authorized for the same general purposes as all other special uses and in recognition of the fact that traditional bulk, space, and yard regulations that may be useful in protecting the character of substantially developed and stable areas may impose rigidities on the development or redevelopment of parcels or areas that lend themselves to an individual, planned approach.

- A. Special Use Permit Standards: No special use permit for a planned unit development shall be recommended or granted pursuant to this chapter unless the applicant shall establish that the proposed development will meet each of the standards made applicable to special use permits pursuant to chapter 19 of this title.

Staff Response: Standard met. Refer to the “Standards for Special Use Permits” contained within this report.

- B. Additional Standards for All Planned Unit Developments: No special use permit for a planned unit development shall be recommended or granted unless the applicant shall establish that the proposed development will meet each of the following additional standards:

1. Unified Ownership Required: The entire property proposed for planned unit development treatment shall be in single ownership or under such unified control as to ensure that the entire property will be developed as a unified whole. All owners of the property shall be included as joint applicants on all applications and all approvals shall bind all owners. The violation of any owner as to any tract shall be deemed a violation as to all owners and all tracts.

Staff Response: Standard met. The property is currently owned in its entirety by the Lake County Housing Authority. The PUD to be developed is proposed by the Housing Opportunity Development Corporation (HODC). On approval of entitlements and an annexation agreement, it is the intent of HODC to acquire all portions of the property.

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2. Minimum Area: The applicant shall have the burden of establishing that the subject property is of sufficient size and shape to be planned and developed as a unified whole capable of meeting the objectives for which planned unit developments may be established pursuant to this section.

Staff Response: Standard met. The property is of a sufficient size to accommodate the proposed development. The 2.6-acre piece of land will accommodate the 2-story building containing 24 apartment dwellings, the 41-space parking lot and detention pond.

3. Covenants and Restrictions to Be Enforceable by Village: All covenants, deed restrictions, easements, and similar restrictions to be recorded in connection with the planned unit development shall provide that they may not be modified, removed, or released without the express consent of the board of trustees and that they may be enforced by the village as well as by future landowners within the proposed development.

Staff Response: Standard met. The Village will ensure that all covenants, deed restrictions and easements are properly prepared, reviewed, recorded and will be enforced by the Village. Such covenants and restrictions will need to be established prior to approval of the Final Plan.

4. Public Open Space and Contributions: Whenever the official comprehensive plan, zoning map, or official map indicates that development of a planned unit development will create a need for land for public purposes of the village within the proposed planned unit development, the board of trustees may require that such area be designated and to the extent such need is specifically and uniquely attributable to the proposed development, dedicated to the village for such use. In addition, the board of trustees may require evidence that all requirements of village ordinances pertaining to the dedication of land or the contribution of cash in connection with subdivisions or developments of land have been met as respects the proposed planned unit development.

Staff Response: Not Applicable. The Comprehensive Plan does not call for the dedication of any land within the proposed development for public purposes (public active or passive recreational space, or public facilities). As such, in lieu of providing such amenities, the developer will compensate the village with the applicable parks impact fees which will be provided at the time of issuance of permits for the building.

5. Common Open Space:
- a. Amount, Location, And Use: The failure of a planned unit development to provide common open space shall be considered to be an indication that it has not satisfied the objectives for which such developments may be

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approved pursuant to this zoning code. When common open space is provided in a planned unit development, the amount and location of such open space shall be consistent with its intended function as set forth in the application and planned unit development plans. No such open space shall be used for the construction of any structure or improvement except such structures and improvements as may be approved in the final plan as appropriate to the intended leisure and recreational uses for which such open space is intended.

- b. **Preservation**: Adequate safeguards, including recorded covenants or dedication of development rights, shall be provided to prevent the subsequent use of common open space for any use, structure, improvement, or development other than that shown on the approved final plan. The restrictions must be permanent and not for a given period of years and must run with the land. Such covenants and dedications may provide that they may be released, but only with the express written consent of the board of trustees.
- c. **Ownership And Maintenance**: The final plan shall include such provisions for the ownership and maintenance of such open space and improvements as are reasonably necessary to ensure their continuity, care, conservation, maintenance, and operation in accordance with predetermined standards and to ensure that remedial measures will be available to the village if such open space or improvements are permitted to deteriorate or are not maintained in a condition consistent with the best interests of the planned unit development or the village.
- d. **Property Owners' Association**: When the requirements of subsection B5c of this section are to be satisfied by the ownership or maintenance of such open space or improvements by a property owners' association, such association shall meet each of the following standards:
 - i. The bylaws and rules of the association and all declarations, covenants, and restrictions to be recorded must be approved as part of the final plan prior to becoming effective. Each such document shall provide that it shall not be amended in any manner that would result in it being in violation of the requirements of this subsection B5d(1); and
 - ii. The association must be established and all covenants and restrictions must be recorded prior to the sale of any property within the area of the planned unit development designated to have the exclusive use of the proposed open space or improvements; and
 - iii. The association must be responsible for casualty and liability insurance, taxes, and the maintenance of the open space and improvements to be deeded to it; and

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- iv. Membership in the association must be mandatory for each property owner and any successive owner having a right to the use or enjoyment of such open space or improvements; and
- v. Every property owner having a right to the use or enjoyment of such open space or improvements must pay its pro rata share of the cost of the association by means of an assessment to be levied by the association that meets the requirements for becoming a lien on the property in accordance with state statutes; and
- vi. The association must have the right to adjust the assessment to meet changed needs. The membership vote required to authorize such adjustment shall not be fixed at more than two-thirds (2/3) of the members voting on the issue; and
- vii. The village must be given the right to enforce the covenants; and
- viii. The village must be given the right, after ten (10) days' written notice to the association, to perform any maintenance or repair work that the association has neglected to perform, to assess the membership for such work and to have a lien against the property of any member failing to pay such assessment. For this purpose alone, the village shall have all the rights and powers of the association and its governing body under the agreements and declarations creating the association.

Staff Response: Standard met. The responsibility of maintenance of any common open space such as stormwater management facilities will lie with HODC who will be the developer, owner and operator of the facility.

- 6. Landscaping and Perimeter Treatment: Any area of a planned unit development not used for structures or circulation elements shall be landscaped or otherwise improved. The perimeter of the planned unit development shall be treated so as to ensure compatibility with surrounding uses by means such as provision of compatible uses and structures, setbacks, screening, or natural or manmade buffers.

Staff Response: Standard Met. All portions of the lots within the development are proposed to be either improved with paved areas or landscaped.

- 7. Private Streets: Private streets are prohibited unless expressly approved by the board of trustees. If so approved, they shall meet all construction standards applicable to public streets. No such streets shall be approved except upon the condition that they shall be owned and maintained by a property owners' association meeting the requirements set forth in subsection B5d of this section.

Staff Response: Not Applicable. No private streets are proposed.

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8. Sidewalks: A sidewalk meeting the standards of the Lake Zurich subdivision ordinance shall be provided along at least one side of every street in or abutting a planned unit development; provided, however, that such sidewalk may be constructed in a street right of way or as a specific element of the design of the planned unit development.

Staff Response: Standard met. Staff is requiring that the Developer construct a sidewalk along the frontage of the property along Midlothian Road and North Lakewood Lane, with additional extension of the sidewalk along Midlothian Road to connect to the nearest existing public sidewalk located approximately 400 feet to the south along the frontage of Cedar Lake Assisted Living & Memory Care Center at 777 Church Street. Absence the construction of such sidewalk, the Applicant shall pay a fee in lieu of installing a sidewalk along the street frontages of the property to be collected and placed into an escrow account that will fund the construction and upkeep of sidewalks within the Village. Such fee shall be based upon the per square-foot cost of a 5-foot wide sidewalk, the unit cost for which shall be determined by the Village at the time of issuance of the building permit, and collected at such time.

9. Utilities: All utility lines shall be installed underground.

Staff Response: Standard Met. All proposed utilities including water and sanitary mains, electric, gas attributable to the development and on the premises are proposed to be located underground.

- C. Additional Standards for Specific Planned Unit Developments: When the district regulations authorizing any planned unit development use in a particular district impose standards to be met by such planned unit development in such district, a special use permit for such development shall not be recommended or granted unless the applicant shall establish compliance with such standards. (Ord., 10-2004)

Staff Response: Standard Met. There are no additional standards imposed through the establishment of a multiple-family residential subdivision that are proposed within such district.

9-19-3: STANDARDS FOR SPECIAL USE PERMITS.

Staff has reviewed the plan and found that the amendment will continue to remain in substantial conformance with the standards for Special Use Permits as outlined below.

- A. General Standards: No special use permit for a planned unit development shall be recommended or granted unless the applicant shall establish substantial conformance with the following:

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1. Zoning Code and Plan Purposes: The proposed use and development will be in harmony with the general and specific purposes for which this zoning code was enacted and for which the regulations of the district in question were established and with the general purpose and intent of the official comprehensive plan.

Staff Response: Standard partially met. The development will remain in substantial conformance with the purpose and intent of the proposed R-6 Multiple-Family Residential District.

Even though the Comprehensive Plan designates the subject property within a low-density single-family residential land use, the property is being developed with a low-density multiple family land use which is in keeping with the trend of development across Midlothian Road within Wicklow Village subdivision.

The proposed multiple-family land use will provide the necessary transition from the higher intensity industrial uses located to the east to the single-family uses located to the west.

2. No Undue Adverse Impact. The proposed use and development will not have a substantial or undue adverse effect upon adjacent property, the character of the area, or the public health, safety, and general welfare.

Staff Response: Standard met. The developer has taken additional measures to reduce any impacts of flooding on the subject property and surrounding property through the installation of on-site stormwater management facilities.

The proposed building will be oriented in an east-west direction so as to minimize impact on the adjacent residential properties. The building is proposed to be located no less than 35.5 feet from the west lot line and no less than 101 feet from the south lot line, both of which are coterminous with single-family residential properties located in unincorporated Lake County. The building will be designed in a style and materials reflective of residential buildings typical of the proposed use – apartment dwellings.

Each of the lot lines coterminous with the adjacent residential properties will be landscaped in a manner to provide year-round screening by use of evergreen and deciduous trees, shrubs and plant material, and shall also include a solid privacy fence of no greater than 6 feet in height within the interior yards. Such fence shall extend no higher than 3 feet if proposed to be located in a front or corner side yard with frontage along a street. All landscaping proposed along the remaining periphery of the site shall conform to the requirements of the landscape codes.

Parking is proposed to be included on the property , but with a deficiency of 7 spaces. However, the Developer has indicated that in general, residents of

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affordable housing tend to have lower vehicle ownership rates as opposed to market rate housing, thus generating less traffic.

The development will otherwise not have any substantial or undue adverse effect upon itself or any adjacent properties.

3. No Interference with Surrounding Development. The proposed use and development will be constructed, arranged, and operated so as not to dominate the immediate vicinity or to interfere with the use and development of neighboring property in accordance with the applicable district regulations.

Staff Response: Standard met. The proposed development will be constructed and arranged so as not to dominate the immediate vicinity, but instead work in harmony with the surrounding land uses which include a combination of single-family, multiple-family and industrial uses. The proposed multiple-family land use provides the necessary transition from the higher intensity industrial uses located to the east to the single-family uses located to the west.

4. Adequate Public Facilities. The proposed use and development will be served adequately by essential public facilities and services such as streets, public utilities, drainage structures, police and fire protection, refuse disposal, parks, libraries, and schools, or the applicant will provide adequately for such services.

Staff Response: Existing utilities currently run adjacent to the Subject Property and the Applicant is working with the Village's Public Works Utilities Staff to propose the most efficient layout for utilities to be provided to the subdivision.

5. No Traffic Congestion. The proposed use and development will not cause undue traffic congestion nor draw significant amounts of traffic through the surrounding streets.

Staff Response: The development is located on Midlothian Road and North Lakewood Lane. Midlothian Road is a regional arterial road which experiences moderate volumes of traffic for an arterial road. North Lakewood Lane is a collector street serving the older residential areas within unincorporated Lake County and portions of Lake Zurich. The Developer has proposed one point of access to the property from North Lakewood Lane.

The developer conducted a Traffic Impact analysis that generated the following recommendations:

- **The existing roadway network will readily accommodate the proposed development traffic.**
- **No major geometric improvements, such as adding turn lanes, are anticipated to be needed.**

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- **Lakewood Lane / Site Access – Continue to provide one inbound lane and one outbound lane with minor leg stop control and a stop sign and stop bar on the south leg of the intersection.**
- **General Site Design – Bicycle storage racks should be provided to encourage non-motorized travel.**

No further improvements are recommended for the existing signalized intersection of Midlothian Road/Lakewood Lane-Oakwood Road. Additionally, no improvements are recommended for the intersection of Lakewood Lane / Echo Lake Road.

6. No Destruction of Significant Features. The proposed use and development will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance.

Staff Response: Standard met. The proposed development will not result in the destruction, loss, or damage of any natural, scenic, or historic features. Instead, the development has been arranged so as to preserve the existing natural features to the greatest extent possible.

7. Compliance with Standards. The proposed use and development complies with all additional standards imposed on it by the particular provision of this Code authorizing such use.

Staff Response: Standard met. The proposed development will comply with all other additional standards imposed through the building codes for multiple-family residences.

8. Positive Effect. The proposed special use creating a positive effect for the zoning district, its purpose, and adjacent properties shall be placed before the benefits of the petitioner.

Staff Response: Standard met. The proposed development will assist in redeveloping and revitalizing a property containing a long-vacant building on the periphery of the village with quality affordable housing.

- B. Special Standards for Specified Special Uses. When the district regulations authorizing any special use in a particular district impose special standards to be met by such use in such district, a permit for such use in such district shall not be recommended or granted unless the applicant shall establish compliance with such special standards.

Staff Response: Not Applicable. The development does not require the imposing of any special standards in addition to those that are currently in place as the proposed use of the property is for the establishment of multiple-family residential uses.

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C. Considerations. In determining whether the applicant's evidence establishes that the foregoing standards have been met, the Plan Commission and the Board of Trustees shall consider:

1. Benefit. Whether and to what extent the proposed use and development at the particular location requested is necessary or desirable to provide a service or a facility that is in the interest of the public convenience or that will contribute to the general welfare of the neighborhood or community.

Staff Response: Standard met. The Subject Property is surrounded by low- to medium-density residential housing and industrial uses, and is therefore the ideal location for a multiple-family residential development that serves as a transition between these dissimilar uses. This development will provide new housing options for low- to moderate-income families who want to locate within the Lake Zurich community and avail of its services and benefits.

2. Alternative Locations. Whether the purposes of the zoning code can be met by the location of the proposed use and development in some other area or zoning district that may be more appropriate than the proposed site.

Staff Response: Standard met. The proposed location is suitable for this type of residential use. The Developer has further indicated that the characteristics of the property by virtue of its location and land area is suitable to be developed with the intended uses.

3. Mitigation of Adverse Impacts. Whether all steps possible have been taken to minimize any substantial or undue adverse effects of the proposed use and development on the immediate vicinity through building design, site design, landscaping, and screening.

Staff Response: Standard met. All steps necessary will be taken to minimize any substantial adverse effects of the proposed development on itself and on surrounding properties and denoted in various portions of this report.

IDENTIFICATION AND ANALYSIS OF ZONING RELIEF FOR THE PLANNED UNIT DEVELOPMENT (PUD)

On analysis of the proposed development against the various standards contained within the municipal code, staff has identified the following areas that will require zoning relief.

1. **Bulk, Space and Yard Requirements.**
 - a. Minimum lot area per unit (square feet): The minimum lot area per unit is defined as that portion of the total lot area allocated for each dwelling unit located on a lot. Section 9-3-11.B.2 requires lots in the R-6 multiple-family residential district to

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have a minimum lot area per unit of 5,000 square feet. The development is proposing a minimum lot area per unit of 4,658 square feet.

- b. Minimum Setback of Parking Areas: Section 9-10-1.C.1 – Location on Lot; requires that parking lots, areas and garages shall comply with the yard requirements made applicable to them by the regulations of the district in which they are located. In the R-6 district, the minimum required Front and Corner Side Yard is 25 feet. The parking lot is designed with a setback of approximately 9 feet from the front lot line of the property along North Lakeview Lane.
- c. Minimum Number of Off-Street Parking Spaces: Section 9-10-1.F.2.A requires that parking for multiple-family dwellings be provided at a rate of 2 spaces for each 1- or 2- bedroom dwelling and 3 for each 3 or more-bedroom dwelling unit, plus 1 for each 10 spaces. Based on the proposed number of units, the requirement is as follows:
- 2 Spaces per 1-Bedroom Units (8 units): 16 Spaces
 - 2 Spaces per 2-Bedroom Units (12 units): 24 Spaces
 - 3 Spaces per 3-Bedroom Units (4 units): 12 Spaces
 - 1 Space for Every 10 Spaces for Visitor Parking: 5 Spaces
- Total Required: 57 Spaces
Total Proposed: 41 Spaces

However, for multiple-family dwellings, Section 9-10-1.B.2.c.(2) requires that not more than two (2) parking spaces located in a garage, driveway, or other area reserved for the exclusive use of the residents of an individual dwelling unit shall be counted toward the parking spaces required pursuant to subsection F2a(1) of this section for multiple-family dwellings (described earlier in this paragraph). Based on a total unit count of 24, the minimum required number of parking spaces is allowed to be reduced to 48 (24x2), a deficiency of 7 spaces.

Further, the same section provides that not more than two (2) spaces required by said subsection may, and at least one such space shall, be located in an area or areas available for use in common by at least three (3) such individual units. Such areas may include parking spaces located in parking areas or lots within the development in which such units are located, whether located on or off the lot on which such units are located; provided, however, that no such required space shall be located farther than three hundred feet (300'), measured along an established pedestrian circulation route, from the unit it is required to serve. This section essentially provides for parking spaces to be shared by the residential units on the property.

The remaining bulk requirements for building height, number of stories, minimum lot area and width, coverage and minimum landscape surface area remain in compliance with the zoning and land development codes.

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RECOMMENDATION

The recommendation of the Planning and Zoning Commission to classify the development within the R-6 zoning district should be based on the standards included in the following Sections of the Lake Zurich Municipal Code:

- Section 9-18-3: Standards for Amendments
- Section 9-19-3 Standards for Special Use Permits
- Section 9-22-5 Standards for Planned Unit Developments (PUD)

Based on the review of staff, the standards for approval will be met with the identified modifications to the zoning and land development codes and therefore staff recommends that the Planning and Zoning Commission make these standards a part of the official record of the Application.

Staff of the Community Development Department therefore recommends the approval of Application PZC 2023-09, subject to the following conditions:

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) with application signed by Mr. Koenig as Applicant and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - b. Exhibit A: Legal Description of the Subject Property
 - c. Petition for Annexation dated March 15, 2023 submitted by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - d. ALTA/NSPS Land Title Survey for Midlothian Manor, 22843 Lakewood Lane prepared by IG Consulting, Inc., dated prepared on August 17, 2022.
 - e. Site Plan including First Floor Plan-Alternate Option, Parking Lot and Stormwater Detention facility, Sheet B2.1, prepared by Cordogan Clark, dated August 18, 2022.
 - f. Landscape Plan Sheet A1.1 prepared by Cordogan Clark, dated August 18, 2022.
 - g. Engineering Improvement Plans for Midlothian Manor, Sheets 1-9, prepared by IG Consulting, Inc., dated prepared on November 22, 2021.
 - h. Site Photometric Plan for Midlothian Manor, prepared by Cree Lighting, 1 sheet, dated November 18, 2022, accompanied by Specification Sheets for OSQ Series LED Area/Flood Luminaires, last revised on July 18, 2022.
 - i. Storm Water Report and Calculations for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on December 6, 2022.
 - j. Traffic Impact Study for Midlothian Manor Affordable Housing Development, prepared by Kimley Horn, dated October 2022.
 - k. Tree Survey and Tree Inventory for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on August 1, 2022 and July 22, 2022 respectively.

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- l. Current Elevation Photograph dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC).
 - m. Proposed Building Elevations, Alternate Option prepared by Cordogan Clark, dated August 18, 2022.
2. The entire 2.6-acre property shall be annexed into the Village of Lake Zurich and zoned within the R-6 Multiple-Family Residential District. The Developer shall agree to the dedication of any prescriptive right-of-way for the use of roadways at their current or future width.
3. Compliance with and satisfaction of the terms and conditions for annexation, zoning, subdivision, land development, as required by Village Code, including all those on- and off-site improvements, application and development impact fees and contributions to be set forth and approved within a binding annexation agreement undertaken between the developer and Village of Lake Zurich.
4. The developer, owner and operator of the facility, HODC, shall be responsible for the general upkeep of the site and private common areas including the parking lot, landscape material and stormwater management facilities. All required maintenance plans shall be prepared and approved by Village Staff prior to Final Plan approval.
5. The binding annexation agreement with the village shall contain provisions to install all the required improvements and providing surety for such improvements, in the form of a Letter of Credit as approved by the village. In addition to the requirements outlined in Chapter 5 of the Land Development Code entitled "Procedure for Subdivision Approval," specifically Section 10-5-7 entitled "Agreements and Guarantee of Improvements," such agreement shall additionally contain the following additional provisions:
 - a. Establishment of a back-up stormwater management Special Service Area (SSA) to ensure that these areas are cared for in the event of a future dissolution or the lack of required maintenance of the stormwater facilities by the developer, owner and operator of the facility or its successors.
 - b. Establishment of a permanent maintenance plan for the maintenance of the stormwater facilities on the subject property, with rights in the Village to maintain if the property owner fails to do so.
 - c. Construction of a sidewalk along the frontage of the property along Midlothian Road and North Lakewood Lane, with additional extension of the sidewalk along Midlothian Road to connect to the nearest existing public sidewalk located approximately 400 feet to the south along the frontage of Cedar Lake Assisted Living & Memory Care Center at 777 Church Street. Absence the construction of such sidewalk, the Applicant shall pay a fee in lieu of installing a sidewalk along the street frontages of the property to be collected and placed into an escrow account that will fund the construction and upkeep of sidewalks within the Village. Such fee shall be based upon the per square-foot cost of a 5-foot wide sidewalk, the unit cost for which shall be determined by the Village at the time of issuance of the building permit, and collected at such time.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: June 21, 2023

6. The interior yards coterminous with the adjacent residential properties shall be landscaped in a manner to provide year-round screening by use of evergreen and deciduous trees, shrubs and plant material, and shall also include a solid privacy fence of no greater than 6 feet in height within the interior yards. Such fence shall extend no higher than 3 feet if proposed to be located in a front or corner side yard with frontage along a street. All landscaping proposed along the remaining periphery of the site shall conform to the requirements of the landscape codes.
7. No patios or balconies shall be constructed or installed on the west elevation of the building so as to minimize any impact on the adjacent residential property. Additionally, no lighting fixtures shall be installed on the west elevation of the building.
8. Removal of the existing structures on the Subject Property shall occur upon the issuance of a demolition permit and prior to issuance of any building permit.
9. The Developer shall be responsible for payment of the all Impact Fees and as a condition of the approval of the Final Plan. Such Impact Fees shall be as follows:
 - a. The required school impact fee:
 - i. 1-2 bedroom - \$795.00 per unit
 - ii. 3 Bedrooms - \$1,275.00 per unit
 - b. The required park impact fee for Low Density Apartments (up to 15/acre)
 - i. 1-bedroom unit \$2,849.40 per unit
 - ii. 2-bedroom unit \$4,365.00 per unit
 - iii. 3-bedroom unit \$5,934.60 per unit
 - c. The required library impact fee: \$125.00 per unit

The school impact fees, park impact fees, and library impact fees are paid pro-rata and due at the time a building permit is issued for the applicable building and shall include the fees for all units contained within such building.
10. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich, including general and continuing compliance with Title 10 of the Village Code, the Land Development Code, and all of the engineering and land improvement requirements, standards and specifications set forth in Chapter 6 of said Land Development Code, unless otherwise approved or provided for in the final engineering plans for this Property.

Respectfully Submitted,

Sarosh Saher
 Community Development Director

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: June 21, 2023

LAKE ZURICH PLANNING & ZONING COMMISSION
FINAL FINDINGS & RECOMMENDATIONS

22843 North Lakewood Lane
June 21, 2023

The Planning & Zoning Commission recommends approval of Application PZC 2023-09, and the Planning & Zoning Commission adopts the findings as contained within the Staff Report dated **June 21, 2023** for this Application and subject to any changes or approval conditions as listed below:

1. Substantial conformance with the following documentation submitted as part of the application subject to revisions required by Village Staff and applicable governmental agencies:
 - a. Zoning Application dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) with application signed by Mr. Koenig as Applicant and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - b. Exhibit A: Legal Description of the Subject Property
 - c. Petition for Annexation dated March 15, 2023 submitted by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC) and Ms. Lorraine Hocker representing the Lake County Housing Authority.
 - d. ALTA/NSPS Land Title Survey for Midlothian Manor, 22843 Lakewood Lane prepared by IG Consulting, Inc., dated prepared on August 17, 2022.
 - e. Site Plan including First Floor Plan-Alternate Option, Parking Lot and Stormwater Detention facility, Sheet B2.1, prepared by Cordogan Clark, dated August 18, 2022.
 - f. Landscape Plan Sheet A1.1 prepared by Cordogan Clark, dated August 18, 2022.
 - g. Engineering Improvement Plans for Midlothian Manor, Sheets 1-9, prepared by IG Consulting, Inc., dated prepared on November 22, 2021.
 - h. Site Photometric Plan for Midlothian Manor, prepared by Cree Lighting, 1 sheet, dated November 18, 2022, accompanied by Specification Sheets for OSQ Series LED Area/Flood Luminaires, last revised on July 18, 2022.
 - i. Storm Water Report and Calculations for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on December 6, 2022.
 - j. Traffic Impact Study for Midlothian Manor Affordable Housing Development, prepared by Kimley Horn, dated October 2022.
 - k. Tree Survey and Tree Inventory for Midlothian Manor, prepared by IG Consulting, Inc., dated prepared on August 1, 2022 and July 22, 2022 respectively.
 - l. Current Elevation Photograph dated March 14, 2023 including cover letter and zoning application prepared by Mr. Richard Koenig of Housing Opportunity Development Corporation (HODC).
 - m. Proposed Building Elevations, Alternate Option prepared by Cordogan Clark, dated August 18, 2022.
2. The entire 2.6-acre property shall be annexed into the Village of Lake Zurich and zoned within the R-6 Multiple-Family Residential District. The Developer shall agree to the

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APPLICATION PZC 2023-09

Community Development Department
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dedication of any prescriptive right-of-way for the use of roadways at their current or future width.

3. Compliance with and satisfaction of the terms and conditions for annexation, zoning, subdivision, land development, as required by Village Code, including all those on- and off-site improvements, application and development impact fees and contributions to be set forth and approved within a binding annexation agreement undertaken between the developer and Village of Lake Zurich.
4. The developer, owner and operator of the facility, HODC, shall be responsible for the general upkeep of the site and private common areas including the parking lot, landscape material and stormwater management facilities. All required maintenance plans shall be prepared and approved by Village Staff prior to Final Plan approval.
5. The binding annexation agreement with the village shall contain provisions to install all the required improvements and providing surety for such improvements, in the form of a Letter of Credit as approved by the village. In addition to the requirements outlined in Chapter 5 of the Land Development Code entitled "Procedure for Subdivision Approval," specifically Section 10-5-7 entitled "Agreements and Guarantee of Improvements," such agreement shall additionally contain the following additional provisions:
 - a. Establishment of a back-up stormwater management Special Service Area (SSA) to ensure that these areas are cared for in the event of a future dissolution or the lack of required maintenance of the stormwater facilities by the developer, owner and operator of the facility or its successors.
 - b. Establishment of a permanent maintenance plan for the maintenance of the stormwater facilities on the subject property, with rights in the Village to maintain if the property owner fails to do so.
 - c. Construction of a sidewalk along the frontage of the property along Midlothian Road and North Lakewood Lane, with additional extension of the sidewalk along Midlothian Road to connect to the nearest existing public sidewalk located approximately 400 feet to the south along the frontage of Cedar Lake Assisted Living & Memory Care Center at 777 Church Street. Absence the construction of such sidewalk, the Applicant shall pay a fee in lieu of installing a sidewalk along the street frontages of the property to be collected and placed into an escrow account that will fund the construction and upkeep of sidewalks within the Village. Such fee shall be based upon the per square-foot cost of a 5-foot wide sidewalk, the unit cost for which shall be determined by the Village at the time of issuance of the building permit, and collected at such time.
6. The interior yards coterminous with the adjacent residential properties shall be landscaped in a manner to provide year-round screening by use of evergreen and deciduous trees, shrubs and plant material, and shall also include a solid privacy fence of no greater than 6 feet in height within the interior yards. Such fence shall extend no higher than 3 feet if proposed to be located in a front or corner side yard with frontage along a street. All landscaping proposed along the remaining periphery of the site shall conform to the requirements of the landscape codes.

Staff Report
APPLICATION PZC 2023-09

Community Development Department
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7. No patios or balconies shall be constructed or installed on the west elevation of the building so as to minimize any impact on the adjacent residential property. Additionally, no lighting fixtures shall be installed on the west elevation of the building.
8. Removal of the existing structures on the Subject Property shall occur upon the issuance of a demolition permit and prior to issuance of any building permit.
9. The Developer shall be responsible for payment of the all Impact Fees and as a condition of the approval of the Final Plan. Such Impact Fees shall be as follows:
 - a. The required school impact fee:
 - i. 1-2 bedroom - \$795.00 per unit
 - ii. 3 Bedrooms - \$1,275.00 per unit
 - b. The required park impact fee for Low Density Apartments (up to 15/acre)
 - iii. 1-bedroom unit \$2,849.40 per unit
 - iv. 2-bedroom unit \$4,365.00 per unit
 - v. 3-bedroom unit \$5,934.60 per unit
 - c. The required library impact fee: \$125.00 per unit

The school impact fees, park impact fees, and library impact fees are paid pro-rata and due at the time a building permit is issued for the applicable building and shall include the fees for all units contained within such building.
10. The development shall be in compliance with all other applicable codes and ordinances of the Village of Lake Zurich, including general and continuing compliance with Title 10 of the Village Code, the Land Development Code, and all of the engineering and land improvement requirements, standards and specifications set forth in Chapter 6 of said Land Development Code, unless otherwise approved or provided for in the final engineering plans for this Property.
 - Without any further additions, changes, modifications and/or approval conditions.
 - With the following additions, changes, modifications and/or approval conditions:

Planning & Zoning Commission Chairman

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: June 21, 2023

EXHIBIT A

LEGAL DESCRIPTION OF SUBJECT PROPERTY

PARCEL 1:

THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 594.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87 DEGREES EAST ALONG THE CENTERLINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTERLINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTERLINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTERLINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTERLINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING...(EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 594.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC

Staff Report
APPLICATION PZC 2023-09

Community Development Department
PZC Hearing Date: June 21, 2023

ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87 DEGREES EAST ALONG THE CENTERLINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTERLINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTERLINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTERLINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTERLINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING...(EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 157.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 317.83 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL)...(ALSO EXCEPTING THEREFROM THAT PART LYING EAST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

Parcel Involved: 14-16-100-056-0000 AND 14-16-100-057-0000

**VILLAGE OF LAKE ZURICH
NOTICE OF PUBLIC HEARING**
PUBLIC NOTICE IS HEREBY GIVEN to all persons that the Village of Lake Zurich Planning & Zoning Commission shall conduct a public hearing on June 21, 2023, at 7:00 P.M. in the Board Room of the Lake Zurich Village Hall, 70 East Main Street, Lake Zurich, Illinois, for the purpose of considering a zoning application filed with the Village requesting approval of Annexation, Zoning and development of a project known as Midlothian Manor of the Subject Property, 22843 Lakewood Lane and legally described below. A copy of the application and the Zoning Code are on file with, and available for public inspection during regular Village business hours in the Lake Zurich Community Development Department located at 595 Teiser Road, Lake Zurich.

Legal Description:
LEGAL DESCRIPTION
PARCEL 1:
THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 304.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87 DEGREES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTER LINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTER LINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTER LINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTER LINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING. (EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE, COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

PARCEL 2:
THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 304.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87 DEGREES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTER LINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTER LINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTER LINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTER LINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING. (EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE, COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 157.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 317.83 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL). (ALSO EXCEPTING THEREFROM THAT PART LYING EAST OF THE FOLLOWING DESCRIBED LINE, COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

Parcel Involved: 14-16-100-056-0000 AND 14-16-100-047-0000
All interested persons are invited to attend and be heard.
At said public hearing, the Planning & Zoning Commission shall accept all testimony and evidence pertaining to said application and shall consider any and all possible zoning actions, including the granting of any necessary special use permits, variations, other special approvals, or amendments to the text of the Zoning Code that may be necessary or convenient to permit development of the proposed type of the described property. All interested persons are invited to attend and be heard.
DATED: June 1, 2023
Orlando Stralman
Chairperson, Planning & Zoning Commission
Published in Daily Herald, June 3, 2023 (4600884)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Lake County Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **Lake County DAILY HERALD**. That said **Lake County DAILY HERALD** is a secular newspaper, published in Libertyville, Lake County, State of Illinois, and has been in general circulation daily throughout Lake County, continuously for more than 50 weeks prior to the first Publication of the attached notice, and a newspaper as defined by 715 ILCS 5/5.

I further certify that the **Lake County DAILY HERALD** is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 06/03/2023 in said **Lake County DAILY HERALD**. This notice was also placed on a statewide public notice website as required by 5 ILCS 5/2.1.

BY *Doula Baitz*
Designee of the Publisher of the Daily Herald

Control # 4600884



Staff Report
APPLICATION PZC 2023-09

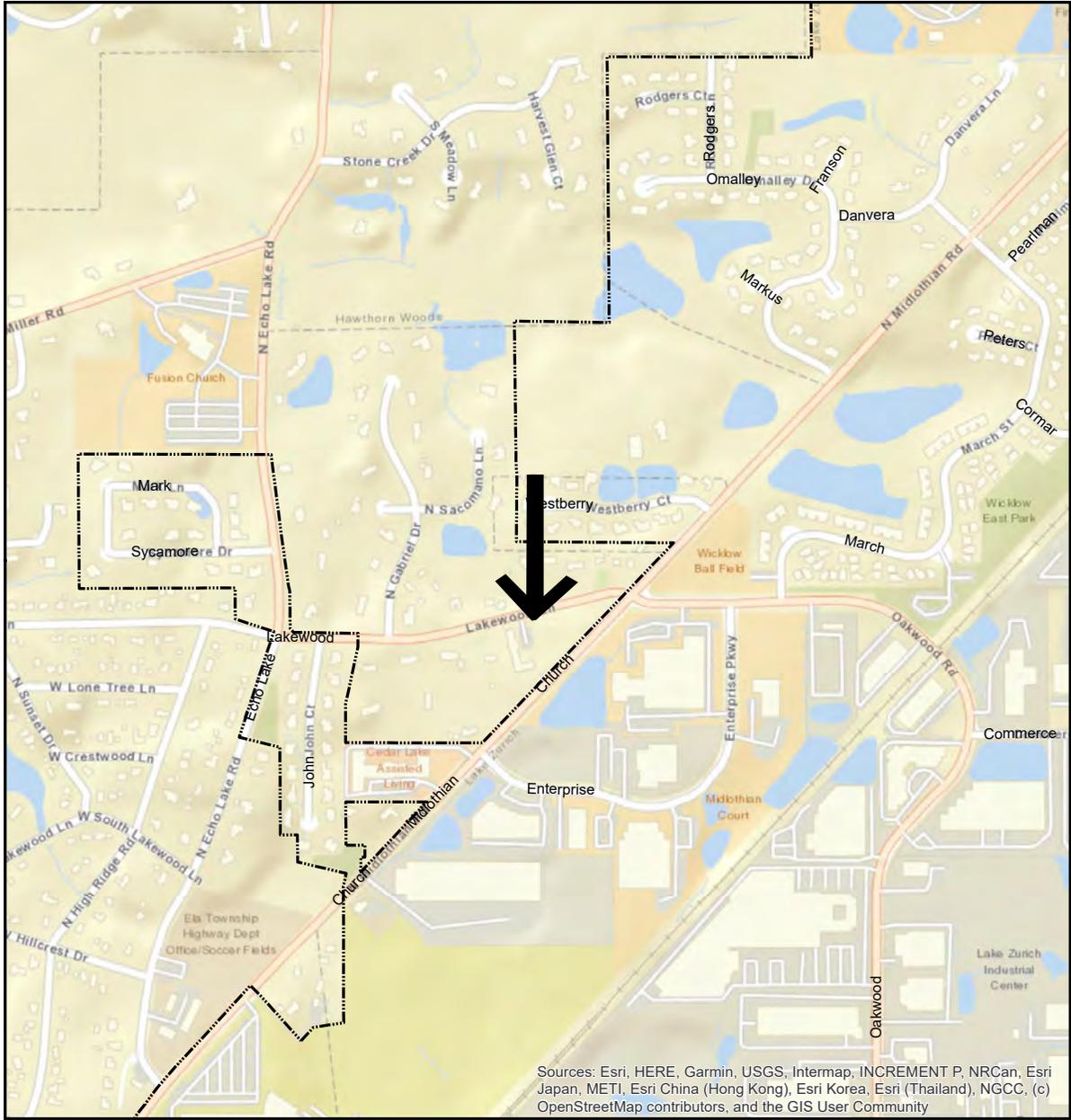
Community Development Department
PZC Hearing Date: June 21, 2023

EXHIBIT B
PUBLIC HEARING SIGNS PRESENT AT SUBJECT PROPERTY





Annexation and PUD 22795 W. Lakewood Lane



COMMUNITY SERVICES DEPARTMENT
Building and Zoning Division
505 Telsor Road, Lake Zurich, Illinois 60047

(847) 540-1696
Fax: (847) 726-2182
LakeZurich.org



Annexation and PUD 22795 W. Lakewood Lane



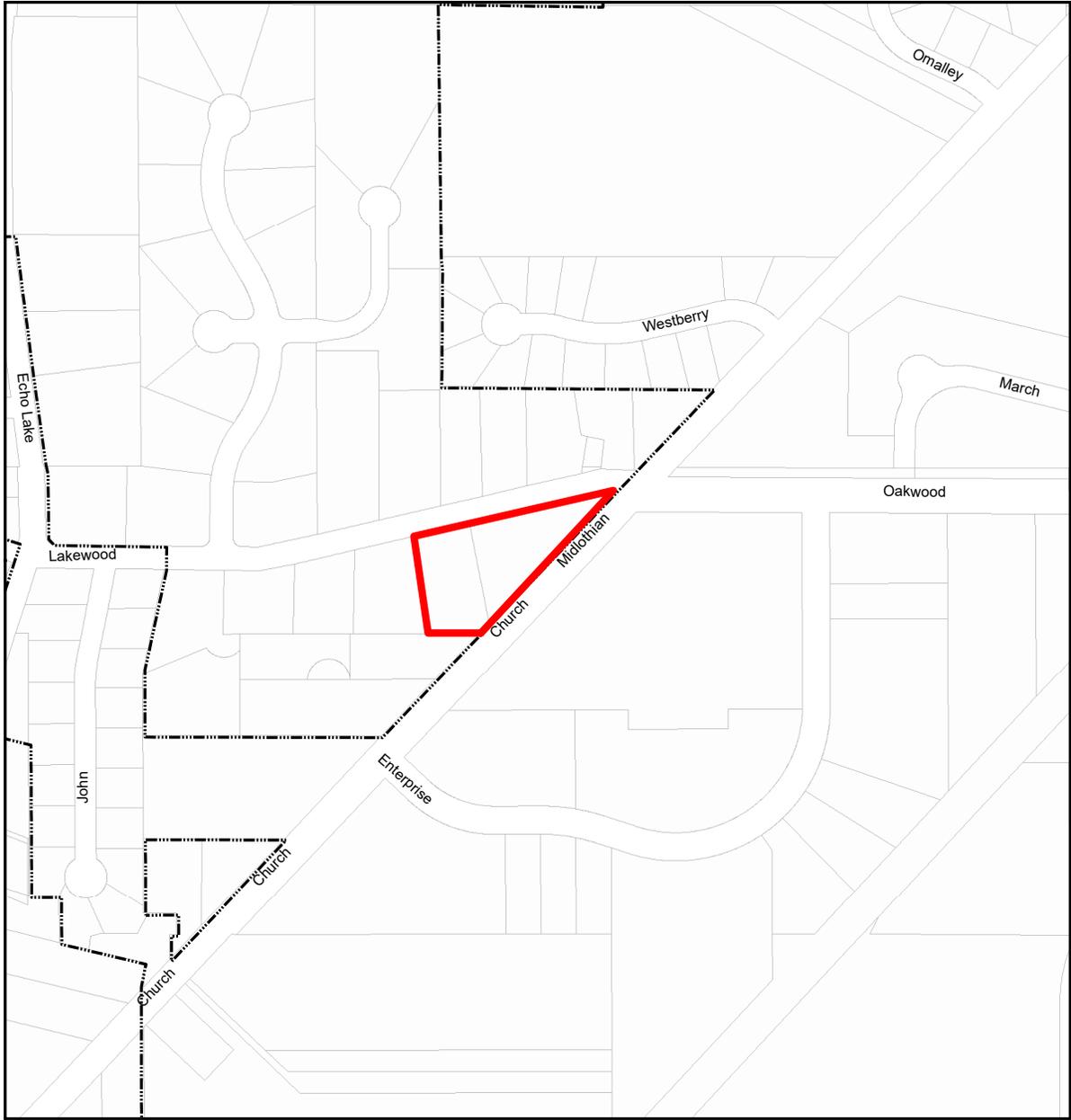
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

COMMUNITY SERVICES DEPARTMENT
Building and Zoning Division
505 Telsor Road, Lake Zurich, Illinois 60047

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Annexation and PUD 22795 W. Lakewood Lane

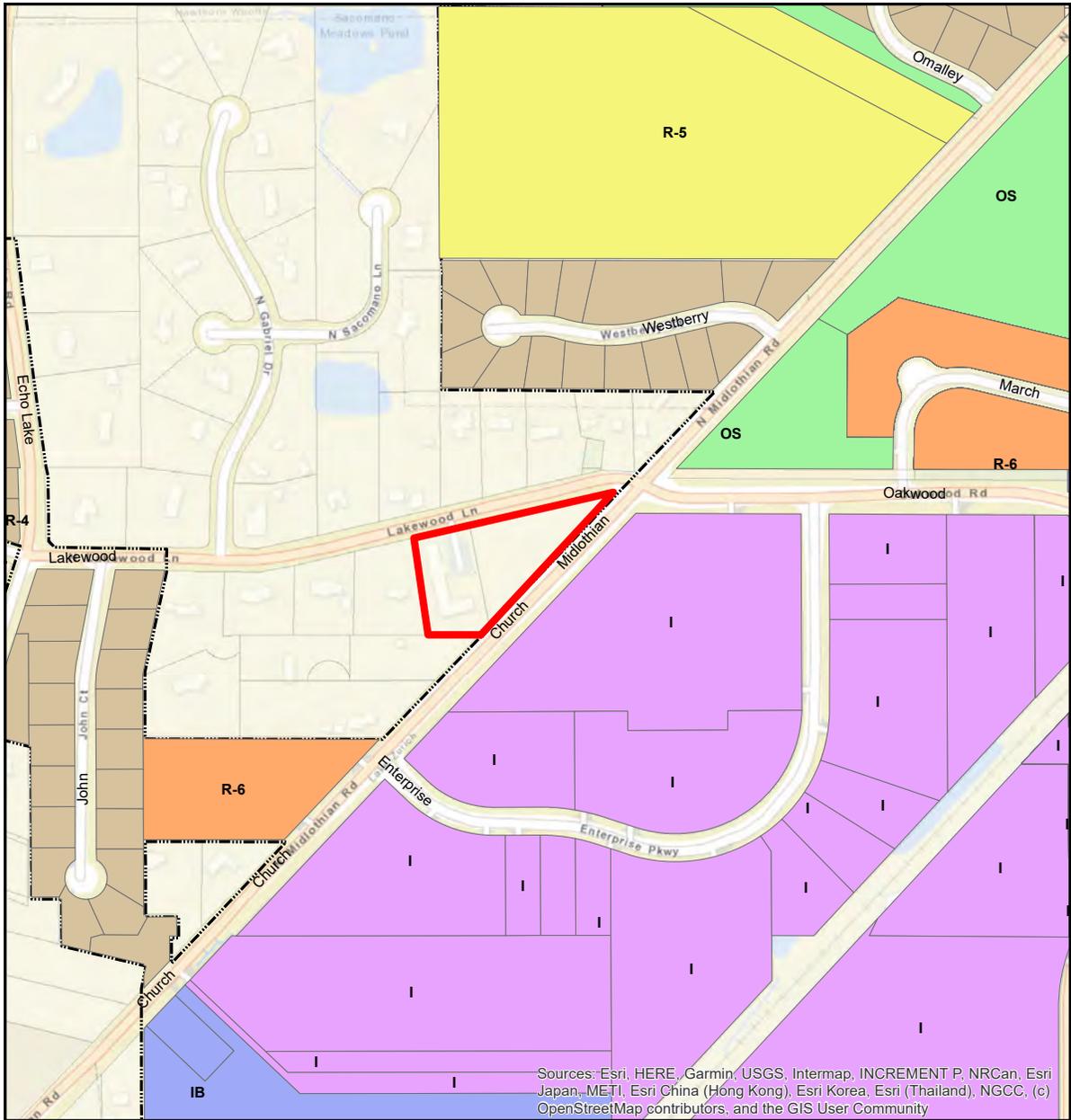


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Annexation and PUD 22795 W. Lakewood Lane



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

COMMUNITY SERVICES DEPARTMENT
Building and Zoning Division
505 Telsor Road, Lake Zurich, Illinois 60047

(847) 540-1696
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LakeZurich.org



**HOUSING
OPPORTUNITY
DEVELOPMENT
CORPORATION**

5340 Lincoln Avenue ♦ Skokie, Illinois 60077
(847) 564-2900 ♦ (847) 564-2992 fax ♦ hodc@hodc.org ♦ www.hodc.org

March 14, 2023

Orlando Stratman
Chairperson of the Planning & Zoning Commission
Village of Lake Zurich
505 Telsler Road
Lake Zurich, IL 60047

Re: Midlothian Manor, 22843 Lakewood Lane
Meeting Request

Dear Chairperson Stratman:

On behalf of Housing Opportunity Development Corporation (HODC), I am writing to submit an application for zoning approval and annexation to develop the property located at 22843 Lakewood Lane. We propose creating a new rental residential development to provide workforce housing. HODC would be the property developer, owner and manager.

The site currently contains a one-story building with shared living facilities and has been vacant for several years. The current units have bathrooms but no kitchens or bedrooms. The property is currently owned by the Lake County Housing Authority who is interested in selling it to us. We propose to construct a new two-story building with 24 affordable rental units including a mix of 1br, 2br and 3br apartments.

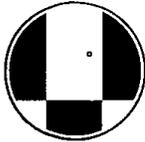
The site is located in unincorporated Lake County so there is not a zoning designation from the Village. We are requesting R6 zoning to allow multifamily residential. The site is currently on a well and septic system so we are requesting access to Village sewer and water services and annexation into the Village.

Please contact me if you have any questions or need any additional information.

Sincerely,

Richard Koenig, FAICP
Executive Director





**HOUSING
OPPORTUNITY
DEVELOPMENT
CORPORATION**

5340 Lincoln Avenue ♦ Skokie, Illinois 60077
(847) 564-2900 ♦ (847) 564-2992 fax ♦ hodc@hodc.org ♦ www.hodc.org

FAQs 22843 Lakewood Lane, Lake Zurich

Q: Who is the developer?

A: Housing Opportunity Development Corporation (HODC) is a community-based nonprofit whose mission is to create affordable housing in the Chicagoland suburbs. The organization was founded in 1983 and is overseen by a board of directors. HODC has completed over 30 housing developments with more than 500 units in 18 communities. More information is available at www.hodc.org.

Q: What is being proposed?

A: The project would include demolition of the existing building to be replaced by a new two-story building with 24 units having a mix of 1br, 2br and 3br apartments. There would be over 40 parking spaces and extensive landscaping. The building would be energy efficient and obtain green certification. Rents would average \$600 for 1 bedroom, \$750 for 2 bedrooms, and \$950 for 3 bedrooms.

Q: Why this location?

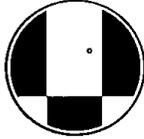
A: The site is owned by the Lake County Housing Authority but has not been used as housing for years. The location has great access to many local amenities. There is a need for housing for local workers in and around Lake Zurich.

Q: Who would live here?

A: Families who live and work in Lake Zurich and need affordable rents are the focus. Potential tenants would be screened through background checks and credit checks. Rents would be affordable to households earning about \$20,000-\$40,000 per year or about \$10-\$20 per hour.

Q: What are the benefits?

A: Benefits to the community include putting this government-owned property back on the tax rolls and creating storm water detention to reduce area flooding. It would replace a dilapidated building with a new, attractive, modern building that is energy efficient, accessible, and sprinklered. The project would provide added landscaping, fencing and sidewalks.



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Q: How will the project be financed?

A: Financing has not been finalized but would likely come from the Illinois Housing Development Authority (IHDA), a state agency that finances affordable housing. IHDA has a variety of programs including the Low Income Housing Tax Credit and Illinois Affordable Housing Trust Fund. Lake County Community Development also has funds for affordable housing through several programs. The programs require that units be rented to households who earn less than certain incomes and that units are rented at below-market rents for at least thirty years.

Q: Who will own the property?

HODC will own and manage the property.

Q: How will eligible families be selected?

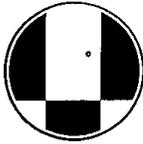
A: Eligible tenants will be selected from a waitlist created for the project. There is no waitlist at this time. The opening of a new waitlist will be announced a few months prior to construction completion and then updated overtime. All new potential tenants must go through a detailed qualifications process. We require detailed income information to determine whether a households meets the income threshold. Then we run a credit check and background check. An applicant cannot have a felony conviction within the past five years. We use all the tools at our disposal to predict who will be good residents and neighbors and want to take advantage of this opportunity.

Q: Do all of the residents have to live in the community?

A: The goal is to provide low cost, high quality housing for Lake County residents. It is against fair housing laws to restrict applicants from certain areas. Therefore, it is not a requirement for applicants to currently live or work in the community. However, we have found that most applicants are already from the area and what to live near their job, family and friends.

Q: How long are the leases?

A: Every lease is signed for a one year term. At the end of each year, residents are recertified and leases are again signed for one year. There are no short term leases. All residents who live in a unit must be named on the lease.



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Q: How many people will be allowed in a unit?

A: Per local codes, the maximum number of people in an apartment is two people per bedroom. We require that every person who lives in a unit must be on the lease. This is enforced through inspections and talking with residents. Allowing unauthorized occupants will result in eviction if violated.

Q: What are the rents and will they cover operating costs?

A: Rents will average \$650 for 1 bedroom, \$850 for 2 bedrooms and \$1050 for 3 bedrooms. Yes, the rents cover the cost of running and operating the building. The development funding covers construction costs.

Q: What is the process when tenants can't pay?

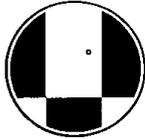
A: When somebody has trouble paying rent, as the property manager HODC works with the family to find a way to pay the rent through various rental assistance programs. This can include the township, philanthropic organizations and other programs. If there is a short-term issue it is possible to enter into a payment plan to get caught-up. We do our best to help tenants stay housed but it is sometime necessary to evict for non-payment of rent.

Q: Will other support agencies be worked with to help residents?

A: Yes, we partner with local agencies that provide support services like the Hope Collective, so that we can connect our residents with them. Our goal is to make sure people stay housed so we need great local partners. This includes churches, private nonprofit organizations, and government resources. In addition to our property manager who is in charge of the annual lease process, we have Service Coordinators who build relationships with residents and are the liaisons with local service agencies. They make sure we know who the local agencies are. The goal is to have a lasting relationship with our residents.

Q: How will the property be maintained?

A: HODC has a team of maintenance and janitorial staff who are responsible for repairs and daily upkeep. Staff take care of minor repairs and hire experienced professionals for larger projects. Over the years, as the owner we set-aside reserve money in a saving account to cover future repair needs like a new roof or



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heating system. This reserve is capitalized up-front and then funded monthly to make sure there are sufficient funds down the road when needed.

Q: Will the development pay property taxes?

A: Yes, the property will be put back on the tax rolls. The assessed value and real estate tax amounts will be based on the restricted rents. Utility rates such as water and sewer will be at market rates.

Q: Can additional units be added?

A: No, units cannot be added in the future. The zoning request is specific for this project and no units can be added in the future without explicit village approval. We have no intention of adding more units later. We are asking for the exact project now so that's what we want to fund and develop.

Q: How will the footprint change from the current building?

A: The current building will be demolished and the new building will be oriented east/west for solar benefits as well as less impact on nearby neighbors.

Q: How many parking spaces for each unit?

A: There will be 41 parking spaces or 1.7 spaces for each unit.

Q: What is the parking configuration?

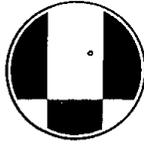
A: The new parking lot will be in approximately the same location as the existing lot and the entry is in about the same location. There will be fencing and additional landscaping installed around the perimeter to block headlights for neighboring properties.

Q: Will there be outdoor parking lot lighting?

A: Yes, there will be lighting within the parking lot but it is against local rules to have lighting go beyond the edge of the property. The lights will face down because lights are needed at night. The city will make sure the lighting is proper.

Q: Will there be pets allowed?

A: Yes, pets allowed with a pet deposit.



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Q: What is the project timeline?

A: The project is in the planning phase. The next step will be to submit a zoning application to the village. Once scheduled the proposal will be presented to the Plan Commission and then to the Village board which typically takes several meetings. If approved, construction funding would be secured which can take several months. Once construction starts, it will take about one year to complete the work. If all gets approved, tenants could potentially move-in by the end of 2024 but there is no fixed timeline.

Q: What is next?

A: A zoning application will be submitted to the village and they will make a public announcement.



ZONING APPLICATION

Community Development Department
505 Telser Rd.
Lake Zurich, IL 60047
Phone: (847) 540-1696
Fax: (847) 540-1769

(Please Type or Print)

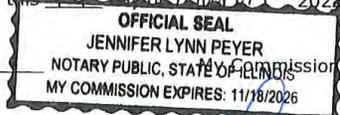
- Address of Subject Property: 22795 W. Lakewood Lane
- Please attach complete legal description
- Property Identification number(s): 14-16-100-056-0000; 14-16-100-057-0000
- Owner of record is: Lake County Housing Authority Phone: 847-650-6848
E-Mail lhocker@lakecountyha.org Address: 33928 N US Highway 45, Grayslake, IL 60030
- Applicant is (if different from owner): Housing Opportunity Development Corp Phone: 847-564-2900
E-Mail rkoenig@hodc.org Address: 5340 Lincoln Avenue
- Applicant's interest in the property (owner, agent, realtor, etc.): purchaser
- All existing uses and improvements on the property are: multifamily residential
- The proposed uses on the property are: multifamily residential
- List any covenants, conditions, or restrictions concerning the use, type of improvements, setbacks, area, or height requirements placed on the Subject Property and now of record and the date of expiration of said restrictions:
none
- Describe any contract or agreement of any nature relevant to the sale or disposal of the Subject Property:
The Housing Authority of Lake County is interesting in selling the property.
- For applications requiring a public hearing, please attach a list which contains the PIN, owner, and owner's mailing address of all properties located within 250 feet (excluding all Public Right-of-Ways) of the Subject Property.

THE APPLICANT'S SIGNATURE BELOW INDICATES THE INFORMATION CONTAINED IN THIS APPLICATION AND ON ANY ACCOMPANYING DOCUMENTS IS TRUE AND CORRECT. THE APPLICANT ALSO ACKNOWLEDGES IF THE CONSULTANT EXPENSES EXCEED THE INITIAL ESCROW DEPOSIT, THE APPLICANT WILL REIMBURSE THE ACCOUNT IMMEDIATELY.

Housing Opportunity Development Corp. Richard Koenig, Executive Director
(Name of applicant) (Signature of applicant)

Subscribed and sworn to before me this 14 day of March, 2022.

Jennifer Lynn Peyer
(Notary Public)

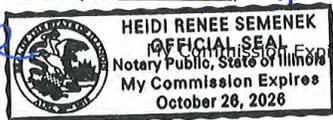


Expires 11/18/2026

Housing Authority of the County of Lake Lorraine Hocter
(Name of Owner, if different) (Signature of Owner, if different)

Subscribed and sworn to before me this 17 day of March, 2022.

Heidi Renee Semenek
(Notary Public)



Expires 10/28/2026

Please indicate what form of zoning relief your application requires. For assistance, please contact Staff:

- Zoning Code **Map** Amendment to change zoning of Subject Property from _____ to _____
- Zoning Code **Text** Amendment to amend the following section(s) of the Zoning Code _____

(See Section 18-103 of the Lake Zurich Zoning Code for specific standards. If a specific parcel is the subject of this amendment, then provide the additional information listed in Section 18-103C.)

- Special Use Permit/Amendment for _____
(See Section 19-103 of the Lake Zurich Zoning Code for specific standards.)

- Planned Unit Development/Major Adjustment/Amendment

(Planned Unit Developments are a distinct category of special use and are intended to create a more desirable environment than through strict application of the zoning and subdivision regulations. See Section 22-105 of the Lake Zurich Zoning Code for specific standards. Please list all the 'modifications' requested in the cover letter.)

- Variation for _____

(See Section 17-104 of the Lake Zurich Zoning Code for specific standards. Please indicate what your specific hardships are in the cover letter.)

- Modification to the Land Development Code (includes retaining walls more than 2 feet in height)
(See Section 10-6-18 of the Land Development Code for specific standards.)

- Preliminary Plat of Subdivision

- Final Plat of Subdivision or Amendment to Plat of Subdivision
(See Sections 10-5-2 and 10-5-9 of the Land Development Code for specific standards.)

- Site Plan Approval/Major Adjustment/Amendment
(See Section 20-103 of the Lake Zurich Zoning Code for specific standards.)

- Exterior Appearance Approval or Amendment
(See Section 21-103 of the Lake Zurich Zoning Code for specific standards.)

APPLICATION TO ANNEX CERTAIN TERRITORY

All land annexed to the Village is classified automatically after such annexation in the R-1\2 Single Family Residential District. The owner must file an application for a Zoning Map amendment if he or she desires a different zoning classification for the Subject Property.

- Petition to Annex Certain Territory (Please complete attached petition)
- Application to Annex Certain Territory

COMPREHENSIVE PLAN APPLICATION

- Comprehensive Plan **Map** Amendment for _____

- Comprehensive Plan **Text** Amendment for _____

Legal Description

PARCEL 1:

THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 594.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87 DEGREES EAST ALONG THE CENTERLINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTERLINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTERLINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTERLINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTERLINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING....(EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF LOT 4 IN SCHOOL TRUSTEES SUBDIVISION OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 16, TOWNSHIP 43 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, SAID POINT BEING NORTH 63 DEGREES 43 MINUTES EAST 260.6 FEET FROM A POINT IN THE WEST LINE OF AFORESAID QUARTER QUARTER SECTION 594.25 FEET SOUTH OF THE NORTHWEST CORNER THEREOF; THENCE EAST PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION 371.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 726.25 FEET; THENCE SOUTH 87

DEGREES EAST ALONG THE CENTERLINE OF SAID PUBLIC ROAD, 108.2 FEET TO THE INTERSECTION OF THE CENTERLINE OF THE AFORESAID PUBLIC ROAD WITH THE CENTERLINE OF PUBLIC HIGHWAY KNOWN AS STATE AID ROUTE 15; THENCE SOUTH 43 DEGREES 40 MINUTES WEST ALONG THE CENTERLINE OF SAID STATE AID ROUTE 15, 594.15 FEET TO A POINT IN THE CENTERLINE THEREOF, 849.68 FEET NORTH OF THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 16, THENCE WEST PARALLEL WITH THE SOUTH LINE OF THE LAST AFORESAID QUARTER QUARTER SECTION, 409.34 FEET TO THE PLACE OF BEGINNING....(EXCEPTING THEREFROM THAT PART LYING WEST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 157.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 317.83 FEET MORE OR LESS TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL)....(ALSO EXCEPTING THEREFROM THAT PART LYING EAST OF THE FOLLOWING DESCRIBED LINE: COMMENCING AT THE AFORESAID POINT OF BEGINNING; THENCE NORTH 0 DEGREES 41 MINUTES EAST, 274.73 FEET TO THE CENTER OF THE PUBLIC ROAD; THENCE NORTH 77 DEGREES 22 MINUTES EAST ALONG THE CENTER LINE OF SAID PUBLIC ROAD, 327.19 FEET FOR THE NORTHERLY TERMINUS OF SAID LINE; THENCE SOUTH 12 DEGREES 38 MINUTES EAST AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 356.77 MORE OR LESS. TO THE SOUTHERLY TERMINUS OF SAID LINE, SAID SOUTHERLY TERMINUS BEING ON THE SOUTH MOST LINE OF PARCEL), IN LAKE COUNTY, ILLINOIS.

TAX NO. 14-16-100-056-0000 AND 14-16-100-047-0000

COMMON ADDRESS: 22795 West Lakewood Lane, Lake Zurich, IL 60047

VILLAGE OF
LAKE ZURICH
 ILLINOIS
At the Heart of Community

**Village of Lake Zurich
 Zoning Application Guide**

**IF APPLICABLE
 PETITION FOR ANNEXATION
 TO THE VILLAGE OF LAKE ZURICH
 PURSUANT TO ILLINOIS MUNICIPAL CODE SECTION 7-1-8**

TO: The Mayor and Board of Trustees
 Of the Village of Lake Zurich
 Lake County, Illinois

THIS PETITION is made pursuant to Section 7-1-8 of the Illinois Municipal Code, 65 ILCS 5/7-1-8. The Petitioners state the following:

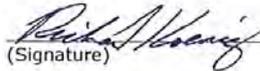
- a. The Petitioners are all of the owners of record of all of the territory that is legally described on Exhibit A attached hereto and, by this reference, incorporated herein (the "Territory").
- b. The Petitioners constitute at least 51 percent of the electors residing within the Territory.
- c. The Territory is not located within the corporate limits of any municipality, is unincorporated, and is contiguous to the Village of Lake Zurich ("Lake Zurich").

The Petitioners hereby request that the Territory be annexed to Lake Zurich by an ordinance passed and approved by the President and the Board of Trustee of Lake Zurich, pursuant to Section 7-1-8 of the Illinois Municipal Code, subject only to payment of the Annexation Fee of \$1,000/acre.

The Petitioners hereby further request that Lake Zurich give any and all notices required by statute and ordinance, and take all such further action as may be necessary or appropriate to effectuate such annexation of the Territory to Lake Zurich.

DATED this 15th day of March, 2022.

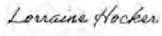
Attested by Richard Koenig
 (Petitioner's Name)


 (Signature)

Executive Director

(Title)
5340 Lincoln Avenue, Skokie IL 60077
 (Address)

Lake County Housing Authority
 (Name of Owner)


 (Signature of Owner)

6 Petition for Annexation

Final Audit Report

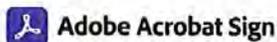
2023-03-15

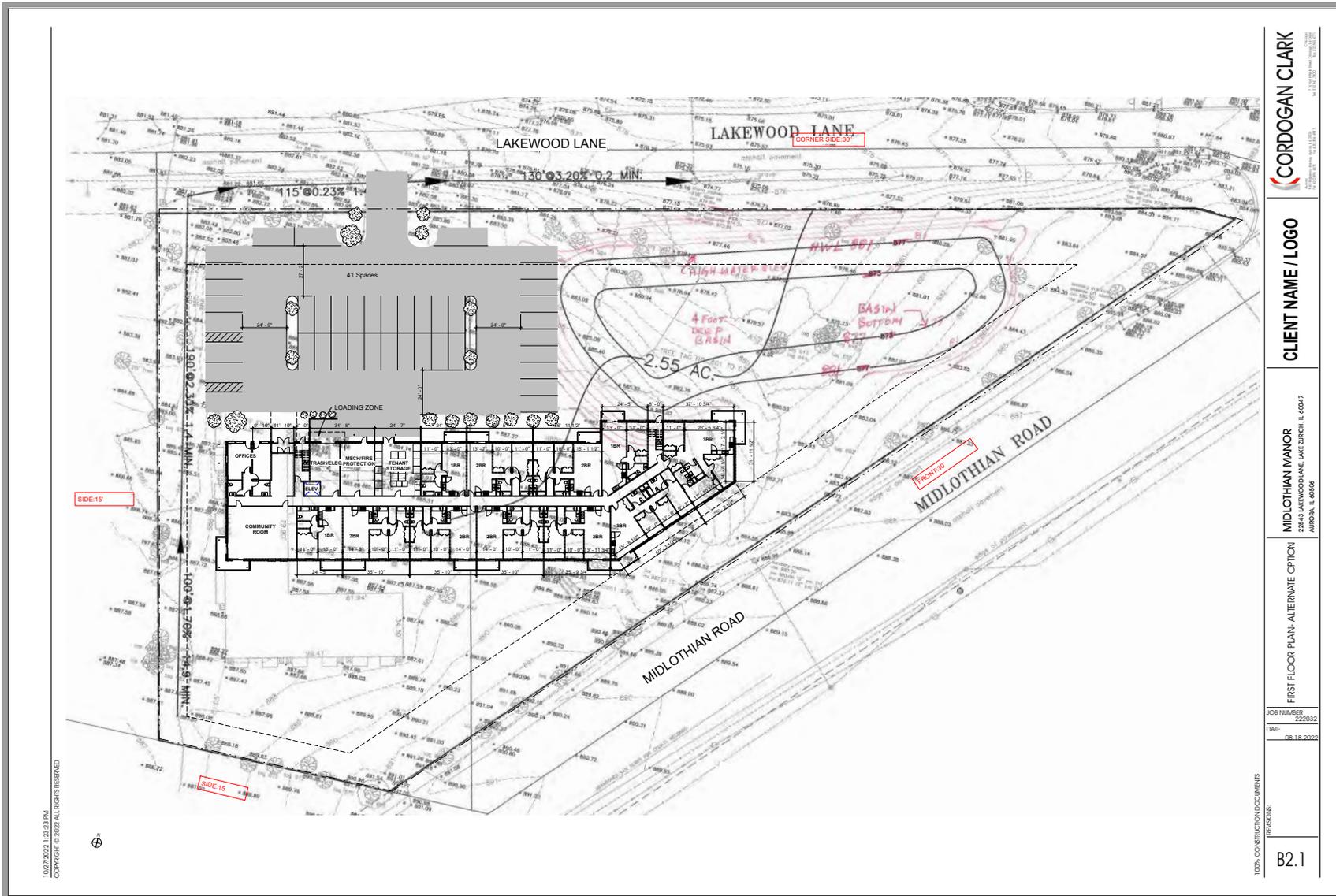
Created:	2023-03-15
By:	Derek Eovaldi (deovaldi@lakecountyha.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAAjIM0FKgvuVezOsGigUq-5FGOk8qqETe

"6 Petition for Annexation" History

-  Document created by Derek Eovaldi (deovaldi@lakecountyha.org)
2023-03-15 - 9:18:09 PM GMT- IP address: 73.247.179.159
-  Document emailed to Lorraine Hocker (lhocker@lakecountyha.org) for signature
2023-03-15 - 9:18:31 PM GMT
-  Email viewed by Lorraine Hocker (lhocker@lakecountyha.org)
2023-03-15 - 9:37:48 PM GMT- IP address: 174.192.77.56
-  Document e-signed by Lorraine Hocker (lhocker@lakecountyha.org)
Signature Date: 2023-03-15 - 9:38:12 PM GMT - Time Source: server- IP address: 174.192.77.56
-  Agreement completed.
2023-03-15 - 9:38:12 PM GMT

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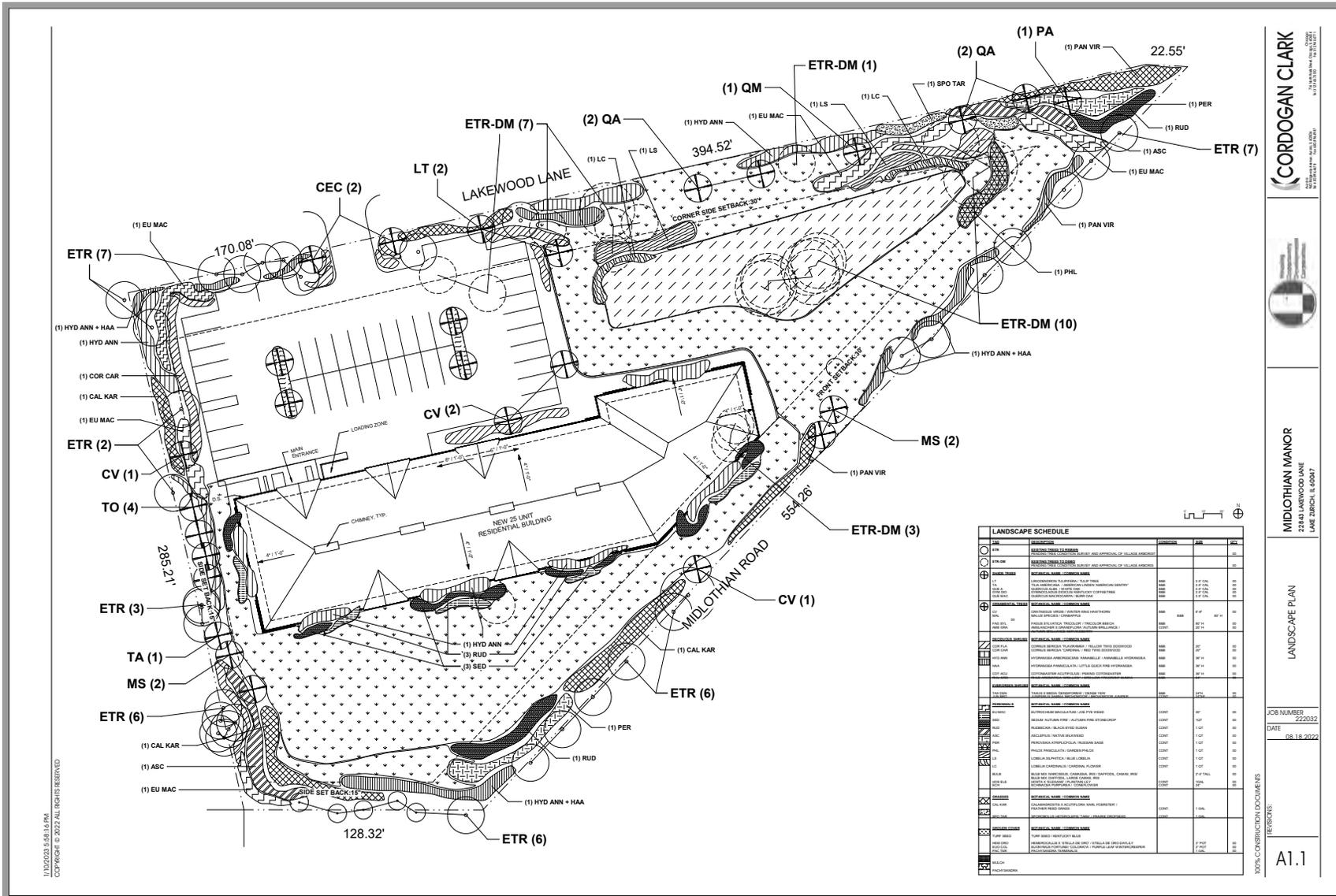


CLIENT NAME / LOGO

MIDLOTHIAN MANOR
 2340 LAKWOOD LANE LAKE EUNICH, IL 60157
 ABBEY, IL 60009

FIRST FLOOR PLAN-ALTERNATE OPTION

JOB NUMBER: 222032
 DATE: 08.18.2022



CORDOGAN CLARK
 LANDSCAPE ARCHITECTS
 11100 WEST 10TH AVENUE, SUITE 100
 DENVER, COLORADO 80231
 TEL: 303.755.1100
 WWW.CORDOGANCLARK.COM



MIDLOTHIAN MANOR
 11100 WEST 10TH AVENUE, SUITE 100
 DENVER, COLORADO 80231
 LANE 2000018.00007

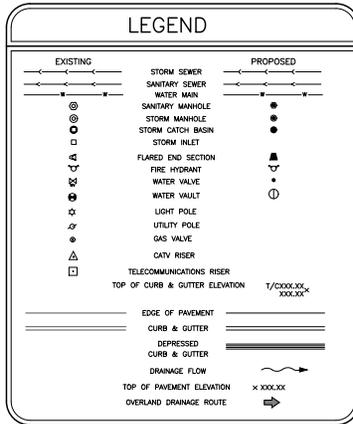
LANDSCAPE PLAN

JOB NUMBER: 2220032
 DATE: 08.18.2022

100% CONSTRUCTION DOCUMENTS
 REVISIONS:
A1.1

11/02/2021 6:50:15 AM
 COPYRIGHT © 2022 ALL RIGHTS RESERVED

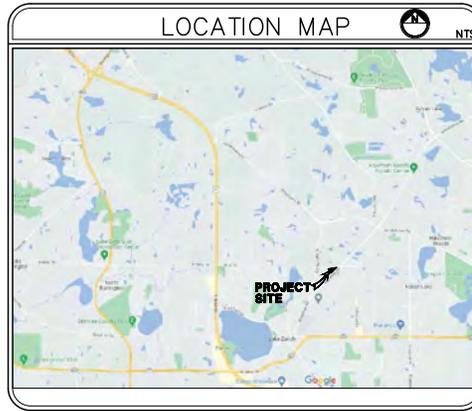
MIDLOTHIAN MANOR 22843 LAKEWOOD LANE LAKE ZURICH, ILLINOIS 2022



OWNER'S INFORMATION:

SITE BENCHMARK:
SOUTH BONNET BOLT OF FIRE HYDRANT, 350'±
SOUTHWEST OF THE INTERSECTION OF LAKEWOOD LANE
AND MIDLOTHIAN ROAD.
ELEVATION = 879.69 NAVD 88 (PER GPS OCCUPATION)

**THE CONTRACTOR MUST CALL J.U.L.I.E
FOR THE LOCATION AND STAKING OF
EXISTING UNDERGROUND UTILITIES
(GAS, ELECTRIC, TELEPHONE, ETC.) AT
1-800-892-0123 48 HOURS PRIOR
TO DIGGING.**



LAKE COUNTY, SECTION 16, TOWNSHIP 43 N, RANGE 10 E

NOTE:
CONTRACTOR MUST VERIFY LOCATIONS, DEPTHS, MATERIALS AND POTENTIAL
CONFLICTS PRIOR TO BIDDING AND CONSTRUCTING THE PROPOSED
IMPROVEMENTS. SUCH VERIFICATION SHALL ALSO INCLUDE FACILITIES OWNED
AND OPERATED BY VARIOUS UTILITY COMPANIES.

THE REVIEW AND APPROVAL OF THESE FINAL ENGINEERING PLANS AND
SPECIFICATIONS BY THE LAKE COUNTY DIVISION OF TRANSPORTATION DOES
NOT CONSTITUTE A RELEASE FROM OR GRANT OF VARIATION FROM THE
STANDARDS AND SPECIFICATIONS REQUIRED IN THE LAKE COUNTY HIGHWAY
ACCESS AND USE ORDINANCE, LATEST EDITION. THE PERMITTEE, THE
PERMITTEE'S DESIGNATED REPRESENTATIVES, AND/OR ALL SUCCESSORS AND
ASSIGNS SHALL BE SOLELY RESPONSIBLE FOR ALL WORK AND
IMPROVEMENTS WITHIN THE LIMITS OF THE COUNTY RIGHT-OF-WAY, UNLESS
OTHERWISE SPECIFIED, APPROVED IN WRITING BY THE LAKE COUNTY
ENGINEER, AND ON FILE WITH THE LAKE COUNTY DIVISION OF
TRANSPORTATION. ALL WORK AND MATERIALS NECESSARY TO PERFORM
WORK WITHIN THE LIMITS OF THE COUNTY HIGHWAY RIGHT-OF-WAY SHALL
BE IN CONFORMANCE WITH THE PROVISIONS AND REQUIREMENTS OF THE
LAKE COUNTY HIGHWAY ACCESS AND USE ORDINANCE, LATEST EDITION.

ENGINEER: KEVIN C. LEWIS DATE: _____
ILLINOIS REGISTRATION NO. 062-055368 EXPIRATION DATE: 11-30-23
THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED
VOID WITHOUT THE SIGNATURE, SEAL, AND EXPIRATION DATE OF
THE SEAL OF THE ENGINEER.

INDEX

- 1 - COVER SHEET
- 2 - EXISTING CONDITIONS
- 3 - GEOMETRIC PLAN
- 4 - GRADING PLAN
- 5 - SOIL EROSION CONTROL PLAN
- 6 - UTILITY PLAN
- 7 - PROJECT NOTES & SPECIFICATIONS
- 8 - CONSTRUCTION STANDARDS
- 9 - CONSTRUCTION STANDARDS

THE CONSTRUCTION, INCLUDING MATERIALS USED, OF THIS IMPROVEMENT
SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE MOST
RECENT EDITIONS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION", "SUPPLEMENTAL SPECIFICATIONS AND RECURRING
SPECIAL PROVISIONS", AND THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC
CONTROL DEVICES FOR STREETS AND HIGHWAYS", INCLUDING ALL
AMENDMENTS AND SUCCESSOR DOCUMENTS TO THE AFOREMENTIONED
DOCUMENTS AS PUBLISHED OR ADOPTED BY THE ILLINOIS DEPARTMENT OF
TRANSPORTATION AND/OR LC DOT UNLESS OTHERWISE STATED IN THESE
ENGINEERING PLANS.

THE CONSTRUCTION OF THE IMPROVEMENTS SHALL ALSO BE IN
ACCORDANCE WITH THE "LAKE COUNTY HIGHWAY ACCESS AND USE
ORDINANCE", LATEST EDITION.

THE LAKE COUNTY DIVISION OF TRANSPORTATION SHALL NOT BE HELD
LIABLE FOR AN ERRORS OR OMISSIONS IN THESE ENGINEERING PLANS OR
FOR ANY ADDITIONAL WORK, WHICH MAY BE NEEDED DUE TO ERRORS OR
OMISSIONS IN THESE ENGINEERING PLANS.

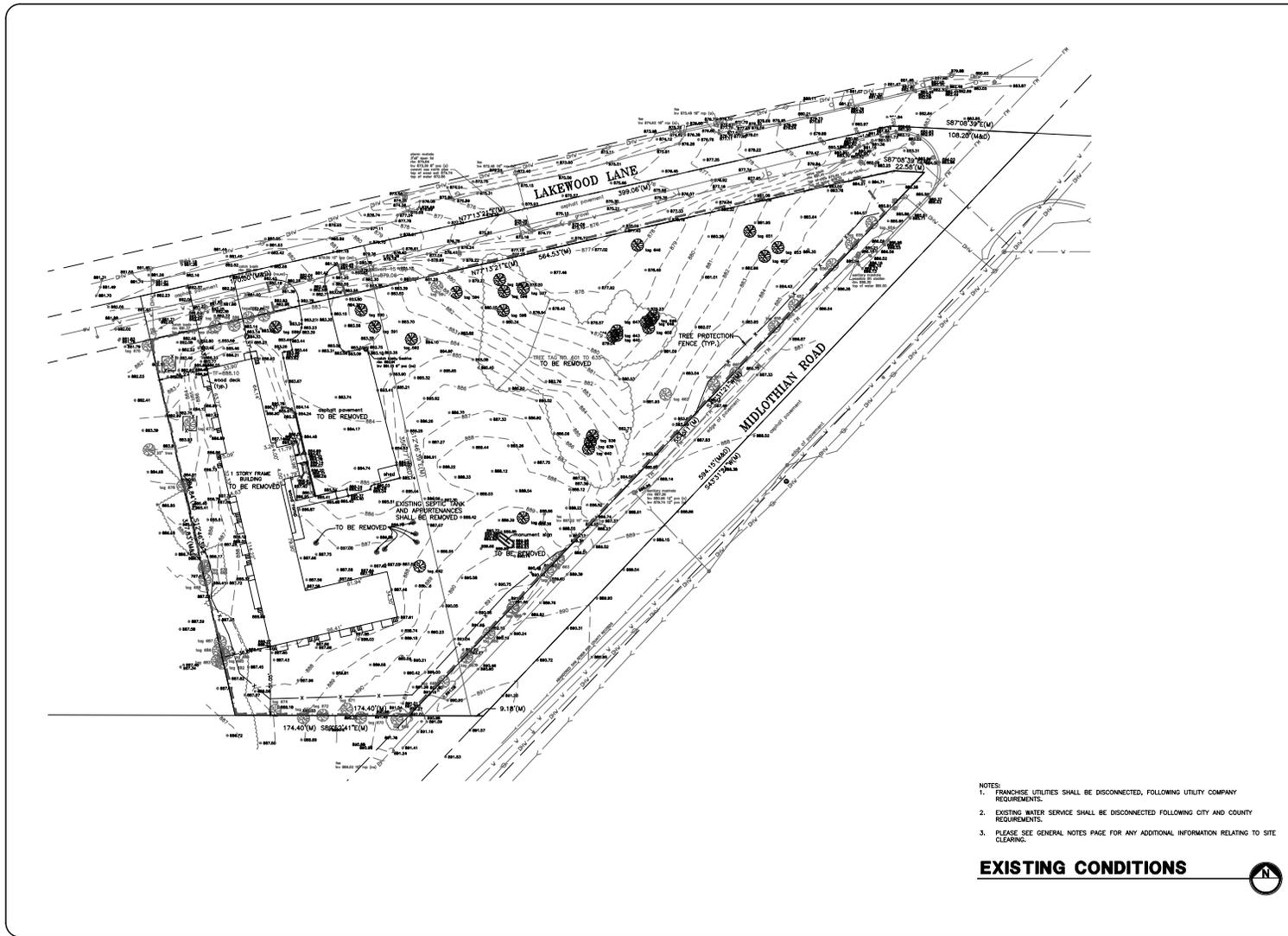
STORM SEWER, SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL
CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN
CONSTRUCTION IN ILLINOIS (STANDARD SPECIFICATIONS), LATEST ISSUE.

DATE	REVISIONS

J.J. CONSULTING, INC.
CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
300 MANHATTAN DRIVE, WHEELING, ILLINOIS 60090 PH: (847) 215-1133 FAX: (847) 215-1177
1725 W. 130th STREET, LAKE ZURICH, WISCONSIN 53090 PROJECT NO. 22211 SCALE: N/A DATE: 11/22/21
COVER SHEET
FORM NO. 104-000330

**MIDLOTHIAN MANOR
22843 LAKEWOOD LANE
LAKE ZURICH, ILLINOIS**

PROJECT No.
22614
1 of 9



- NOTES:
1. FRANCHISE UTILITIES SHALL BE DISCONNECTED, FOLLOWING UTILITY COMPANY REQUIREMENTS.
 2. EXISTING WATER SERVICE SHALL BE DISCONNECTED FOLLOWING CITY AND COUNTY REQUIREMENTS.
 3. PLEASE SEE GENERAL NOTES PAGE FOR ANY ADDITIONAL INFORMATION RELATING TO SITE CLEARING.

EXISTING CONDITIONS

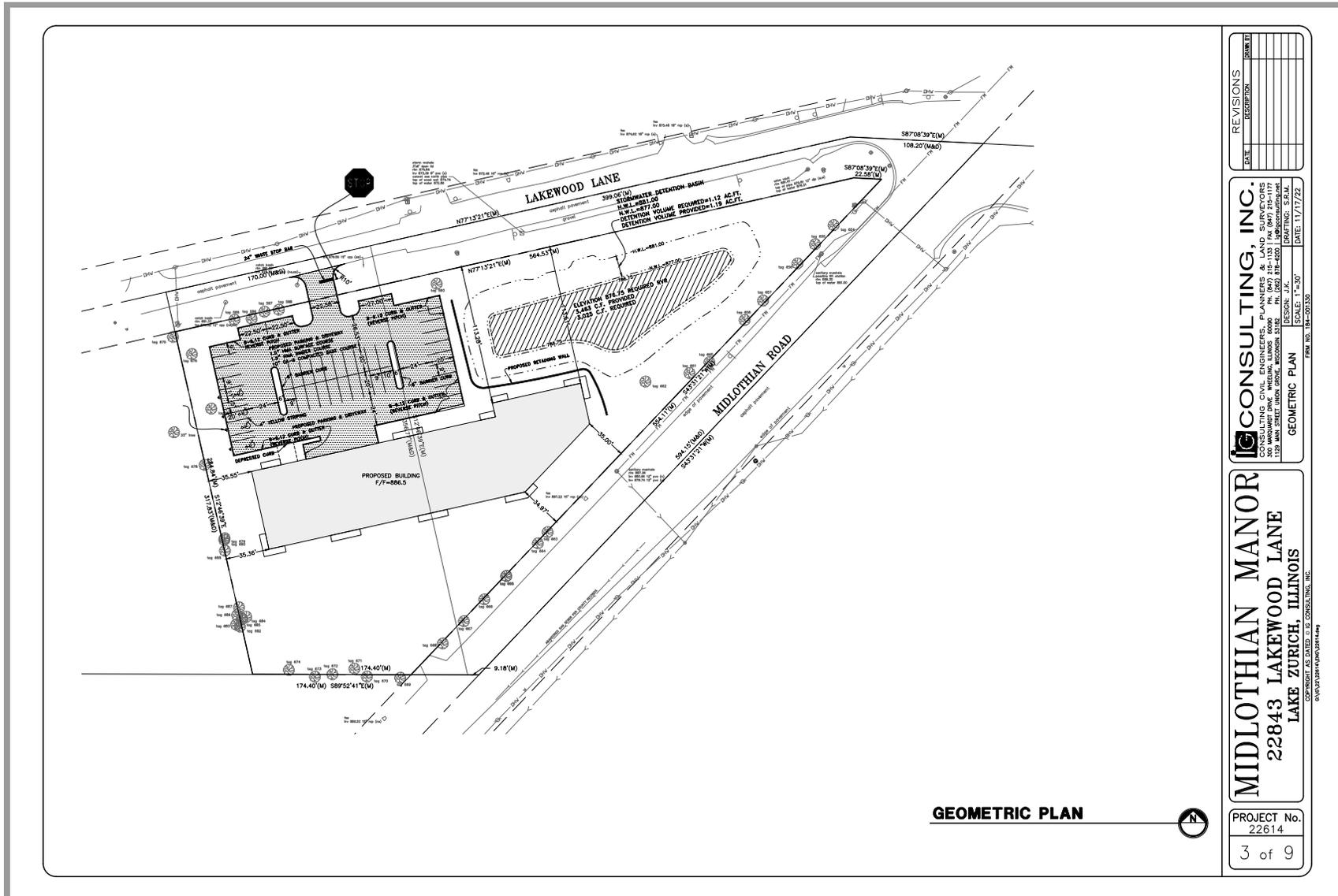


DATE	REVISIONS

CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WILMINGTON DRIVE, WILMINGTON, ILLINOIS 60090 PH: (847) 716-1133 FAX: (847) 241-1177
 1175 W. BIRCHWOOD DRIVE, DEERFIELD, ILLINOIS 60015
 DESIGN: J.K.C. DRAFTING: S.F.M.
 SCALE: 1" = 30'
 DATE: 11/17/22
 EXISTING CONDITIONS
 PWD NO. 194-501330

MIDLOTHIAN MANOR
22843 LAKEWOOD LANE
LAKE ZURICH, ILLINOIS

PROJECT No.
 22614
 2 of 9



DATE	REVISIONS

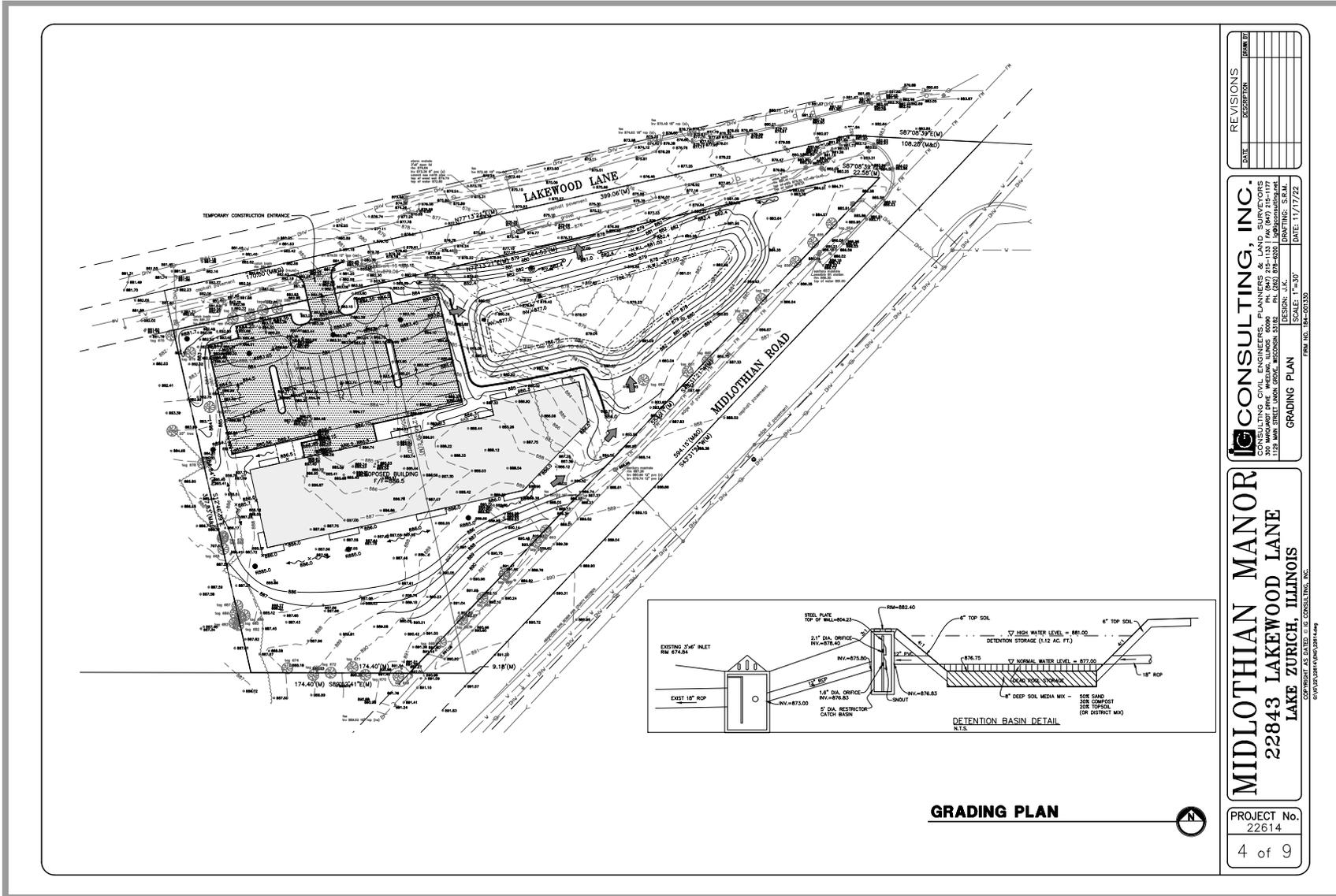
CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WASHINGTON DRIVE, WHEELING, ILLINOIS 60090 PH: (847) 745-1133 FAX: (847) 745-1177
 1175 W. WASHINGTON, WHEELING, ILLINOIS 60090 PH: (847) 745-1133 FAX: (847) 745-1177
 DESIGN: J.K.C. DRAWING: S.F.M.
 SCALE: 1" = 30'
 DATE: 11/17/22
 FORM NO. 19-50133D

MIDLOTHIAN MANOR
 22843 LAKEWOOD LANE
 LAKE ZURICH, ILLINOIS

PROJECT No.
 22614
 3 of 9

GEOMETRIC PLAN





DATE	REVISIONS

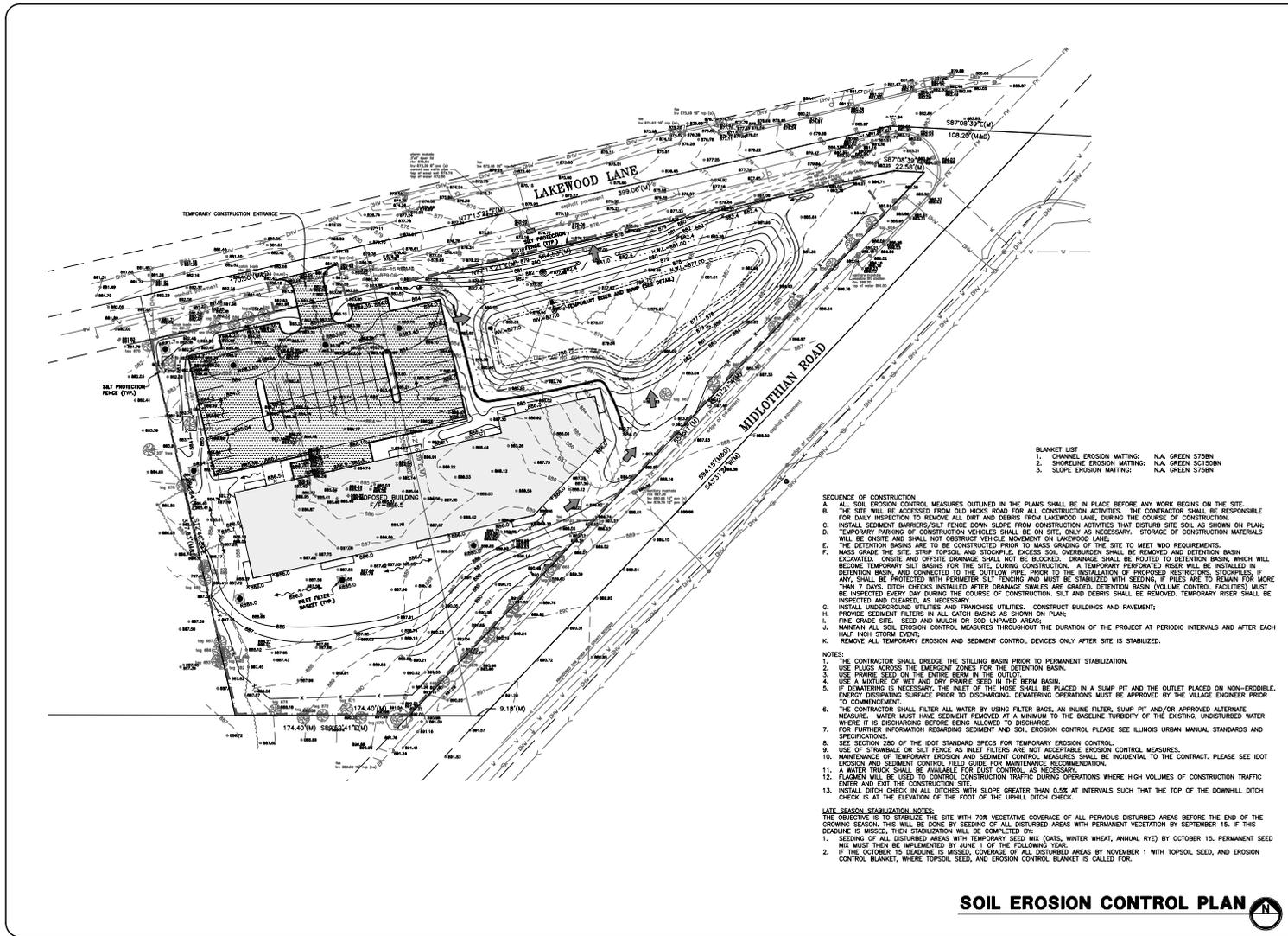
CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WILMINGTON PIKE, WILMINGTON, ILLINOIS 60090 PH: (847) 745-1133 FAX: (847) 241-1177
 1175 WEST OBERLIN STREET, DEERFIELD, ILLINOIS 60015 PH: (847) 477-8888
 DESIGN: J.K.C. DRAWING: S.F.M. DATE: 11/17/22
 SCALE: 1" = 30'
 PWD NO. 19-04-001350

MIDLOTHIAN MANOR
22843 LAKEWOOD LANE
LAKE ZURICH, ILLINOIS

PROJECT No.
 22614
 4 of 9

GRADING PLAN





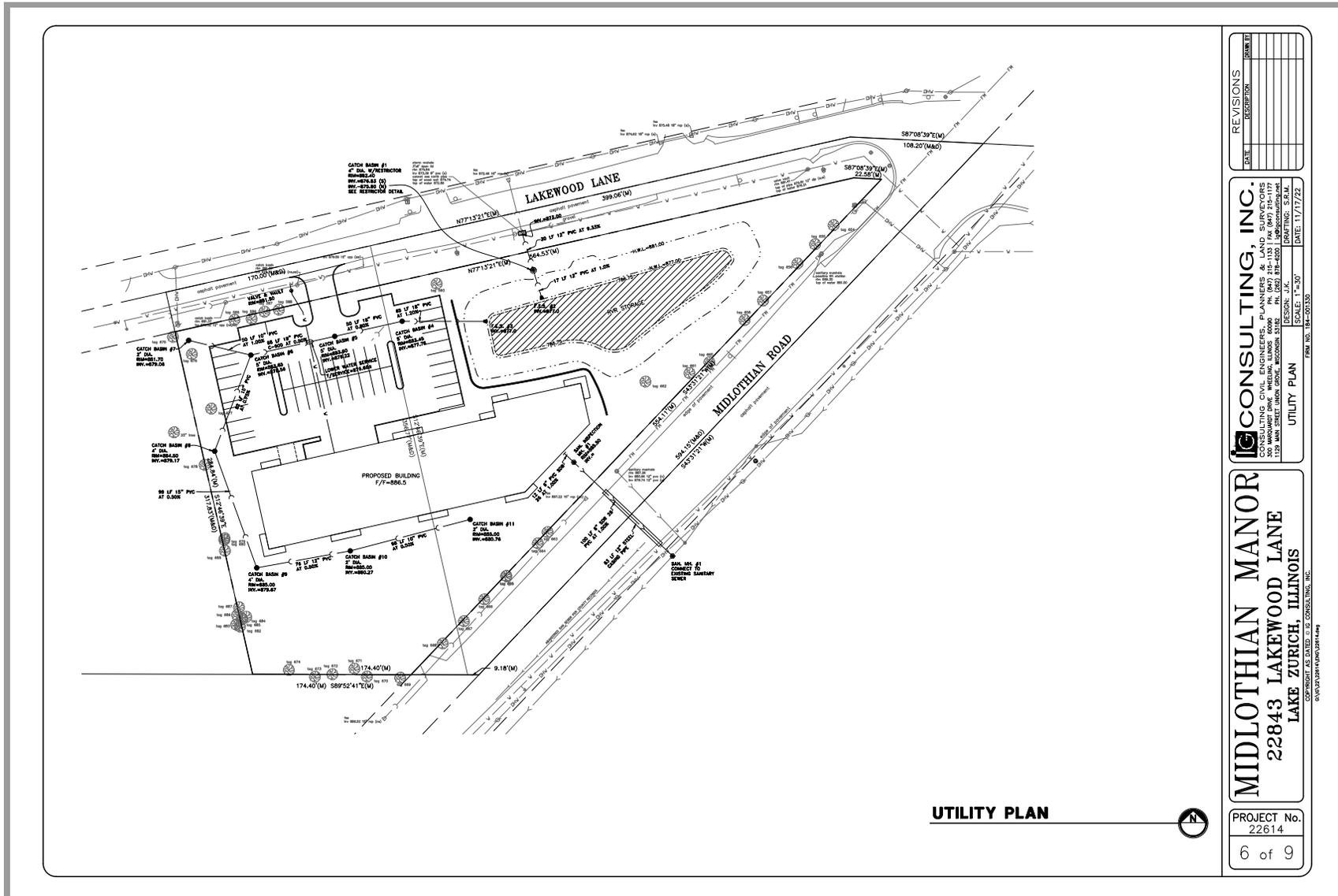
DATE	REVISIONS

CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WINDWARD DRIVE, WHEELING, ILLINOIS 60090 PH: (847) 716-1133 FAX: (847) 716-1177
 100 W. WASHINGTON STREET, WHEELING, ILLINOIS 60090 PH: (847) 716-1133 FAX: (847) 716-1177
 SOIL EROSION CONTROL PLAN DESIGN: J.A.C. DRAWING: S.F.M. DATE: 11/17/22
 SCALE: 1" = 30'
 PLAN NO. 19-104-00130

MIDLOTHIAN MANOR
22843 LAKEWOOD LANE
LAKE ZURICH, ILLINOIS
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 010/2020/0000/0001/0001.dwg

PROJECT No.
 22614
 5 of 9

SOIL EROSION CONTROL PLAN



DATE	REVISIONS

CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WILMINGTON DRIVE, WILMINGTON, ILLINOIS 60090
 PHONE: (847) 214-1133 FAX: (847) 214-1177
 WWW: WWW.CONSULTINGINC.COM
 DESIGN: J.K.C. DRAWING: S.F.M.
 SCALE: 1" = 30'
 DATE: 11/17/22
 PROJECT NO. 22614

MIDLOTHIAN MANOR
 22843 LAKEWOOD LANE
 LAKE ZURICH, ILLINOIS

PROJECT No.
 22614
 6 of 9

UTILITY PLAN



LCDOT STANDARD NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY APPROVALS WITH ALL LOCAL AGENCIES AND THE STATE OF ILLINOIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES AND THE STATE OF ILLINOIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES AND THE STATE OF ILLINOIS.

PRECAST REINFORCED CONCRETE FLARED END SECTION

TRASH GUARDS FOR F.E.S.

SPILLWAY DETAIL

6527N1 Grate

STACKING NOTE: EACH GRATE MUST ROTATE 90° WHILE FALLING.

DEPRESSED CURB

MOUNTABLE CURB

CATCH BASIN DETAIL (TYPE C)

STORM CATCHBASIN TYPES A AND C

TABLE 1: ROCK RIPRAP SIZES AND THICKNESS

EDOT Gradation Number	480 (in.)	30 (in.)	Minimum Blanket Thickness (in.)
RR-3	5	10	15
RR-4	9	14	20
RR-5	12	19	28
RR-6	15	22	32
RR-7	18	27	32

TABLE 2: MINIMUM EDOT ROCK SIZES AND APPROX LENGTH FOR MAXIMUM AND MINIMUM FLOW WATER CONDITIONS

Culvert Dia. (in.)	Minimum Tailwater			Maximum Tailwater		
	5 ft/s 1'	10 ft/s 1'	10 ft/s 1'	5 ft/s 1'	10 ft/s 1'	10 ft/s 1'
12	No. 3	No. 3	No. 3	No. 3	No. 3	No. 3
18	No. 3	No. 4	No. 3	No. 3	No. 3	No. 3
24	No. 3	No. 4	No. 3	No. 3	No. 4	No. 3
30	No. 3	No. 4	No. 3	No. 3	No. 4	No. 3
36	No. 4	No. 5	No. 3	No. 3	No. 4	No. 3
48	No. 4	No. 5	No. 4	No. 4	No. 4	No. 4
60	No. 5	No. 6	No. 4	No. 4	No. 5	No. 5
72	No. 6	No. 6	No. 4	No. 4	No. 5	No. 5
96	No. 7	No. 7	No. 5	No. 5	No. 5	No. 5

TABLE 3: DIMENSION CHART

SPRINKLER	1/2" (12.5)	3/4" (19.0)	1" (25.4)	1 1/4" (31.8)	1 1/2" (38.1)
1/2" (12.5)	1.0	1.0	1.0	1.0	1.0
3/4" (19.0)	1.0	1.0	1.0	1.0	1.0
1" (25.4)	1.0	1.0	1.0	1.0	1.0
1 1/4" (31.8)	1.0	1.0	1.0	1.0	1.0
1 1/2" (38.1)	1.0	1.0	1.0	1.0	1.0

REVISIONS

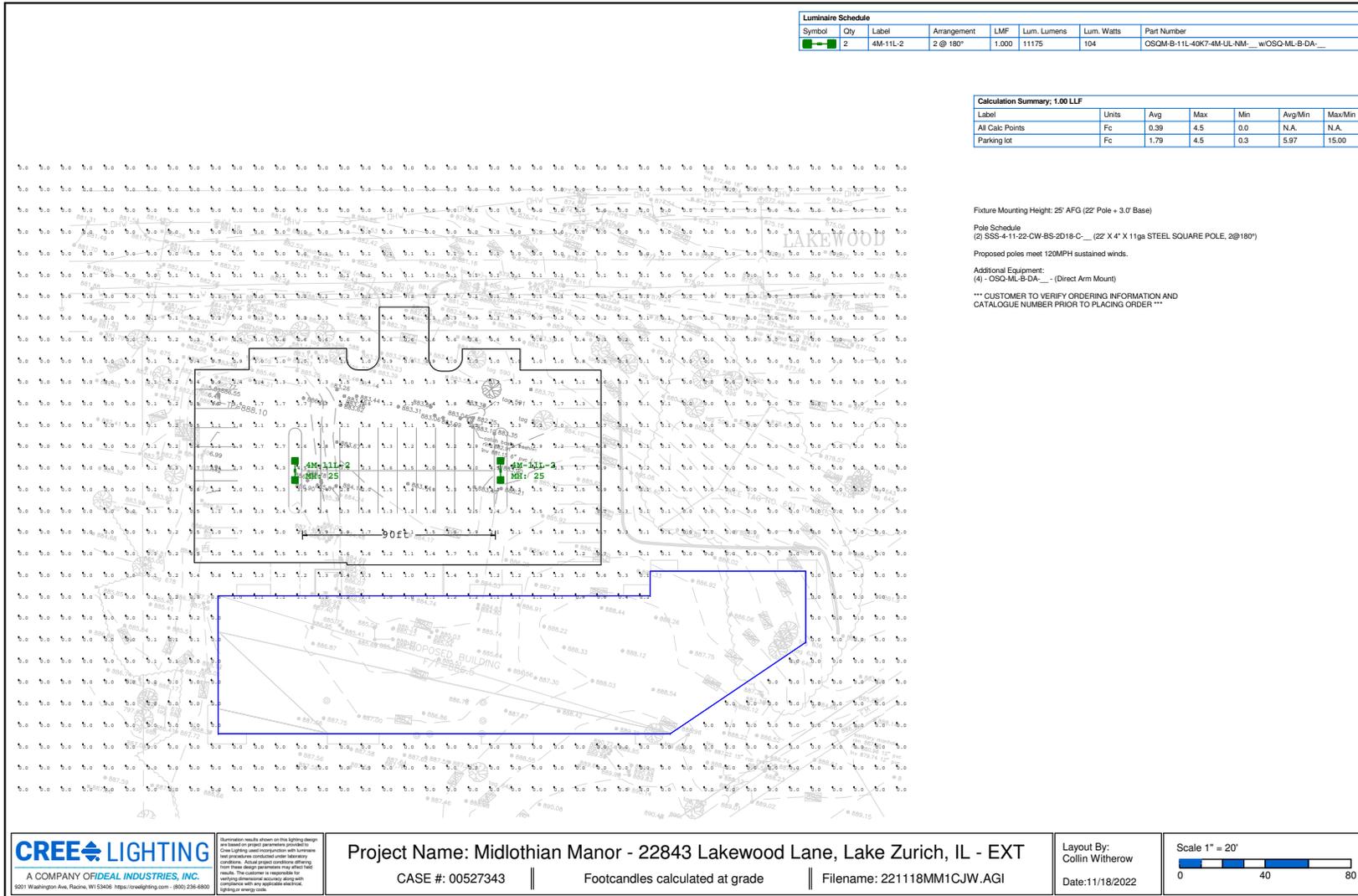
NO.	DATE	DESCRIPTION

CONSULTING, INC.
CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
300 WASHINGTON DRIVE, WHEELING, ILLINOIS 60090 P: (847) 215-1133 F: (847) 215-1177
E: INFO@CONSULTINGINC.COM WWW.CONSULTINGINC.COM
CONSTRUCTION STANDARDS SCALE: N/A DRAWING: S.F.M. DATE: 11/17/22

MIDLOTHIAN MANOR
22843 LAKEWOOD LANE
LAKE ZURICH, ILLINOIS

PROJECT No. 22614
8 of 9

<h3>CULVERT INLET PROTECTION - STONE</h3> <p>CULVERT CROSS SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p> <p>REVISIONS</p> <table border="1"> <tr><th>DATE</th><th>DESCRIPTION</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> <p>CONSULTING, INC. CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS 300 WILMINGTON DRIVE, WILMINGTON, MISSISSIPPI 39201 PHONE: (601) 715-1133 FAX: (601) 715-1177 WWW.CONSULTING.COM CONSTRUCTION STANDARDS SCALE: N/A DESIGN: J.K. DRAWING: S.F.M. DATE: 11/17/22 FORM NO. 194-501330</p>	DATE	DESCRIPTION									<h3>SUMP PIT PLAN</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>TREE PROTECTION - FENCING</h3> <p>POST AND FENCE DETAIL</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>ROLLED EROSION CONTROL PRODUCTS</h3> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>PIPE OUTLET TO FLAT AREA</h3> <p>SECTION A-A</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>PIPE OUTLET TO CHANNEL</h3> <p>SECTION A-A</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>
DATE	DESCRIPTION														
<h3>STABILIZED CONSTRUCTION ENTRANCE PLAN</h3> <p>PLAN VIEW</p> <p>SIDE ELEVATION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>STABILIZED CONSTRUCTION ENTRANCE PLAN</h3> <p>SECTION A-A</p> <p>SECTION B-B</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>SILT FENCE DETAIL</h3> <p>REVISIONS</p> <table border="1"> <tr><th>DATE</th><th>DESCRIPTION</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> <p>CONSULTING, INC. CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS 300 WILMINGTON DRIVE, WILMINGTON, MISSISSIPPI 39201 PHONE: (601) 715-1133 FAX: (601) 715-1177 WWW.CONSULTING.COM CONSTRUCTION STANDARDS SCALE: N/A DESIGN: J.K. DRAWING: S.F.M. DATE: 11/17/22 FORM NO. 194-501330</p>	DATE	DESCRIPTION									<h3>TEMPORARY TOPSOIL STOCKPILE DETAIL</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>TEMPORARY TOPSOIL STOCKPILE DETAIL</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	
DATE	DESCRIPTION														
<h3>FOR BARE EARTH APPLICATION ONLY</h3> <p>TEMPORARY DITCH CHECK INSTALLATION FOR BARE EARTH APPLICATION ONLY</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>CHANNEL INSTALLATION</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>SHORELINE INSTALLATION</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>	<h3>SLOPE INSTALLATION</h3> <p>SECTION</p> <p>Notes: 1. This detail shall be installed when the installed flow accumulation is one foot or more. 2. The stone shall be placed on a 12" to 18" thick concrete apron. 3. The stone shall be placed on a 12" to 18" thick concrete apron. 4. The stone shall be placed on a 12" to 18" thick concrete apron. 5. The stone shall be placed on a 12" to 18" thick concrete apron. 6. The stone shall be placed on a 12" to 18" thick concrete apron.</p>												



Simulation results shown on this lighting design are based on typical performance characteristics. Cree Lighting used interpolation with luminaire footcandle data calculated under laboratory conditions. Actual project conditions affecting footcandle design parameters may affect final results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

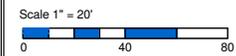
Project Name: Midlothian Manor - 22843 Lakewood Lane, Lake Zurich, IL - EXT

CASE #: 00527343

Footcandles calculated at grade

Filename: 221118MM1CJW.AGI

Layout By:
Collin Witherow
Date: 11/18/2022



OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Rev. Date: V6 07/18/2022

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. The 6L lumen package is a suitable upgrade for HID applications up to 250 Watt, and the 11L lumen package is a suitable upgrade for HID applications up to 400 Watt. The 22L lumen package is a suitable upgrade for HID applications up to 750 Watts, and the 30L lumen package is a suitable upgrade for HID applications up to 1000 Watts.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, tunnels, underpasses, and internal roadways

Performance Summary

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

NanoOptic® Precision Delivery Grid™ optic

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 4,000 - 30,000

Efficacy: Up to 173 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty: 10 years on luminaire; 10 years on Colorfast DeltaGuard® finish; 5 years for PML sensor; up to 5 years for Synapse® accessories; 1 year on luminaire accessories

*See <http://creelighting.com/warranty> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Mount:** OSQ-ML-B-AA-BK + **Luminaire:** OSQM-B-4L-30K7-2M-UL-NM-BK

Mount (Luminaire must be ordered separately)*		Color Options:
OSQ-		SV Silver BK Black BZ Bronze SV Silver WH White
OSQ-ML-B-AA Adjustable Arm		
OSQ-ML-B-DA Direct Arm		
OSQ-ML-B-TSP Transportation Mount (stainless steel; do not specify color)		
OSQ-ML-B-TM Trunnion Mount		

*Reference EPA and pole configuration suitability data beginning on page 10

Luminaire (Mount must be ordered separately)

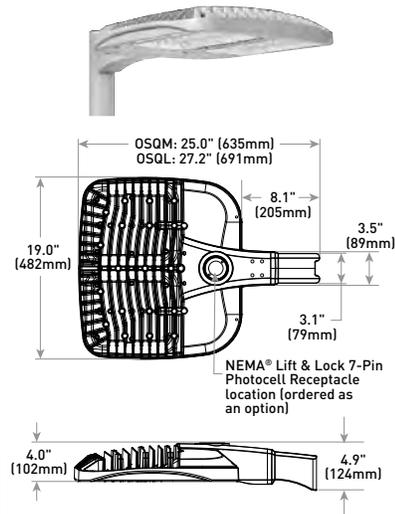
OSQ	Family	Size	Series	Lumen Package ¹	CCT/CRI	Optic	Voltage	Mount	Color Options	Controls**	Options									
OSQ	M	L	B	Medium	30K7	Asymmetric	UL	NM	BK	PML Programmable Multi-Level, up to 40° Mounting Height	20KV	20KV/10KA Surge Suppression								
													4L	3000K, 70 CRI	2M*	Universal 120-277V	No Mount	Black	- Refer to PML_spec_sheet for details	- Replaces standard 10kV/5kA surge protection
													6L	4000K, 70 CRI	3M*	Universal 347-480V	Must specify mount from table above	BZ	- Intended for downlight applications at 0° tilt	- Fuse
													9L	5000K, 90 CRI	4M*	Universal 347-480V	Mount ships separately	SV	- Mount ships separately	- Compatible with 120V, 277V or 347V (phase to neutral)
													11L	5000K, 90 CRI	Symmetric	- Not available with 4L or 6L lumen packages	WH	- Refer to PML_spec_sheet for details	- Consult factory if fusing is required for 208V, 240V or 480V (phase to phase)	
													16L	5700K, 70 CRI	5M	Type V Medium		Intended for downlight applications at 0° tilt	- Refer to PML_spec_sheet for availability with PML options	
													22L	11,000 Lumens	6M	Type V Narrow		- Intended for downlight applications at 0° tilt	- When code dictates fusing, use time delay fuse	
													30L	30,000 Lumens	7M	Type V Square		09/08/07/06/05/04/03/02/01	- Refer to PML_spec_sheet for availability with PML options	
													30L	30,000 Lumens	8M	Narrow Flood		Field Adjustable Output	- Refer to PML_spec_sheet for details	
													30L	30,000 Lumens	9M	NEMA® 3x3		- Must select 09, 08, 07, 06, 05, 04, 03, 02, or 01	- Intended for downlight applications at 0° tilt	
													30L	30,000 Lumens	10M	NEMA® 4x4		- Offers full range adjustability	- Intended for downlight applications at 0° tilt	
													30L	30,000 Lumens	11M	NEMA® 5x5		- Refer to pages 12-18 for power and lumen values	- Not available with PML or PML2 options	
30L	30,000 Lumens	12M	NEMA® 6x6		- Not available with PML or PML2 options	- Refer to pages 12-18 for power and lumen values														
30L	30,000 Lumens	13M	NEMA® 7x5		- Not available with PML or PML2 options	- Refer to pages 12-18 for power and lumen values														

¹ Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values

** Available with Backlight Shield when ordered with field-installed accessory (see table on page 2)

** Luminaire comes standard with 0-10V dimming

OSQ-ML-B-DA Mount



Luminaire	Weight
OSQM	28.9 lbs. [13.1kg]
OSQL	32.4 lbs. [14.7kg]

Note: Refer to page 11 for fixture mounting drill pattern. For additional mounts, refer to drawings beginning on page 19



US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING®

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weatherlight LED driver compartment and high-performance heat sink
- Convenient interlocking mounting method on direct arm. Mounting adaptor is rugged die cast aluminum and mounts to 3" (76mm) or larger square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers. Refer to page 11 for fixture mounting drill pattern.
- Mounting for the adjustable arm mount adaptor is rugged die cast aluminum and mounts to 2" (51mm) IP, 2.375" (60mm) O.D. tenon.
- Adjustable arm mount can be adjusted 180° in 2.5° increments.
- Transportation mount is constructed of 316 stainless steel and mounts to surface with [4] 3/8" fasteners by others
- Trunnion mount is constructed of A500 and A1011 steel and is adjustable from 0-180° in 15° degree increments. Trunnion mount secures to surface with [1] 3/4" bolt or [2] 1/2" or 3/8" bolts
- Luminaires ordered with NM mount include 18" [340mm] 18/5 or 16/5 cord exiting the luminaire; when combined with R option, 18" [340mm] 18/7 or 16/7 cord is provided
- Designed for uplight and downlight applications
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, and white are available

Weight		
Mount	Housing	
	Medium	Large
OSQ-ML-B-AA	28.4 lbs. [12.9kg]	32.0 lbs. [14.5kg]
OSQ-ML-B-DA	28.9 lbs. [13.1kg]	32.4 lbs. [14.7kg]
OSQ-ML-B-TSP	42.0 lbs. [19.1kg]	44.0 lbs. [20.0kg]
OSQ-ML-B-TM	32.6 lbs. [14.8kg]	36.1 lbs. [16.4kg]

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV/5kA surge suppression protection standard; 20kV/10kA surge suppression protection optional
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- Refer to [Dimming spec sheet](#) for details
- **Maximum 10V Source Current:** 1.0mA
- **Operating Temperature Range:** -40°C - +40°C [-40°F - +104°F]

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed (UL1598)
- Suitable for wet locations
- Meets NEMA C82.77 standards
- Drivers and LEDs are UL Recognized in accordance with UL8750
- Enclosure rated IP66 per IEC 60529 when ordered without R option. Luminaires with R option meet IP66 requirements per IEC 60529 when used with IP66 rated NEMA control or shorting cap
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2018, 3G bridge and overpass vibration standards
- ANSI C136.2 10kV/5kA (standard) and 20kV/10kA (optional) surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and direct or transportation mounts only. Please refer to <https://www.darksky.org/our-work/lighting/lighting-for-industry/isa/isa-products/> for most current information
- DLC Premium qualified versions available. Please refer to <https://www.designlights.org/search/> for most current information
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm - www.p65warnings.ca.gov

US: creeighting.com (800) 236-6800
 Canada: creeighting-canada.com (800) 473-1234

Product Specifications

SYNAPSE® SIMPLYSNAP INTELLIGENT CONTROL

The Synapse SimplySNAP platform is a highly intuitive connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based interface that runs on smartphones, tablets, and PCs. The Twist-Lock Lighting Controller (TL7-B2) and Site Controller (SS450-002) take the OSQ Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

Synapse Wireless Control Accessories	
Twist-Lock Lighting Controller TL7-B2 - Suitable for 120-277V (UL) voltage only - Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle - Not for use with PML or PML2 options - Provides On/Off switching, dimming, power metering, digital sensor input, and status monitoring of luminaire - Refer to TL7-B2 spec sheet for details Twist-Lock Lighting Controller TL7-HVG - Suitable for 120-480V (UL and UH) voltage - Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle - Not for use with PML or PML2 options - Provides On/Off switching, dimming, power metering, digital sensor input, and status monitoring of luminaire - Refer to TL7-HVG spec sheet for details SimplySNAP Central Base Station CBSSW-450-002 - Includes On-Site Controller (SS450-002) and 5-button switch - Indoor and Outdoor rated - Refer to CBSSW-450-002 spec sheet for details	Synapse Wireless Sensor WSN-DPM - Motion and light sensor - Control multiple zones - Refer to WSN-DPM spec sheet for details SimplySNAP On-Site Controller SS450-002 - Verizon® LTE-enabled - Designed for indoor applications - Refer to SS450-002 spec sheet for details Building Management System (BMS) Gateway BMS-GW-002 - Required for BACnet integration - Refer to BMS-GW-002 spec sheet for details Outdoor Antennas (Optional, for increased range, 8dB gain) KIT-ANT420SM - Kit includes antenna, 20' cable and bracket KIT-ANT360 - Kit includes antenna, 30' cable and bracket KIT-ANT600 - Kit includes antenna, 50' cable and bracket - Refer to Outdoor antenna spec sheet for details

Electrical Data*

Lumen Package	Optic	System Watts 120-480V	Utility Label Wattage	Total Current (A)					
				120V	208V	240V	277V	347V	480V
4L**	All	29	30	0.25	0.14	0.12	0.11	N/A	N/A
6L**	Asymmetric	48	50	0.41	0.23	0.20	0.17	N/A	N/A
	Symmetric	39	40	0.33	0.19	0.17	0.14	N/A	N/A
9L	All	60	60	0.51	0.29	0.25	0.22	0.18	0.13
11L	All	72	70	0.62	0.36	0.31	0.27	0.21	0.16
16L	All	104	100	0.89	0.51	0.43	0.39	0.31	0.22
22L	All	132	130	1.12	0.63	0.55	0.47	0.39	0.28
30L	All	202	200	1.72	0.96	0.84	0.72	0.60	0.43

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%
 ** Available with UL voltage only

OSQ Series Ambient Adjusted Lumen Maintenance¹

Ambient	Optic	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Reported ² / Estimated ³ LMF	100K hr Reported ² / Estimated ³ LMF
5°C (41°F)	Asymmetric	1.04	1.03	1.01	0.99 ²	0.97 ²
	Symmetric	1.05	1.05	1.05	1.05 ²	1.05 ²
10°C (50°F)	Asymmetric	1.03	1.02	1.00	0.98 ²	0.96 ²
	Symmetric	1.04	1.03	1.03	1.03 ²	1.03 ²
15°C (59°F)	Asymmetric	1.02	1.01	0.99	0.97 ²	0.95 ²
	Symmetric	1.02	1.02	1.02	1.02 ²	1.02 ²
20°C (68°F)	Asymmetric	1.01	1.00	0.98	0.96 ²	0.94 ²
	Symmetric	1.01	1.01	1.01	1.01 ²	1.01 ²
25°C (77°F)	Asymmetric	1.00	0.99	0.97	0.95 ²	0.93 ²
	Symmetric	1.00	1.00	1.00	1.00 ²	1.00 ²

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.
² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.
³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Accessories

Field-Installed	Hand-Held Remote	Shorting Cap
Backlight Shield (Front Facing Optics) OSQ-BLSMF (Medium) OSQ-BLSLF (Large) Backlight Shield (Rotated Optics) OSQ-BLSMR (Medium) OSQ-BLSLR (Large) Bird Spikes OSQ-MED-BRDSPK OSQ-LG-BRDSPK	XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	XA-XLSHRT

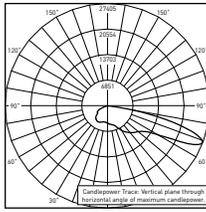


OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

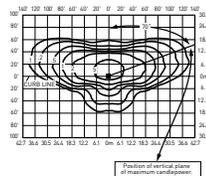
Photometry

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2M



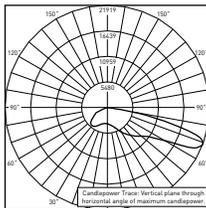
RESTL Test Report #: PL16334-001A
OSQ-B-30L-40K7-2M-UL
Initial Delivered Lumens: 32,795



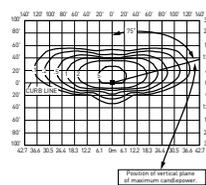
OSQ-B-30L-40K7-2M-UL
Mounting Height: 25 [7.6m] A.F.G.
Initial Delivered Lumens: 31,000
Initial FC at grade

Type II Mid Distribution								
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,290	B1 U0 G1	4,440	B1 U0 G1	3,810	B1 U0 G1	4,440	B1 U0 G1
6L	6,450	B1 U0 G2	6,900	B1 U0 G2	5,925	B1 U0 G1	6,900	B1 U0 G2
9L	8,875	B2 U0 G2	9,200	B2 U0 G2	7,900	B2 U0 G2	9,200	B2 U0 G2
11L	10,800	B2 U0 G2	11,175	B2 U0 G2	9,600	B2 U0 G2	11,175	B2 U0 G2
16L	15,500	B3 U0 G3	16,100	B3 U0 G3	13,800	B2 U0 G2	16,100	B3 U0 G3
22L	20,700	B3 U0 G3	22,100	B3 U0 G3	18,600	B3 U0 G3	22,100	B3 U0 G3
30L	27,800	B3 U0 G4	31,000	B3 U0 G4	22,300	B3 U0 G3	31,000	B3 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



RESTL Test Report #: PL16335-001A
OSQ-B-30L-40K7-2M-UL w/OSQ-BLSLF
Initial Delivered Lumens: 25,509



OSQ-B-30L-40K7-2M-UL w/OSQ-BLSLF
Mounting Height: 25 [7.6m] A.F.G.
Initial Delivered Lumens: 23,800
Initial FC at grade

Type II Mid w/BLS Distribution								
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	3,300	B1 U0 G1	3,410	B1 U0 G1	2,930	B1 U0 G1	3,410	B1 U0 G1
6L	5,100	B1 U0 G1	5,300	B1 U0 G1	4,550	B1 U0 G1	5,300	B1 U0 G1
9L	6,825	B1 U0 G2	7,075	B1 U0 G2	6,075	B1 U0 G1	7,075	B1 U0 G2
11L	8,300	B1 U0 G2	8,575	B1 U0 G2	7,375	B1 U0 G2	8,575	B1 U0 G2
16L	11,925	B2 U0 G2	12,350	B2 U0 G2	10,600	B1 U0 G2	12,350	B2 U0 G2
22L	15,900	B2 U0 G2	17,000	B2 U0 G3	14,250	B2 U0 G2	17,000	B2 U0 G3
30L	21,400	B2 U0 G3	23,800	B3 U0 G3	17,100	B2 U0 G3	23,800	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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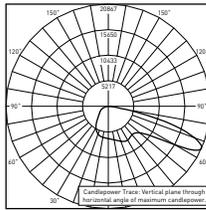


OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

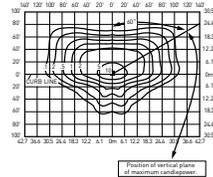
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://creelighting.com/products/outdoor/area/osq-series>

3M



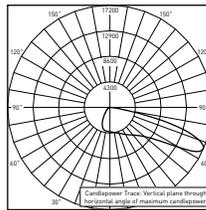
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OSQ-B-30L-40K7-3M-UL
Initial Delivered Lumens: 30,908



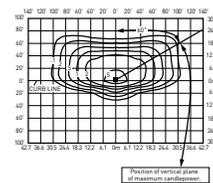
OSQ-B-30L-40K7-3M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 31,000
Initial FC at grade

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,290	B1 U0 G1	4,440	B1 U0 G1	3,810	B1 U0 G1	4,440	B1 U0 G1
6L	6,650	B1 U0 G2	6,900	B1 U0 G2	5,925	B1 U0 G2	6,900	B1 U0 G2
9L	8,875	B2 U0 G2	9,200	B2 U0 G2	7,900	B2 U0 G2	9,200	B2 U0 G2
11L	10,800	B2 U0 G2	11,175	B2 U0 G2	9,600	B2 U0 G2	11,175	B2 U0 G2
16L	15,500	B3 U0 G3	16,100	B3 U0 G3	13,800	B2 U0 G2	16,100	B3 U0 G3
22L	20,700	B3 U0 G3	22,100	B3 U0 G3	18,600	B3 U0 G3	22,100	B3 U0 G3
30L	27,800	B3 U0 G4	31,000	B3 U0 G4	22,300	B3 U0 G3	31,000	B3 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



RESTL Test Report #: PL16064-001A
OSQ-B-30L-40K7-3M-UL w/OSQ-BLSLF
Initial Delivered Lumens: 22,498



OSQ-B-30L-40K7-3M-UL w/OSQ-BLSLF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 24,500
Initial FC at grade

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	3,390	B1 U0 G1	3,510	B1 U0 G1	3,010	B1 U0 G1	3,510	B1 U0 G1
6L	5,250	B1 U0 G2	5,450	B1 U0 G2	4,680	B1 U0 G1	5,450	B1 U0 G2
9L	7,000	B1 U0 G2	7,275	B1 U0 G2	6,225	B1 U0 G2	7,275	B1 U0 G2
11L	8,525	B1 U0 G2	8,825	B1 U0 G2	7,575	B1 U0 G2	8,825	B1 U0 G2
16L	12,250	B2 U0 G2	12,700	B2 U0 G2	10,900	B2 U0 G2	12,700	B2 U0 G2
22L	16,300	B2 U0 G3	17,500	B2 U0 G3	14,650	B2 U0 G3	17,500	B2 U0 G3
30L	21,900	B3 U0 G4	24,500	B3 U0 G4	17,600	B2 U0 G3	24,500	B3 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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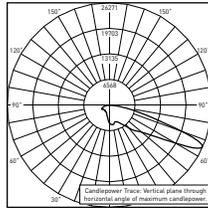


OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

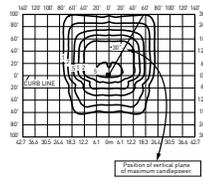
Photometry

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4M



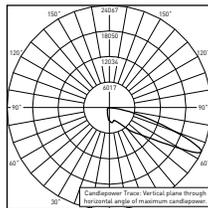
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OSQL-B-30L-40K7-4M-UL
Initial Delivered Lumens: 30,752



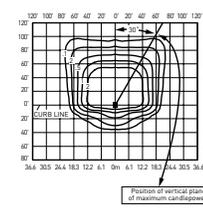
OSQL-B-30L-40K7-4M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 31,000
Initial FC at grade

Type IV Mid Distribution								
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,290	B1 U0 G1	4,440	B1 U0 G1	3,810	B1 U0 G1	4,440	B1 U0 G1
6L	6,450	B1 U0 G2	6,900	B1 U0 G2	5,925	B1 U0 G2	6,900	B1 U0 G2
9L	8,875	B2 U0 G2	9,200	B2 U0 G2	7,900	B1 U0 G2	9,200	B2 U0 G2
11L	10,800	B2 U0 G2	11,175	B2 U0 G2	9,600	B2 U0 G2	11,175	B2 U0 G3
16L	15,500	B2 U0 G3	16,100	B2 U0 G3	13,800	B2 U0 G2	16,100	B2 U0 G3
22L	20,700	B3 U0 G3	22,100	B3 U0 G4	18,600	B3 U0 G3	22,100	B3 U0 G4
30L	27,800	B3 U0 G4	31,000	B3 U0 G4	22,300	B3 U0 G4	31,000	B3 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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RESTL Test Report #: PL16066-001B
OSQL-B-30L-40K7-4M-UL w/OSQ-BLSLF
Initial Delivered Lumens: 23,654



OSQL-B-30L-40K7-4M-UL w/OSQ-BLSLF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 23,800
Initial FC at grade

Type IV Mid w/BLS Distribution								
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	3,300	B0 U0 G1	3,410	B0 U0 G1	2,930	B0 U0 G1	3,410	B0 U0 G1
6L	5,100	B1 U0 G2	5,300	B1 U0 G2	4,550	B1 U0 G1	5,300	B1 U0 G2
9L	6,825	B1 U0 G2	7,075	B1 U0 G2	6,075	B1 U0 G2	7,075	B1 U0 G2
11L	8,300	B1 U0 G2	8,575	B1 U0 G2	7,375	B1 U0 G2	8,575	B1 U0 G2
16L	11,925	B1 U0 G2	12,350	B1 U0 G2	10,600	B1 U0 G2	12,350	B1 U0 G2
22L	15,900	B2 U0 G3	17,000	B2 U0 G3	14,250	B1 U0 G3	17,000	B2 U0 G3
30L	21,400	B2 U0 G4	23,800	B2 U0 G4	17,100	B2 U0 G3	23,800	B2 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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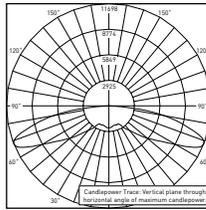


OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

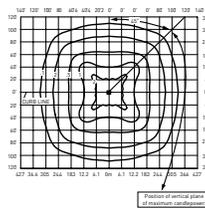
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://creelighting.com/products/outdoor/area/osq-series>

5M



RESTL Test Report #: PL16050-001A
OSQL-B-30L-40K7-5M-UL
Initial Delivered Lumens: 26,918



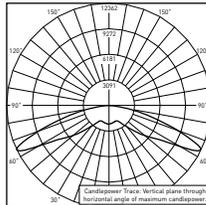
OSQL-B-30L-40K7-5M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 27,800
Initial FC at grade

Type V Mid Distribution

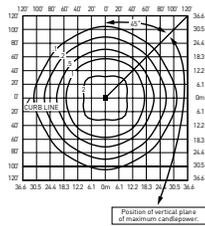
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,190	B3 U0 G2	4,370	B3 U0 G2	3,700	B2 U0 G2	4,370	B3 U0 G2
6L	5,900	B3 U0 G3	6,150	B3 U0 G3	5,200	B3 U0 G2	6,150	B3 U0 G3
9L	9,300	B3 U0 G3	9,700	B4 U0 G3	8,225	B3 U0 G3	9,700	B4 U0 G3
11L	10,850	B4 U0 G3	11,325	B4 U0 G3	9,575	B4 U0 G3	11,325	B4 U0 G3
16L	14,450	B4 U0 G4	15,300	B4 U0 G4	12,950	B4 U0 G4	15,300	B4 U0 G4
22L	20,200	B5 U0 G5	21,700	B5 U0 G5	19,800	B5 U0 G5	21,700	B5 U0 G5
30L	26,400	B5 U0 G5	27,800	B5 U0 G5	23,600	B5 U0 G5	27,800	B5 U0 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt

5N



RESTL Test Report #: PL16056-001A
OSQL-B-30L-40K7-5N-UL
Initial Delivered Lumens: 29,721



OSQL-B-30L-40K7-5N-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 29,700
Initial FC at grade

Type V Narrow Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,430	B3 U0 G1	4,620	B3 U0 G1	3,910	B3 U0 G1	4,620	B3 U0 G1
6L	6,225	B3 U0 G1	6,500	B3 U0 G2	5,500	B3 U0 G1	6,500	B3 U0 G2
9L	9,825	B4 U0 G2	10,250	B4 U0 G2	8,675	B3 U0 G2	10,250	B4 U0 G2
11L	11,450	B4 U0 G2	11,950	B4 U0 G2	10,125	B4 U0 G2	11,950	B4 U0 G2
16L	15,475	B4 U0 G3	16,125	B4 U0 G3	13,675	B4 U0 G2	16,125	B4 U0 G3
22L	21,300	B5 U0 G3	22,900	B5 U0 G3	20,900	B5 U0 G3	22,900	B5 U0 G3
30L	28,400	B5 U0 G4	29,700	B5 U0 G4	25,200	B5 U0 G3	29,700	B5 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt

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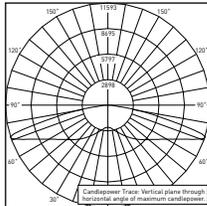
OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Photometry

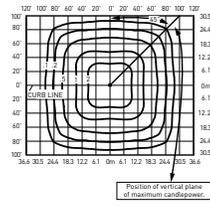
All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:

<https://creelighting.com/products/outdoor/area/osq-series>

5Q



RESTL Test Report #: PL16332-001A
OSQL-B-30L-40K7-5Q-UL
Initial Delivered Lumens: 29,519



OSQL-B-30L-40K7-5Q-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 29,700
Initial FC at grade

Type V Square Distribution								
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
4L	4,430	B2 U0 G1	4,620	B3 U0 G1	3,910	B2 U0 G1	4,620	B3 U0 G1
6L	6,225	B3 U0 G1	6,500	B3 U0 G1	5,500	B3 U0 G1	6,500	B3 U0 G1
9L	9,825	B3 U0 G2	10,250	B3 U0 G2	8,675	B3 U0 G2	10,250	B3 U0 G2
11L	11,450	B4 U0 G2	11,950	B4 U0 G2	10,125	B3 U0 G2	11,950	B4 U0 G2
16L	15,475	B4 U0 G2	16,125	B4 U0 G2	13,675	B4 U0 G2	16,125	B4 U0 G2
22L	21,300	B4 U0 G2	22,900	B5 U0 G3	20,900	B4 U0 G2	22,900	B5 U0 G3
30L	28,400	B5 U0 G3	29,700	B5 U0 G3	25,200	B5 U0 G3	29,700	B5 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
 ** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt

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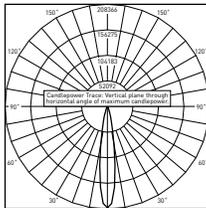
OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Photometry

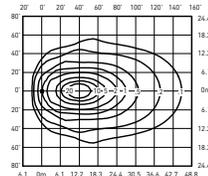
All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:

<https://creelighting.com/products/outdoor/area/osq-series>

N3



RESTL Test Report #: PL16058-001A
OSQL-B-30L-40K7-N3-UL
Initial Delivered Lumens: 30,311

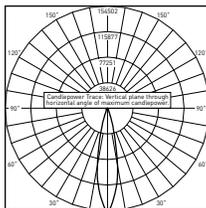


OSQL-B-30L-40K7-N3-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 29,700
Initial FC at grade

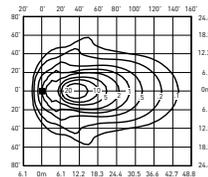
Narrow Flood Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

33



RESTL Test Report #: PL16059-001A
OSQL-B-30L-40K7-33-UL
Initial Delivered Lumens: 27,700

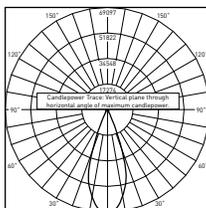


OSQL-B-30L-40K7-33-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 29,700
Initial FC at grade

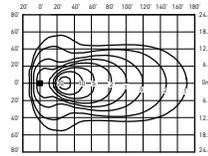
NEMA® 3x3 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

44



RESTL Test Report #: PL16060-001A
OSQL-B-30L-40K7-44-UL
Initial Delivered Lumens: 29,939



OSQL-B-30L-40K7-44-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 29,700
Initial FC at grade

NEMA® 4x4 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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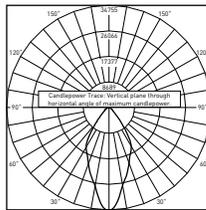


OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

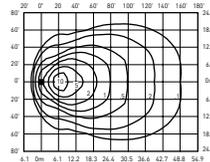
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:
<https://creelighting.com/products/outdoor/area/osq-series>

55



RESTL Test Report #: PL16333-001A
 OSQ-B-30L-40K7-55-UL
 Initial Delivered Lumens: 29,479

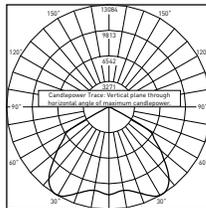


OSQ-B-30L-40K7-55-UL
 Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
 Initial Delivered Lumens: 29,700
 Initial FC at grade

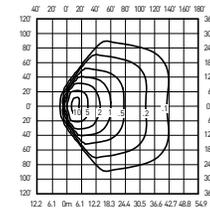
NEMA® 5x5 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

66



RESTL Test Report #: PL16062-001A
 OSQ-B-30L-40K7-66-UL
 Initial Delivered Lumens: 30,037

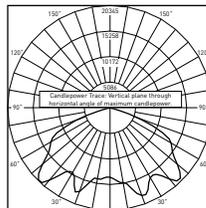


OSQ-B-30L-40K7-66-UL
 Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
 Initial Delivered Lumens: 29,700
 Initial FC at grade

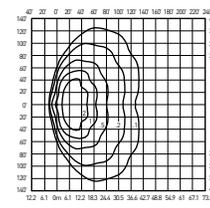
NEMA® 6x6 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

75



RESTL Test Report #: PL16063-001A
 OSQ-B-30L-40K7-75-UL
 Initial Delivered Lumens: 29,997



OSQ-B-30L-40K7-75-UL
 Mounting Height: 25' (7.6m) A.F.G., 60° tilt
 Initial Delivered Lumens: 29,700
 Initial FC at grade

NEMA® 7x5 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	4,430	4,620	3,910	4,620
6L	6,225	6,500	5,500	6,500
9L	9,825	10,250	8,675	10,250
11L	11,450	11,950	10,125	11,950
16L	15,475	16,125	13,675	16,125
22L	21,300	22,900	20,900	22,900
30L	28,400	29,700	25,200	29,700

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Luminaire EPA

Adjustable Arm Mount – OSQ-ML-B-AA Weight: Medium – 28.4 lbs. (12.9kg); Large – 32.0 lbs. (14.5kg)								
	Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	3 @ 180°	4 @ 180°	4 @ 90°
Luminaire	Tenon Configuration (0°-80° Tilt); If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA							
	 PB-1A*; PT-1; PW-1A3**	 PB-2A*; PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	 PB-2A*; PD-2A4(90); PT-2(90)	 PB-3A*; PD-3A4(90); PT-3(90)	 PB-3A*; PT-3(120)	 PB-3A*; PB-3R2.375	 PB-4A*(180)	 PB-4A*(90); PB-4R2.375; PD-4A4(90); PT-4(90)
0° Tilt								
OSQM	0.74	1.48	1.19	1.93	1.63	3.33	4.66	2.38
OSQL	0.80	1.61	1.26	2.06	1.68	3.33	4.66	2.52
10° Tilt								
OSQM	0.75	1.48	1.49	2.23	2.15	4.22	5.84	2.98
OSQL	0.81	1.61	1.62	2.42	2.32	4.40	6.08	3.24
20° Tilt								
OSQM	1.12	1.48	1.86	2.60	2.85	5.31	7.32	3.72
OSQL	1.24	1.61	2.04	2.84	3.13	5.68	7.80	4.08
30° Tilt								
OSQM	1.46	1.48	2.20	2.94	3.56	6.34	8.68	4.40
OSQL	1.64	1.64	2.44	3.24	3.97	6.88	9.40	4.88
45° Tilt								
OSQM	1.96	1.96	2.69	3.43	4.54	7.83	10.68	5.38
OSQL	2.20	2.20	3.00	3.80	5.07	8.55	11.64	6.00
60° Tilt								
OSQM	2.33	2.33	3.07	3.81	5.11	8.94	12.16	6.14
OSQL	2.63	2.63	3.43	4.23	5.73	9.84	13.63	6.86
70° Tilt								
OSQM	2.49	2.49	3.23	3.97	5.11	9.43	12.80	6.46
OSQL	2.82	2.82	3.62	4.42	5.73	10.41	14.12	7.24
80° Tilt								
OSQM	2.58	2.58	3.32	4.06	5.11	9.71	13.16	6.64
OSQL	2.93	2.93	3.73	4.53	5.73	10.74	14.56	7.46
Tenon Configuration (90° Tilt); If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA								
	PB-1A*; PT-1; PW-1A3**	PB-2A*; PB-2R2.375; PD-2A4(180); PT-2(180); PW-2A3**	PB-2A*	PB-3A*	PB-3A*; PT-3(120)	PB-3A*; PB-3R2.375	PB-4A*(180)	PB-4A*(90); PB-4R2.375
90° Tilt								
OSQM	2.61	2.61	4.44	6.05	5.11	9.79	13.28	10.39
OSQL	2.95	2.95	4.84	6.52	5.73	10.81	14.64	11.19

* Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"] for single, double or triple luminaire orientation or 4 [4"], 5 [5"], or 6 [6"] for quad luminaire orientation
 ** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"]

Tenon EPA

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25
WM-DM	None

* Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"] for single, double or triple luminaire orientation or 4 [4"], 5 [5"], or 6 [6"] for quad luminaire orientation
 ** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"]

Tenons and Brackets [‡] (must specify color)	
Square Internal Mount Vertical Tenons (Steel) - Mounts to 3-6" [76-152mm] square aluminum or steel poles PB-1A* – Single PB-2A* – 180° Twin PB-3A* – 180° Triple PB-4A*(90) – 90° Quad PB-4A*(180) – 180° Quad	Round External Mount Vertical Tenons (Steel) - Mounts to 2.375" [60mm] O.D. round aluminum or steel poles or tenons PB-2R2.375 – Twin PB-3R2.375 – Triple PB-4R2.375 – Quad
Square Internal Mount Horizontal Tenons (Aluminum) - Mounts to 4" [102mm] square aluminum or steel poles PD-2A4(90) – 90° Twin PD-2A4(180) – 180° Twin PD-3A4(90) – 90° Triple PD-4A4(90) – 90° Quad	Round External Mount Horizontal Tenons (Aluminum) - Mounts to 2.375" [60mm] O.D. round aluminum or steel poles or tenons - Mounts to square pole with PB-1A* tenon PT-1 – Single (Vertical) PT-2(90) – 90° Twin PT-2(180) – 180° Twin PT-3(90) – 90° Triple PT-3(120) – 120° Triple PT-4(90) – 90° Quad
Wall Mount Brackets - Mounts to wall or roof WM-2 – Horizontal for OSQ-ML-B-AA mount WM-4 – L-Shape for OSQ-ML-B-AA mount WM-DM – Plate for OSQ-ML-B-DA mount	Mid-Pole Bracket - Mounts to square pole PW-1A3** – Single PW-2A3** – Double
Ground Mount Post - For ground-mounted flood luminaires PGM-1 – for OSQ-ML-B-AA mount	

[‡] Refer to the [Bracket and Tenons spec sheet](#) for more details

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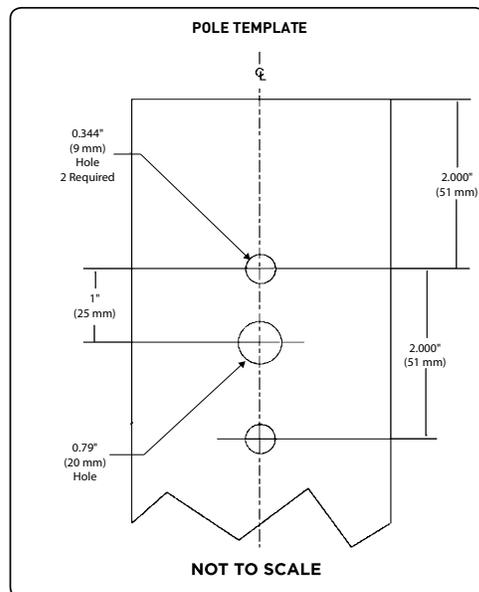
Luminaire EPA

Direct Arm Mount – OSQ-ML-B-DA Weight: Medium - 28.9 lbs. [13.1kg]; Large - 32.4 lbs. [14.7kg]						
Luminaire	Single	2 @ 180°	2 @ 90°	3 @ 90°	3 @ 120°	4 @ 90°
OSQM	0.74	1.48	1.19	1.93	1.63	2.38
OSQL	0.80	1.61	1.26	2.06	1.68	2.52

Direct Mount Configurations

Compatibility with OSQ-ML-B-DA Direct Mount Bracket					
Size	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°
3" Square					
Medium/Large	N/A	✓	N/A	N/A	N/A
3" Round					
Medium/Large	N/A	✓	N/A	N/A	N/A
4" Square					
Medium/Large	✓	✓	✓	N/A	✓
4" Round					
Medium/Large	✓	✓	✓	✓	✓
5" Square					
Medium/Large	✓	✓	✓	N/A	✓
5" Round					
Medium/Large	✓	✓	✓	✓	✓
6" + Square					
Medium/Large	✓	✓	✓	N/A	✓
6" + Round					
Medium/Large	✓	✓	✓	✓	✓

Fixture Mounting Drill Pattern for OSQ-ML-B-DA Mount



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Luminaire EPA

Trunnion Mount – OSQ-ML-B-TM Weight: Medium - 32.6 lbs. [14.8kg]; Large - 36.1 lbs. [16.4kg]		
Single	Medium	Large
0° Tilt		
0.75		0.81
15° Tilt		
0.99		1.12
30° Tilt		
1.57		1.74
45° Tilt		
2.07		2.35
60° Tilt		
2.46		2.59
75° Tilt		
2.67		2.83
90° Tilt		
2.33		3.07



OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q Option Power & Lumen Data – 4L Lumen Package

Q Option Setting	X Option Setting	CCT/CRI	System Watts 120-277V	Lumen Values						Optics Qualified on DLC QPL
				Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 (Full Power)	N/A (Full Power)	30K (70 CRI)	29	4,290	4,190	4,430	3,300	3,390	3,300	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
		40K (70 CRI)		4,440	4,370	4,620	3,410	3,510	3,410	
		50K (90 CRI)		3,810	3,700	3,910	2,930	3,010	2,930	
		57K (70 CRI)		4,440	4,370	4,620	3,410	3,510	3,410	
Q8	X8	30K (70 CRI)	27	4,120	4,020	4,250	3,170	3,250	3,170	
		40K (70 CRI)		4,260	4,200	4,440	3,270	3,370	3,270	
		50K (90 CRI)		3,660	3,550	3,750	2,810	2,890	2,810	
		57K (70 CRI)		4,260	4,200	4,440	3,270	3,370	3,270	
Q7	X7	30K (70 CRI)	26	3,950	3,850	4,080	3,040	3,120	3,040	
		40K (70 CRI)		4,080	4,020	4,250	3,140	3,230	3,140	
		50K (90 CRI)		3,510	3,400	3,600	2,700	2,770	2,700	
		57K (70 CRI)		4,080	4,020	4,250	3,140	3,230	3,140	
Q6	X6	30K (70 CRI)	24	3,650	3,560	3,770	2,810	2,880	2,810	
		40K (70 CRI)		3,770	3,710	3,930	2,900	2,980	2,900	
		50K (90 CRI)		3,240	3,150	3,320	2,490	2,560	2,490	
		57K (70 CRI)		3,770	3,710	3,930	2,900	2,980	2,900	
Q5	X5	30K (70 CRI)	23	3,560	3,480	3,680	2,740	2,810	2,740	
		40K (70 CRI)		3,690	3,630	3,830	2,830	2,910	2,830	
		50K (90 CRI)		3,160	3,070	3,250	2,430	2,500	2,430	
		57K (70 CRI)		3,690	3,630	3,830	2,830	2,910	2,830	
Q4	X4	30K (70 CRI)	22	3,430	3,350	3,540	2,640	2,710	2,640	
		40K (70 CRI)		3,550	3,500	3,700	2,810	2,810	2,730	
		50K (90 CRI)		3,050	2,960	3,130	2,340	2,410	2,340	
		57K (70 CRI)		3,550	3,500	3,700	2,730	2,810	2,730	
Q3	X3	30K (70 CRI)	20	3,130	3,060	3,230	2,410	2,470	2,410	
		40K (70 CRI)		3,240	3,190	3,370	2,490	2,560	2,490	
		50K (90 CRI)		2,780	2,700	2,850	2,140	2,200	2,140	
		57K (70 CRI)		3,240	3,190	3,370	2,490	2,560	2,490	
Q2	N/A	30K (70 CRI)	18	2,790	2,720	2,880	2,150	2,200	2,150	
		40K (70 CRI)		2,890	2,840	3,000	2,220	2,280	2,220	
		50K (90 CRI)		2,480	2,410	2,540	1,900	1,960	1,900	
		57K (70 CRI)		2,890	2,840	3,000	2,220	2,280	2,220	
Q1	N/A	30K (70 CRI)	16	2,360	2,300	2,440	1,820	1,860	1,820	
		40K (70 CRI)		2,440	2,400	2,540	1,880	1,930	1,880	
		50K (90 CRI)		2,100	2,040	2,150	1,610	1,660	1,610	
		57K (70 CRI)		2,440	2,400	2,540	1,880	1,930	1,880	

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OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q Option Power & Lumen Data – 6L Lumen Package

Q Option Setting	X Option Setting	CCT/CRI	System Watts 120-277V		Lumen Values						Optics Qualified on DLC QPL
			Asymmetric	Symmetric	Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 (Full Power)	N/A (Full Power)	30K (70 CRI)	48	39	6,650	5,900	6,225	5,100	5,250	5,100	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
		40K (70 CRI)			6,900	6,150	6,500	5,300	5,450	5,300	
		50K (90 CRI)			5,925	5,200	5,500	4,550	4,680	4,550	
		57K (70 CRI)			6,900	6,150	6,500	5,300	5,450	5,300	
Q8	X8	30K (70 CRI)	45	37	6,375	5,675	5,975	4,900	5,050	4,900	
		40K (70 CRI)			6,625	5,900	6,250	5,100	5,225	5,100	
		50K (90 CRI)			5,700	4,990	5,275	4,370	4,490	4,370	
		57K (70 CRI)			6,625	5,900	6,250	5,100	5,225	5,100	
Q7	X7	30K (70 CRI)	43	35	6,125	5,425	5,725	4,690	4,830	4,690	
		40K (70 CRI)			6,350	5,650	5,975	4,880	5,025	4,880	
		50K (90 CRI)			5,450	4,780	5,050	4,190	4,310	4,190	
		57K (70 CRI)			6,350	5,650	5,975	4,880	5,025	4,880	
Q6	X6	30K (70 CRI)	41	33	5,650	5,025	5,300	4,340	4,460	4,340	
		40K (70 CRI)			5,875	5,225	5,525	4,510	4,630	4,510	
		50K (90 CRI)			5,025	4,420	4,680	3,870	3,980	3,870	
		57K (70 CRI)			5,875	5,225	5,525	4,510	4,630	4,510	
Q5	X5	30K (70 CRI)	39	32	5,525	4,900	5,175	4,230	4,360	4,230	
		40K (70 CRI)			5,725	5,100	5,400	4,400	4,520	4,400	
		50K (90 CRI)			4,920	4,320	4,570	3,780	3,880	3,780	
		57K (70 CRI)			5,725	5,100	5,400	4,400	4,520	4,400	
Q4	X4	30K (70 CRI)	37	31	5,325	4,720	4,980	4,080	4,200	4,080	
		40K (70 CRI)			5,525	4,920	5,200	4,240	4,360	4,240	
		50K (90 CRI)			4,740	4,160	4,400	3,640	3,740	3,640	
		57K (70 CRI)			5,525	4,920	5,200	4,240	4,360	4,240	
Q3	X3	30K (70 CRI)	34	28	4,850	4,310	4,540	3,720	3,830	3,720	
		40K (70 CRI)			5,025	4,490	4,750	3,870	3,980	3,870	
		50K (90 CRI)			4,330	3,800	4,020	3,320	3,420	3,320	
		57K (70 CRI)			5,025	4,490	4,750	3,870	3,980	3,870	
Q2	X2	30K (70 CRI)	31	25	4,320	3,840	4,050	3,320	3,410	3,320	
		40K (70 CRI)			4,490	4,000	4,230	3,450	3,540	3,450	
		50K (90 CRI)			3,850	3,380	3,580	2,960	3,040	2,960	
		57K (70 CRI)			4,490	4,000	4,230	3,450	3,540	3,450	
Q1	X1	30K (70 CRI)	26	22	3,660	3,250	3,420	2,810	2,890	2,810	
		40K (70 CRI)			3,800	3,380	3,580	2,920	3,000	2,920	
		50K (90 CRI)			3,260	2,860	3,030	2,500	2,570	2,500	
		57K (70 CRI)			3,800	3,380	3,580	2,920	3,000	2,920	

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OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q Option Power & Lumen Data – 9L Lumen Package

Q Option Setting	X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values						Optics Qualified on DLC QPL
				Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 (Full Power)	N/A (Full Power)	30K (70 CRI)	60	8,875	9,300	9,825	6,825	7,000	6,825	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
		40K (70 CRI)		9,200	9,700	10,250	7,075	7,275	7,075	
		50K (90 CRI)		7,900	8,225	8,675	6,075	6,225	6,075	
		57K (70 CRI)		9,200	9,700	10,250	7,075	7,275	7,075	
Q8	X8	30K (70 CRI)	56	8,525	8,925	9,425	6,550	6,725	6,550	
		40K (70 CRI)		8,825	9,300	9,850	6,800	6,975	6,800	
		50K (90 CRI)		7,575	7,900	8,325	5,825	5,975	5,825	
		57K (70 CRI)		8,825	9,300	9,850	6,800	6,975	6,800	
Q7	X7	30K (70 CRI)	53	8,175	8,550	9,050	6,275	6,450	6,275	
		40K (70 CRI)		8,475	8,925	9,425	6,500	6,700	6,500	
		50K (90 CRI)		7,275	7,575	7,975	5,600	5,725	5,600	
		57K (70 CRI)		8,475	8,925	9,425	6,500	6,700	6,500	
Q6	X6	30K (70 CRI)	50	7,550	7,900	8,350	5,800	5,950	5,800	
		40K (70 CRI)		7,825	8,250	8,725	6,025	6,175	6,025	
		50K (90 CRI)		6,725	7,000	7,375	5,175	5,300	5,175	
		57K (70 CRI)		7,825	8,250	8,725	6,025	6,175	6,025	
Q5	X5	30K (70 CRI)	47	7,375	7,725	8,150	5,675	5,800	5,675	
		40K (70 CRI)		7,625	8,050	8,500	5,875	6,050	5,875	
		50K (90 CRI)		6,550	6,825	7,200	5,050	5,175	5,050	
		57K (70 CRI)		7,625	8,050	8,500	5,875	6,050	5,875	
Q4	X4	30K (70 CRI)	45	7,100	7,450	7,850	5,450	5,600	5,450	
		40K (70 CRI)		7,350	7,750	8,200	5,650	5,825	5,650	
		50K (90 CRI)		6,325	6,575	6,950	4,860	4,980	4,860	
		57K (70 CRI)		7,350	7,750	8,200	5,650	5,825	5,650	
Q3	X3	30K (70 CRI)	41	6,475	6,800	7,175	4,980	5,100	4,980	
		40K (70 CRI)		6,725	7,075	7,475	5,175	5,300	5,175	
		50K (90 CRI)		5,775	6,000	6,325	4,430	4,540	4,430	
		57K (70 CRI)		6,725	7,075	7,475	5,175	5,300	5,175	
Q2	X2	30K (70 CRI)	37	5,775	6,050	6,375	4,440	4,550	4,440	
		40K (70 CRI)		5,975	6,300	6,675	4,600	4,730	4,600	
		50K (90 CRI)		5,125	5,350	5,650	3,950	4,050	3,950	
		57K (70 CRI)		5,975	6,300	6,675	4,600	4,730	4,600	
Q1	X1	30K (70 CRI)	31	4,880	5,125	5,400	3,750	3,850	3,750	
		40K (70 CRI)		5,050	5,325	5,650	3,890	4,000	3,890	
		50K (90 CRI)		4,350	4,520	4,770	3,340	3,420	3,340	
		57K (70 CRI)		5,050	5,325	5,650	3,890	4,000	3,890	

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OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q Option Power & Lumen Data – 11L Lumen Package

Q Option Setting	X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values						Optics Qualified on DLC QPL
				Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 (Full Power)	N/A (Full Power)	30K (70 CRI)	72	10,800	10,850	11,450	8,300	8,525	8,300	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
		40K (70 CRI)		11,175	11,325	11,950	8,575	8,825	8,575	
		50K (90 CRI)		9,600	9,575	10,125	7,375	7,575	7,375	
		57K (70 CRI)		11,175	11,325	11,950	8,575	8,825	8,575	
Q8	X8	30K (70 CRI)	67	10,375	10,425	11,000	7,975	8,175	7,975	
		40K (70 CRI)		10,725	10,875	11,475	8,225	8,475	8,225	
		50K (90 CRI)		9,225	9,200	9,725	7,075	7,275	7,075	
		57K (70 CRI)		10,725	10,875	11,475	8,225	8,475	8,225	
Q7	X7	30K (70 CRI)	64	9,925	9,975	10,525	7,625	7,850	7,625	
		40K (70 CRI)		10,275	10,425	11,000	7,900	8,125	7,900	
		50K (90 CRI)		8,825	8,800	9,325	6,775	6,975	6,775	
		57K (70 CRI)		10,275	10,425	11,000	7,900	8,125	7,900	
Q6	X6	30K (70 CRI)	60	9,175	9,225	9,725	7,050	7,250	7,050	
		40K (70 CRI)		9,500	9,625	10,150	7,300	7,500	7,300	
		50K (90 CRI)		8,150	8,150	8,600	6,275	6,450	6,275	
		57K (70 CRI)		9,500	9,625	10,150	7,300	7,500	7,300	
Q5	X5	30K (70 CRI)	57	8,975	9,000	9,500	6,900	7,075	6,900	
		40K (70 CRI)		9,275	9,400	9,925	7,125	7,325	7,125	
		50K (90 CRI)		7,975	7,950	8,400	6,125	6,275	6,125	
		57K (70 CRI)		9,275	9,400	9,925	7,125	7,325	7,125	
Q4	X4	30K (70 CRI)	54	8,650	8,675	9,150	6,650	6,825	6,650	
		40K (70 CRI)		8,950	9,050	9,550	6,850	7,050	6,850	
		50K (90 CRI)		7,675	7,650	8,100	5,900	6,050	5,900	
		57K (70 CRI)		8,950	9,050	9,550	6,850	7,050	6,850	
Q3	X3	30K (70 CRI)	49	7,875	7,925	8,350	6,050	6,225	6,050	
		40K (70 CRI)		8,150	8,275	8,725	6,250	6,450	6,250	
		50K (90 CRI)		7,000	7,000	7,400	5,375	5,525	5,375	
		57K (70 CRI)		8,150	8,275	8,725	6,250	6,450	6,250	
Q2	X2	30K (70 CRI)	44	7,025	7,050	7,450	5,400	5,550	5,400	
		40K (70 CRI)		7,275	7,350	7,775	5,575	5,725	5,575	
		50K (90 CRI)		6,250	6,225	6,575	4,790	4,920	4,790	
		57K (70 CRI)		7,275	7,350	7,775	5,575	5,725	5,575	
Q1	X1	30K (70 CRI)	37	5,950	5,975	6,300	4,570	4,690	4,570	
		40K (70 CRI)		6,150	6,225	6,575	4,720	4,850	4,720	
		50K (90 CRI)		5,275	5,275	5,575	4,060	4,170	4,060	
		57K (70 CRI)		6,150	6,225	6,575	4,720	4,850	4,720	

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 Canada: creelighting-canada.com (800) 473-1234



OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q Option Power & Lumen Data – 16L Lumen Package

Q Option Setting	X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values						Optics Qualified on DLC QPL Premium
				Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	
Q9 (Full Power)	N/A (Full Power)	30K (70 CRI)	104	15,500	14,650	15,475	11,925	12,250	11,925	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
		40K (70 CRI)		16,100	15,300	16,125	12,350	12,700	12,350	
		50K (90 CRI)		13,800	12,950	13,675	10,600	10,900	10,600	
		57K (70 CRI)		16,100	15,300	16,125	12,350	12,700	12,350	
Q8	X8	30K (70 CRI)	100	14,875	14,075	14,850	11,450	11,750	11,450	
		40K (70 CRI)		15,500	14,700	15,500	11,850	12,200	11,850	
		50K (90 CRI)		13,250	12,425	13,125	10,175	10,475	10,175	
		57K (70 CRI)		15,500	14,700	15,500	11,850	12,200	11,850	
Q7	X7	30K (70 CRI)	96	14,250	13,475	14,225	10,975	11,275	10,975	
		40K (70 CRI)		14,800	14,075	14,825	11,350	11,675	11,350	
		50K (90 CRI)		12,700	11,925	12,575	9,750	10,025	9,750	
		57K (70 CRI)		14,800	14,075	14,825	11,350	11,675	11,350	
Q6	X6	30K (70 CRI)	88	13,175	12,450	13,150	10,125	10,425	10,125	
		40K (70 CRI)		13,675	13,000	13,700	10,500	10,800	10,500	
		50K (90 CRI)		11,725	11,000	11,625	9,000	9,275	9,000	
		57K (70 CRI)		13,675	13,000	13,700	10,500	10,800	10,500	
Q5	X5	30K (70 CRI)	85	12,875	12,150	12,850	9,900	10,175	9,900	
		40K (70 CRI)		13,375	12,700	13,375	10,250	10,550	10,250	
		50K (90 CRI)		11,450	10,750	11,350	8,800	9,050	8,800	
		57K (70 CRI)		13,375	12,700	13,375	10,250	10,550	10,250	
Q4	X4	30K (70 CRI)	81	12,400	11,725	12,375	9,550	9,800	9,550	
		40K (70 CRI)		12,875	12,250	12,900	9,875	10,150	9,875	
		50K (90 CRI)		11,050	10,350	10,950	8,475	8,725	8,475	
		57K (70 CRI)		12,875	12,250	12,900	9,875	10,150	9,875	
Q3	X3	30K (70 CRI)	73	11,325	10,700	11,300	8,700	8,950	8,700	
		40K (70 CRI)		11,750	11,175	11,775	9,025	9,275	9,025	
		50K (90 CRI)		10,075	9,450	9,975	7,750	7,950	7,750	
		57K (70 CRI)		11,750	11,175	11,775	9,025	9,275	9,025	
Q2	X2	30K (70 CRI)	65	10,075	9,525	10,050	7,750	7,975	7,750	
		40K (70 CRI)		10,475	9,950	10,475	8,025	8,250	8,025	
		50K (90 CRI)		8,975	8,425	8,900	6,900	7,075	6,900	
		57K (70 CRI)		10,475	9,950	10,475	8,025	8,250	8,025	
Q1	X1	30K (70 CRI)	54	8,525	8,050	8,500	6,550	6,750	6,550	
		40K (70 CRI)		8,850	8,425	8,875	6,800	6,975	6,800	
		50K (90 CRI)		7,600	7,125	7,525	5,825	6,000	5,825	
		57K (70 CRI)		8,850	8,425	8,875	6,800	6,975	6,800	

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OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Q Option Power & Lumen Data – 22L Lumen Package

Q Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values						Optics Qualified on DLC QPL
			Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 [Full Power]	30K7	132	20,700	20,200	21,300	15,900	16,300	15,900	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
	40K7		22,100	21,700	22,900	17,000	17,500	17,000	
	50K9		18,600	19,800	20,900	14,250	14,650	14,250	
	57K7		22,100	21,700	22,900	22,300	17,500	22,300	
Q8	30K7	122	19,300	18,800	19,800	14,775	15,200	14,775	
	40K7		20,600	20,200	21,300	15,800	16,300	15,800	
	50K9		17,300	18,400	19,400	13,250	13,625	13,250	
	57K7		20,600	20,200	21,300	15,800	16,300	15,800	
Q7	30K7	117	18,600	18,200	19,200	14,300	14,675	14,300	
	40K7		19,900	19,500	20,600	15,300	15,800	15,300	
	50K9		16,700	17,800	18,800	12,825	13,175	12,825	
	57K7		19,900	19,500	20,600	15,300	15,800	15,300	
Q6	30K7	108	17,200	16,800	17,700	13,200	13,525	13,200	
	40K7		18,300	18,000	19,000	14,100	14,525	14,100	
	50K9		15,400	16,400	17,300	11,825	12,150	11,825	
	57K7		18,300	18,000	19,000	14,100	14,525	14,100	
Q5	30K7	104	16,800	16,400	17,300	12,875	13,200	12,875	
	40K7		17,900	17,600	18,500	13,775	14,175	13,775	
	50K9		15,100	16,000	16,900	11,550	11,875	11,550	
	57K7		17,900	17,600	18,500	13,775	14,175	13,775	
Q4	30K7	99	16,100	15,800	16,600	12,400	12,725	12,400	
	40K7		17,200	16,900	17,900	13,250	13,650	13,250	
	50K9		14,500	15,400	16,300	11,125	11,425	11,125	
	57K7		17,200	16,900	17,900	13,250	13,650	13,250	
Q3	30K7	89	14,700	14,350	15,100	11,300	11,575	11,300	
	40K7		15,700	15,400	16,300	12,075	12,425	12,075	
	50K9		13,200	14,050	14,850	10,125	10,400	10,125	
	57K7		15,700	15,400	16,300	12,075	12,425	12,075	
Q2	30K7	80	13,250	12,925	13,625	10,175	10,425	10,175	
	40K7		14,150	13,900	14,650	10,875	11,200	10,875	
	50K9		11,900	12,675	13,375	9,125	9,375	9,125	
	57K7		14,150	13,900	14,650	10,875	11,200	10,875	
Q1	30K7	66	10,975	10,700	11,300	8,425	8,650	8,425	
	40K7		11,725	11,500	12,125	9,000	9,275	9,000	
	50K9		9,850	10,500	11,075	7,550	7,775	7,550	
	57K7		11,725	11,500	12,125	9,000	9,275	9,000	

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Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Q Option Power & Lumen Data – 30L Lumen Package

Q Option Setting	CCT/ CRI	System Watts 120-480V	Lumen Values						Optics Qualified on DLC QPL
			Asymmetric	5M	5N, 5Q & Floods	2M w/BLS	3M w/BLS	4M w/BLS	Premium
Q9 [Full Power]	30K7	202	27,800	26,600	28,400	21,400	21,900	21,400	2M, 3M, 4M, 5M, 5N, 5Q, N3, 33, 44, 55, 66, 75
	40K7		31,000	27,800	29,700	23,800	24,500	23,800	
	50K9		22,300	23,600	25,200	17,100	17,600	17,100	
	57K7		31,000	27,800	29,700	23,800	24,500	23,800	
Q8	30K7	191	27,000	25,800	27,500	20,800	21,200	20,800	
	40K7		30,100	27,000	28,800	23,100	23,800	23,100	
	50K9		21,600	22,900	24,400	16,600	17,100	16,600	
	57K7		30,100	27,000	28,800	23,100	23,800	23,100	
Q7	30K7	181	25,600	24,500	26,100	19,700	20,100	19,700	
	40K7		28,500	25,600	27,300	21,900	22,500	21,900	
	50K9		20,500	21,700	23,200	15,700	16,200	15,700	
	57K7		28,500	25,600	27,300	21,900	22,500	21,900	
Q6	30K7	173	24,700	23,700	25,300	19,000	19,500	19,000	
	40K7		27,600	24,700	26,400	21,200	21,800	21,200	
	50K9		19,800	21,000	22,400	15,200	15,700	15,200	
	57K7		27,600	24,700	26,400	21,200	21,800	21,200	
Q5	30K7	159	22,800	21,800	23,300	17,500	18,000	17,500	
	40K7		25,400	22,800	24,400	19,500	20,100	19,500	
	50K9		18,300	19,400	20,700	14,025	14,425	14,025	
	57K7		25,400	22,800	24,400	19,500	20,100	19,500	
Q4	30K7	143	21,100	20,200	21,600	16,300	16,600	16,300	
	40K7		23,600	21,100	22,600	18,100	18,600	18,100	
	50K9		16,900	17,900	19,200	13,000	13,375	13,000	
	57K7		23,600	21,100	22,600	18,100	18,600	18,100	
Q3	30K7	128	18,900	18,100	19,300	14,550	14,900	14,550	
	40K7		21,100	18,900	20,200	16,200	16,700	16,200	
	50K9		15,200	16,000	17,100	11,625	11,975	11,625	
	57K7		21,100	18,900	20,200	16,200	16,700	16,200	
Q2	30K7	114	17,000	16,200	17,300	13,050	13,350	13,050	
	40K7		18,900	17,000	18,100	14,525	14,950	14,525	
	50K9		13,600	14,400	15,400	10,425	10,725	10,425	
	57K7		18,900	17,000	18,100	14,525	14,950	14,525	
Q1	30K7	101	15,300	14,625	15,600	11,775	12,050	11,775	
	40K7		17,100	15,300	16,300	13,100	13,475	13,100	
	50K9		12,275	12,975	13,850	9,400	9,675	9,400	
	57K7		17,100	15,300	16,300	13,100	13,475	13,100	

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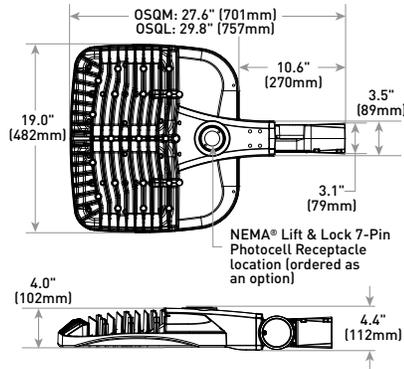


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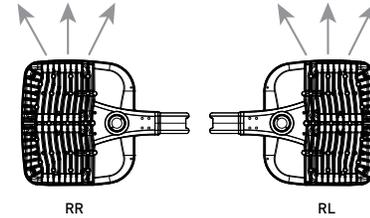
OSQ-ML-B-AA Mount



Luminaire	Weight
OSQM	28.4 lbs. (12.9kg)
OSQL	32.0 lbs. (14.5kg)



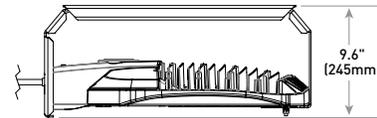
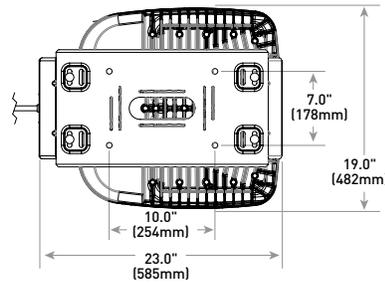
RR/RL Configuration



OSQ-ML-B-TSP Mount



Luminaire	Weight
OSQM	42.0 lbs. (19.1kg)
OSQL	44.0 lbs. (20.0kg)

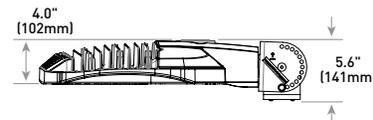
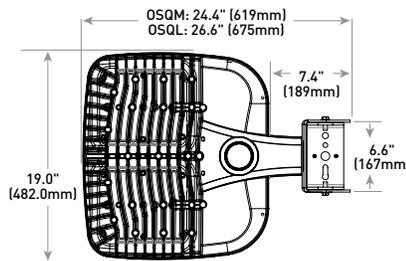


OSQ Large luminaire shown.

OSQ-ML-B-TM Mount



Luminaire	Weight
OSQM	32.6 lbs. (14.8kg)
OSQL	36.1 lbs. (16.4kg)



OSQ Large luminaire shown.

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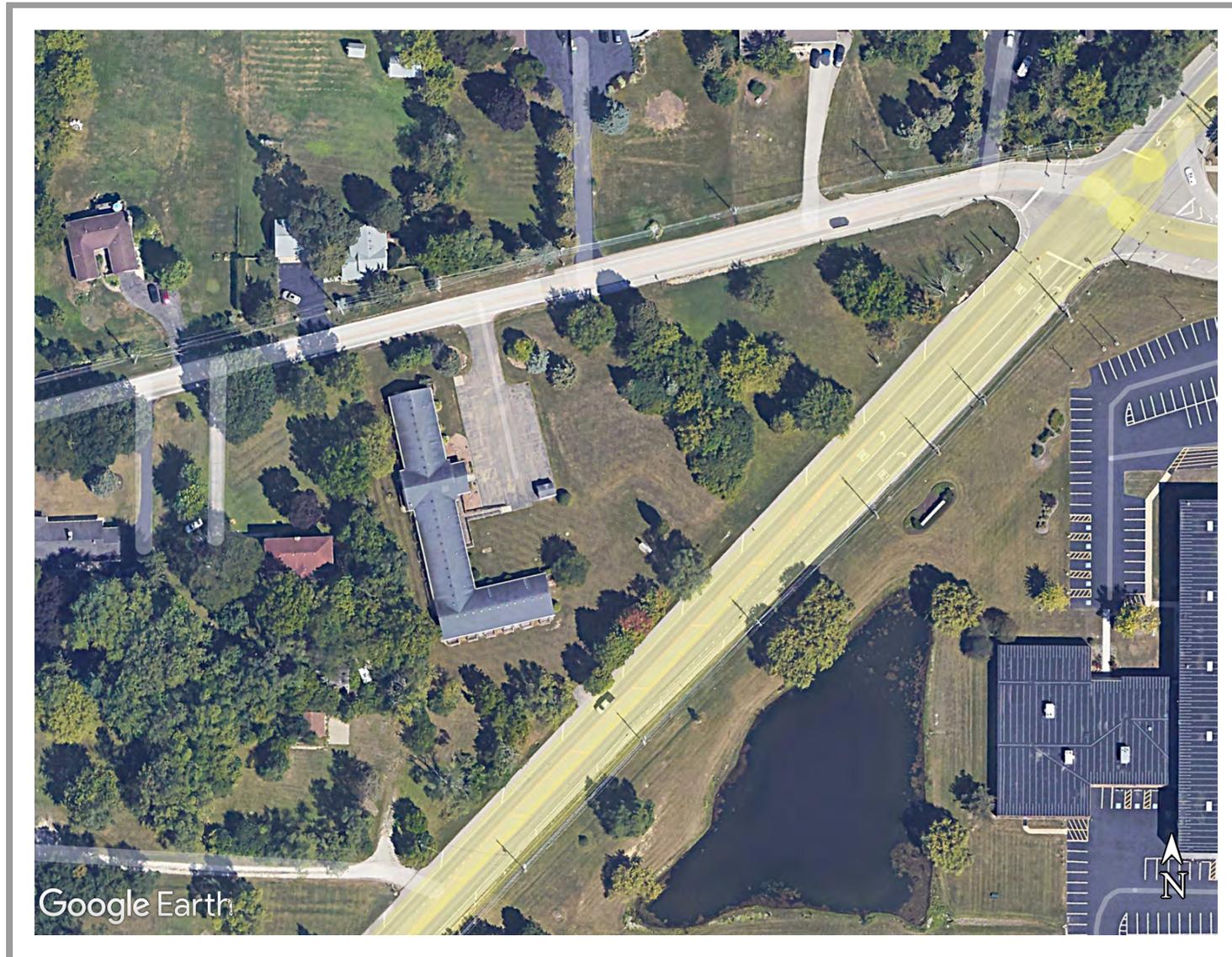
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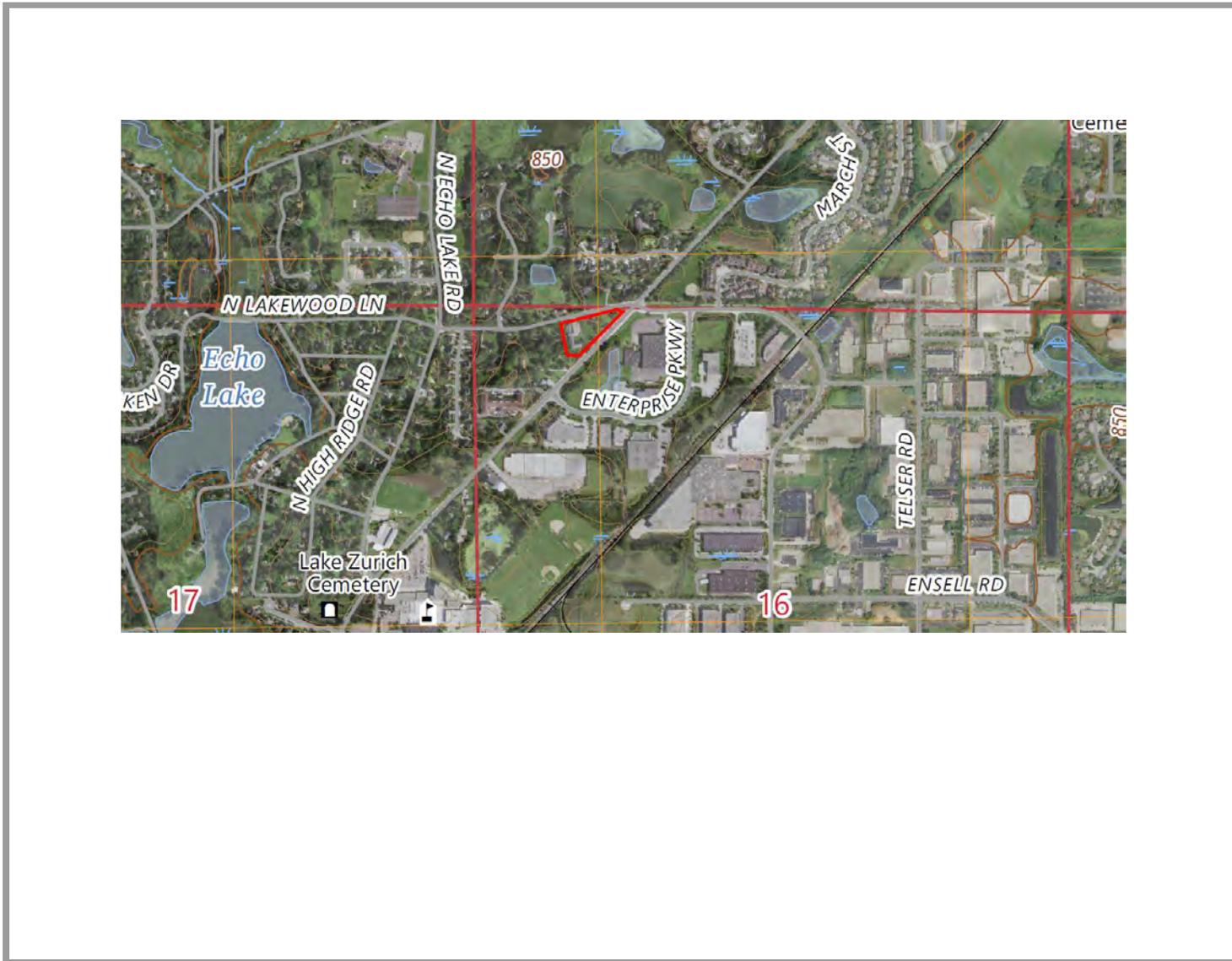
Storm Water Report and Calculations

For

Midlothian Manor
Lake Zurich, Illinois
December 6, 2022

Prepared By:
IG Consulting, Inc.
300 Marquardt Drive
Wheeling, IL 60090
P. 847.215.1133





REPORT NARRATIVE

The proposed 24-unit residential development will be constructed on a 2.55-acre property, located at the southwest corner of Midlothian Road and Lakewood Lane, in Lake Zurich, Illinois. The development will include 41 parking spaces, with four handicap accessible spaces. One full access driveway will be provided, utilizing the existing driveway access point located on Lakewood Lane.

EXISTING CONDITIONS

The subject property has an existing building and parking lot which will be demolished. Scattered trees are located throughout the property. The highest ground elevation on the property is at the south-southwest corner. The property slopes north/northeast toward Lakewood Lane, with a grade difference of approximately 15 feet. The property adjacent to the west is residential. The north side of Lakewood Lane is residential and the south side of Midlothian Road is commercial.

STORM WATER DETENTION

Storm water management will include construction of a detention basin adjacent to Lakewood Lane. The proposed basin will discharge into an existing inlet found in Lakewood Lane. Please see plans for details. Storm water release will be controlled with a proposed catch basin and restrictor housed in the catch basin. The restrictor catch basin will regulate the 2-year and the 100-year allowable release rates for the development.

DESIGNED STORAGE VOLUME:

The proposed conditions were modeled using HydroCad Software, and Custom Prismatic Storage for the proposed detention system. 2019 Bulletin 75 Rainfall data was used to detain sufficient storm water on site, while limiting allowable release rates to 0.102 cfs (2-yr) and 0.383 cfs (100-yr) for a 2.55-acre development.

$$2\text{-yr: } 2.55 * 0.04 = 0.102 \text{ cfs}$$

$$100\text{-yr: } 2.55 * 0.15 = 0.383 \text{ cfs.}$$

Using Bulletin 75 rainfall data, existing runoff rates and proposed storm water detention volumes were modeled using the 2-year and 100-year, 24-hour rain events. Unrestricted release was factored into the design of the allowable release rate and sizing of the detention systems. Tables 1 and 2 outline allowable discharges, based upon unrestricted discharge.

Table 1. Existing and Allowable Discharge

Sub-watershed	Tributary Area (acres)	2-yr, 24-hr		100-yr, 24-hr	
		Existing Discharge (cfs)	Qallowed (cfs)	Existing Discharge (cfs)	Qall (cfs)
1	2.55	0.550	0.102	2.080	0.383

Table 2. Restricted and Unrestricted Discharge (Theoretical Release)

Sub-watershed	Area (acres)	2-yr, 24-hr		100-yr, 24-hr	
		Proposed Discharge (cfs)	Total Discharge (cfs)	Proposed Discharge (cfs)	Total Discharge (cfs)
Development	2.48	0.080		0.320	
Unrestricted	0.07	0.020	0.100	0.060	0.380

Proposed Detention Volume Provided – 100-year, 24Hr: 48,911.00 cf (HWL 880.82)

CRITICAL DURATION OUTPUT TABLES

Table 3. Release Rates & HWL

Detention Basin	Release Rate CFS	100-yr HWL
1 Hr	0.19	879.09
3 Hr	0.26	879.85
6Hr	0.28	880.21
12Hr	0.30	880.56
18Hr	0.31	880.77
24Hr	0.32	880.82
48Hr	0.32	880.85
72Hr	0.31	880.66
120Hr	0.28	880.24
240Hr	0.23	879.58

RUNOFF VOLUME REDUCTION PRACTICES

Runoff Volume Reduction practices are provided in the Detention Basins. The proposed Detention Basin includes a wetland bottom component for sediment capture and RVR below the discharge invert elevation. Runoff Volume Reduction is a combination of storage within a dead pool and soil media mix. The total provided RVR within the Detention Basin is 3,463.00 CF.

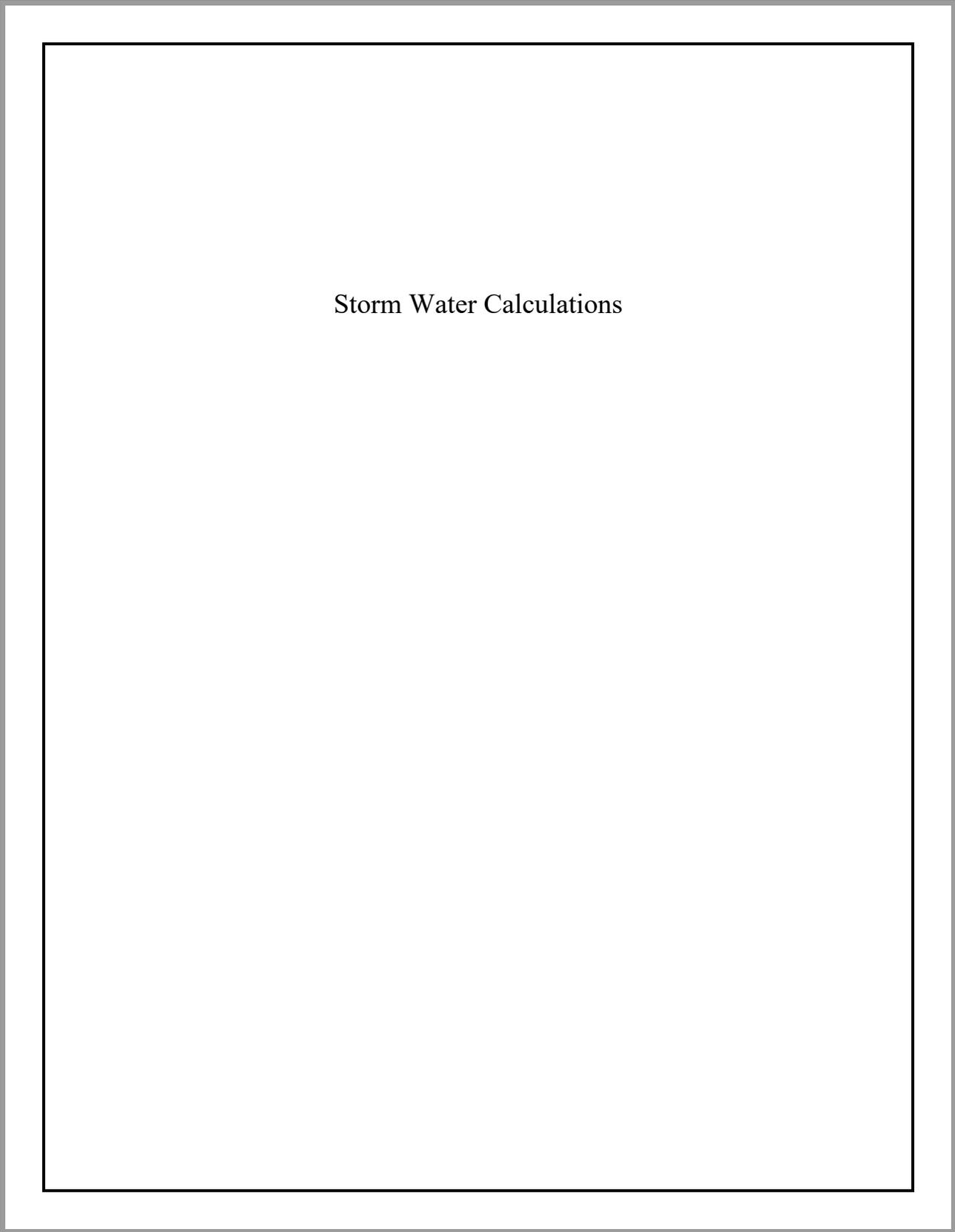
SANITARY SEWER / WATERMAIN

A proposed sanitary service will connect to the existing 12-inch sanitary sewer located in Midlothian Road. A proposed water service will connect to an existing 10-inch water main in Lakewood Lane.

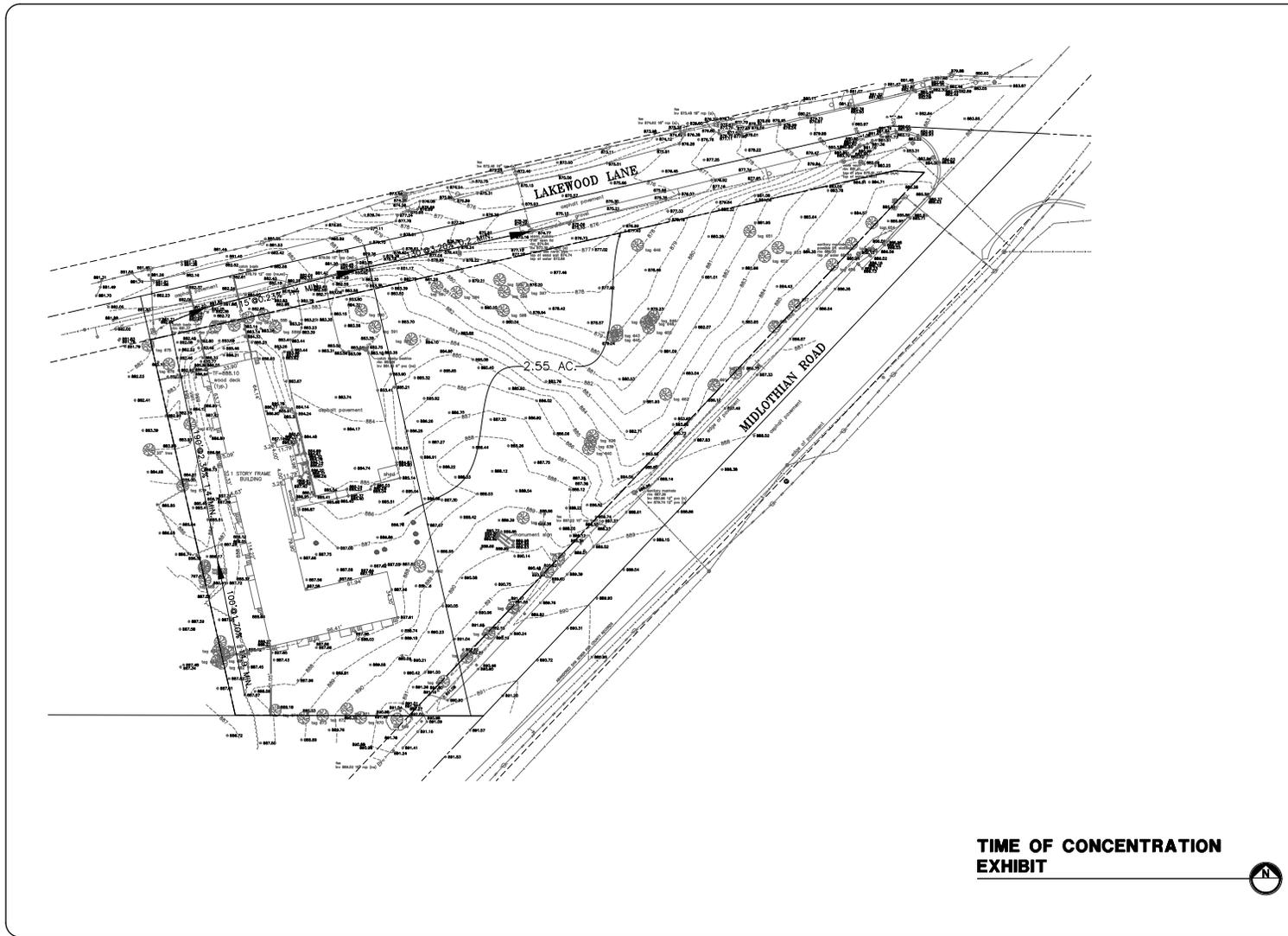
EROSION CONTROL

Prior to the start of construction, silt fence shall be installed around the development perimeter. Temporary filter baskets will be installed in all proposed catch basins, throughout the development, where construction will take place. Once the detention basin is completed, blanket stabilization and temporary seeding will be installed. If temporary stockpiling of soil is

necessary, silt fence and seeding will be provided, if the stockpile is to remain over 14 days. The proposed basin shall be inspected and cleaned of silt and sediment over the course of construction. Weekly inspections of the basin will be performed and after rainfall events over half an inch. Please see erosion control plan for details. Once construction is near completion, seed and blanketing will be installed to stabilize the property with permanent erosion control. This work will be conducted during landscape installation.



Storm Water Calculations

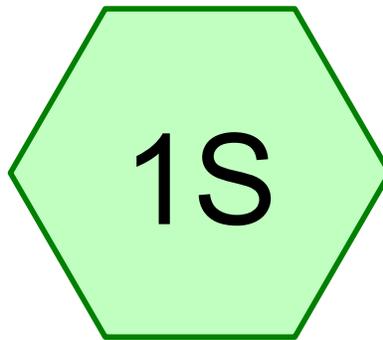


DATE	REVISIONS

CONSULTING, INC.
 CONSULTING CIVIL ENGINEERS, PLANNERS & LAND SURVEYORS
 300 WASHINGTON DRIVE, WHEELING, ILLINOIS 60090 PH: (847) 245-1133 FAX: (847) 245-1177
 TITLE: TIME OF CONCENTRATION EXHIBIT DESIGN: J.K.C. DRAWING: S.F.M.
 DATE: 09/17/22
 PWA NO. 194-501350

MIDLOTHIAN MANOR
 22843 LAKEWOOD LANE
 LAKE ZURICH, ILLINOIS

PROJECT No.
 22614
 1 of 1



Existing Conditions

2.55 Ac.



Routing Diagram for 2.55 Ac. channel Runoff_Existing_Cond
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2.55 Ac. channel Runoff_Existing_Cond

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.092	74	>75% Grass cover, Good, HSG C (1S)
0.458	98	Roofs, Paved parking and driveways HSG C (1S)

2.55 Ac. channel Runoff_Existing_Cond

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
2.550	HSG C	1S
0.000	HSG D	
0.000	Other	

2.55 Ac. channel Runoff_Existing_Cond

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Page 4

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	115.0	0.0023	0.020	12.0	0.0	0.0

2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Summary for Subcatchment 1S: Existing Conditions 2.55 Ac.

Runoff = 0.55 cfs @ 15.87 hrs, Volume= 0.293 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

Area (ac)	CN	Description
2.092	74	>75% Grass cover, Good, HSG C
* 0.458	98	Roofs, Paved parking and driveways HSG C
2.550	78	Weighted Average
2.092		82.04% Pervious Area
0.458		17.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.0170	0.11		Sheet Flow, West Side sheet flow Grass: Dense n= 0.240 P2= 3.34"
1.4	190	0.0230	2.27		Shallow Concentrated Flow, West Side of Property Grassed Waterway Kv= 15.0 fps
1.4	115	0.0023	1.41	1.11	Pipe Channel, Pipe under Driveway 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.020 Corrugated PE, corrugated interior
0.2	130	0.0320	9.82	137.48	Channel Flow, Channel Area= 14.0 sf Perim= 12.0' r= 1.17' n= 0.030 Earth, grassed & winding
17.9	535	Total			

2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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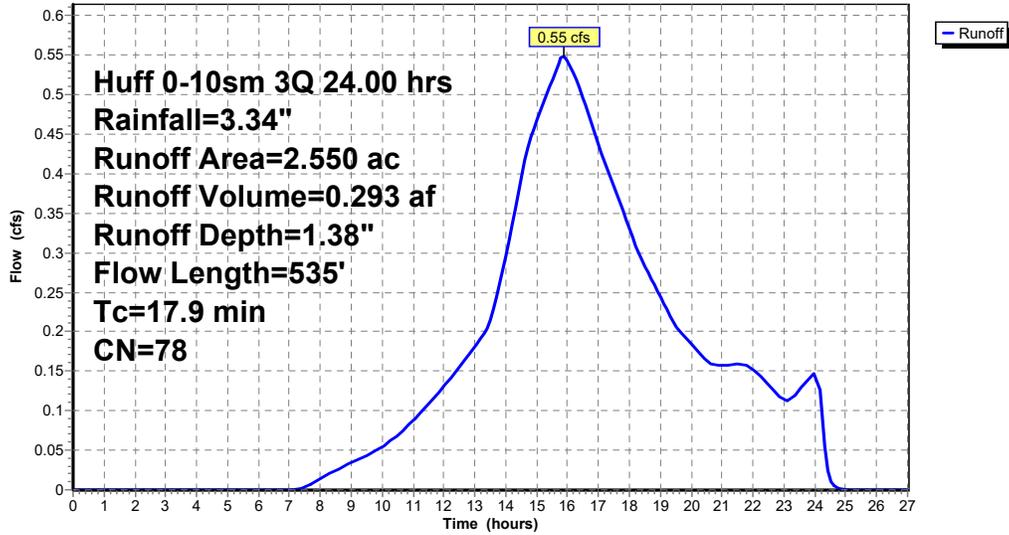
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Page 6

Subcatchment 1S: Existing Conditions 2.55 Ac.

Hydrograph



2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Hydrograph for Subcatchment 1S: Existing Conditions 2.55 Ac.

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.34	1.38	0.00
0.50	0.01	0.00	0.00	27.00	3.34	1.38	0.00
1.00	0.04	0.00	0.00				
1.50	0.08	0.00	0.00				
2.00	0.12	0.00	0.00				
2.50	0.16	0.00	0.00				
3.00	0.20	0.00	0.00				
3.50	0.25	0.00	0.00				
4.00	0.29	0.00	0.00				
4.50	0.33	0.00	0.00				
5.00	0.37	0.00	0.00				
5.50	0.42	0.00	0.00				
6.00	0.46	0.00	0.00				
6.50	0.50	0.00	0.00				
7.00	0.55	0.00	0.00				
7.50	0.61	0.00	0.00				
8.00	0.67	0.00	0.01				
8.50	0.72	0.01	0.02				
9.00	0.78	0.02	0.03				
9.50	0.84	0.02	0.04				
10.00	0.89	0.03	0.05				
10.50	0.96	0.05	0.07				
11.00	1.03	0.07	0.09				
11.50	1.10	0.09	0.11				
12.00	1.19	0.11	0.13				
12.50	1.27	0.14	0.15				
13.00	1.37	0.18	0.18				
13.50	1.47	0.22	0.22				
14.00	1.60	0.28	0.30				
14.50	1.76	0.36	0.40				
15.00	1.94	0.45	0.47				
15.50	2.12	0.55	0.52				
16.00	2.29	0.66	0.54				
16.50	2.45	0.75	0.50				
17.00	2.58	0.84	0.44				
17.50	2.69	0.91	0.38				
18.00	2.78	0.98	0.33				
18.50	2.86	1.03	0.28				
19.00	2.93	1.08	0.24				
19.50	2.98	1.12	0.21				
20.00	3.03	1.15	0.18				
20.50	3.08	1.18	0.16				
21.00	3.12	1.21	0.16				
21.50	3.16	1.25	0.16				
22.00	3.20	1.28	0.15				
22.50	3.24	1.30	0.13				
23.00	3.27	1.32	0.11				
23.50	3.30	1.35	0.13				
24.00	3.34	1.38	0.15				
24.50	3.34	1.38	0.01				
25.00	3.34	1.38	0.00				
25.50	3.34	1.38	0.00				
26.00	3.34	1.38	0.00				

2.55 Ac. channel Runoff_Existing_Cond

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Page 1

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.092	74	>75% Grass cover, Good, HSG C (1S)
0.458	98	Roofs, Paved parking and driveways HSG C (1S)

2.55 Ac. channel Runoff_Existing_Cond

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
2.550	HSG C	1S
0.000	HSG D	
0.000	Other	

2.55 Ac. channel Runoff_Existing_Cond

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Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	115.0	0.0023	0.020	12.0	0.0	0.0

2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Summary for Subcatchment 1S: Existing Conditions 2.55 Ac.

Runoff = 2.08 cfs @ 15.80 hrs, Volume= 1.258 af, Depth= 5.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

Area (ac)	CN	Description
2.092	74	>75% Grass cover, Good, HSG C
* 0.458	98	Roofs, Paved parking and driveways HSG C
2.550	78	Weighted Average
2.092		82.04% Pervious Area
0.458		17.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.0170	0.11		Sheet Flow, West Side sheet flow Grass: Dense n= 0.240 P2= 3.34"
1.4	190	0.0230	2.27		Shallow Concentrated Flow, West Side of Property Grassed Waterway Kv= 15.0 fps
1.4	115	0.0023	1.41	1.11	Pipe Channel, Pipe under Driveway 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.020 Corrugated PE, corrugated interior
0.2	130	0.0320	9.82	137.48	Channel Flow, Channel Area= 14.0 sf Perim= 12.0' r= 1.17' n= 0.030 Earth, grassed & winding
17.9	535	Total			

2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

Prepared by {enter your company name here}

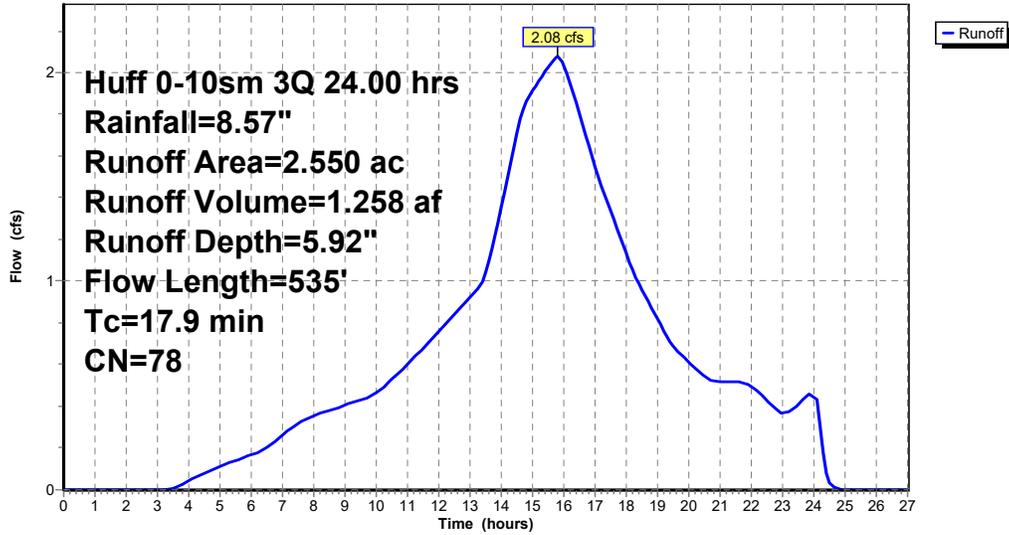
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Subcatchment 1S: Existing Conditions 2.55 Ac.

Hydrograph



2.55 Ac. channel Runoff_Existing_Cond

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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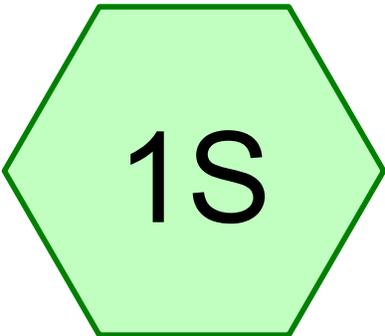
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Hydrograph for Subcatchment 1S: Existing Conditions 2.55 Ac.

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.57	5.92	0.00
0.50	0.02	0.00	0.00	27.00	8.57	5.92	0.00
1.00	0.09	0.00	0.00				
1.50	0.20	0.00	0.00				
2.00	0.30	0.00	0.00				
2.50	0.41	0.00	0.00				
3.00	0.52	0.00	0.00				
3.50	0.63	0.00	0.01				
4.00	0.74	0.01	0.04				
4.50	0.85	0.03	0.08				
5.00	0.96	0.05	0.11				
5.50	1.07	0.08	0.14				
6.00	1.17	0.11	0.17				
6.50	1.29	0.15	0.20				
7.00	1.42	0.20	0.26				
7.50	1.57	0.26	0.32				
8.00	1.71	0.33	0.35				
8.50	1.86	0.41	0.38				
9.00	2.00	0.49	0.41				
9.50	2.15	0.57	0.43				
10.00	2.30	0.66	0.46				
10.50	2.46	0.76	0.53				
11.00	2.64	0.88	0.60				
11.50	2.84	1.01	0.68				
12.00	3.05	1.16	0.76				
12.50	3.27	1.33	0.84				
13.00	3.51	1.51	0.92				
13.50	3.78	1.71	1.04				
14.00	4.11	1.98	1.36				
14.50	4.52	2.31	1.71				
15.00	4.97	2.69	1.91				
15.50	5.43	3.08	2.02				
16.00	5.88	3.48	2.03				
16.50	6.28	3.82	1.80				
17.00	6.61	4.12	1.55				
17.50	6.89	4.38	1.33				
18.00	7.13	4.60	1.13				
18.50	7.34	4.78	0.96				
19.00	7.51	4.94	0.82				
19.50	7.65	5.07	0.69				
20.00	7.78	5.19	0.61				
20.50	7.90	5.29	0.54				
21.00	8.00	5.40	0.52				
21.50	8.11	5.50	0.52				
22.00	8.22	5.59	0.50				
22.50	8.31	5.67	0.43				
23.00	8.38	5.75	0.36				
23.50	8.47	5.83	0.41				
24.00	8.57	5.92	0.48				
24.50	8.57	5.92	0.03				
25.00	8.57	5.92	0.00				
25.50	8.57	5.92	0.00				
26.00	8.57	5.92	0.00				



Unrestricted 0.07 Acres



Routing Diagram for Unrestricted 0.07 Acres
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Unrestricted 0.07 Acres

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Summary for Subcatchment 1S: Unrestricted 0.07 Acres

Runoff = 0.02 cfs @ 15.60 hrs, Volume= 0.009 af, Depth= 1.51"

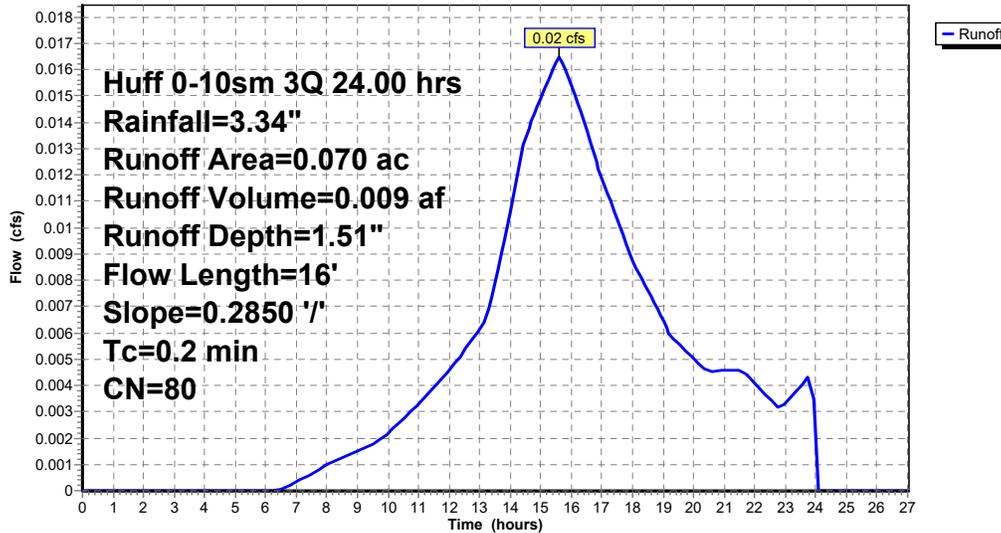
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
 Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

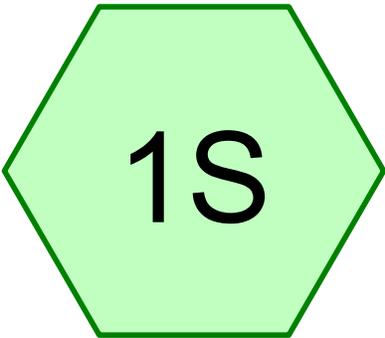
Area (ac)	CN	Description
0.070	80	>75% Grass cover, Good, HSG D
0.070		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	16	0.2850	1.22		Lag/CN Method, Unrestricted Area

Subcatchment 1S: Unrestricted 0.07 Acres

Hydrograph





Unrestricted 0.07 Acres



Routing Diagram for Unrestricted 0.07 Acres
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Unrestricted 0.07 Acres

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Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.070	80	>75% Grass cover, Good, HSG D (1S)
0.070	80	TOTAL AREA

Unrestricted 0.07 Acres

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.070	HSG D	1S
0.000	Other	
0.070		TOTAL AREA

Unrestricted 0.07 Acres

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Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.070	0.000	0.070	>75% Grass cover, Good	1S
0.000	0.000	0.000	0.070	0.000	0.070	TOTAL AREA	

Unrestricted 0.07 Acres

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Summary for Subcatchment 1S: Unrestricted 0.07 Acres

Runoff = 0.06 cfs @ 15.57 hrs, Volume= 0.036 af, Depth= 6.16"

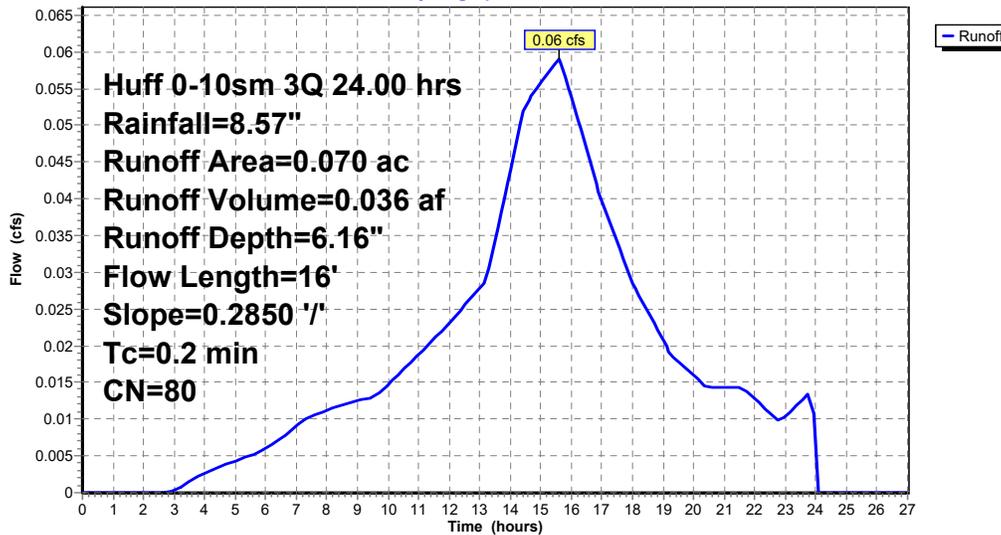
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
 Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

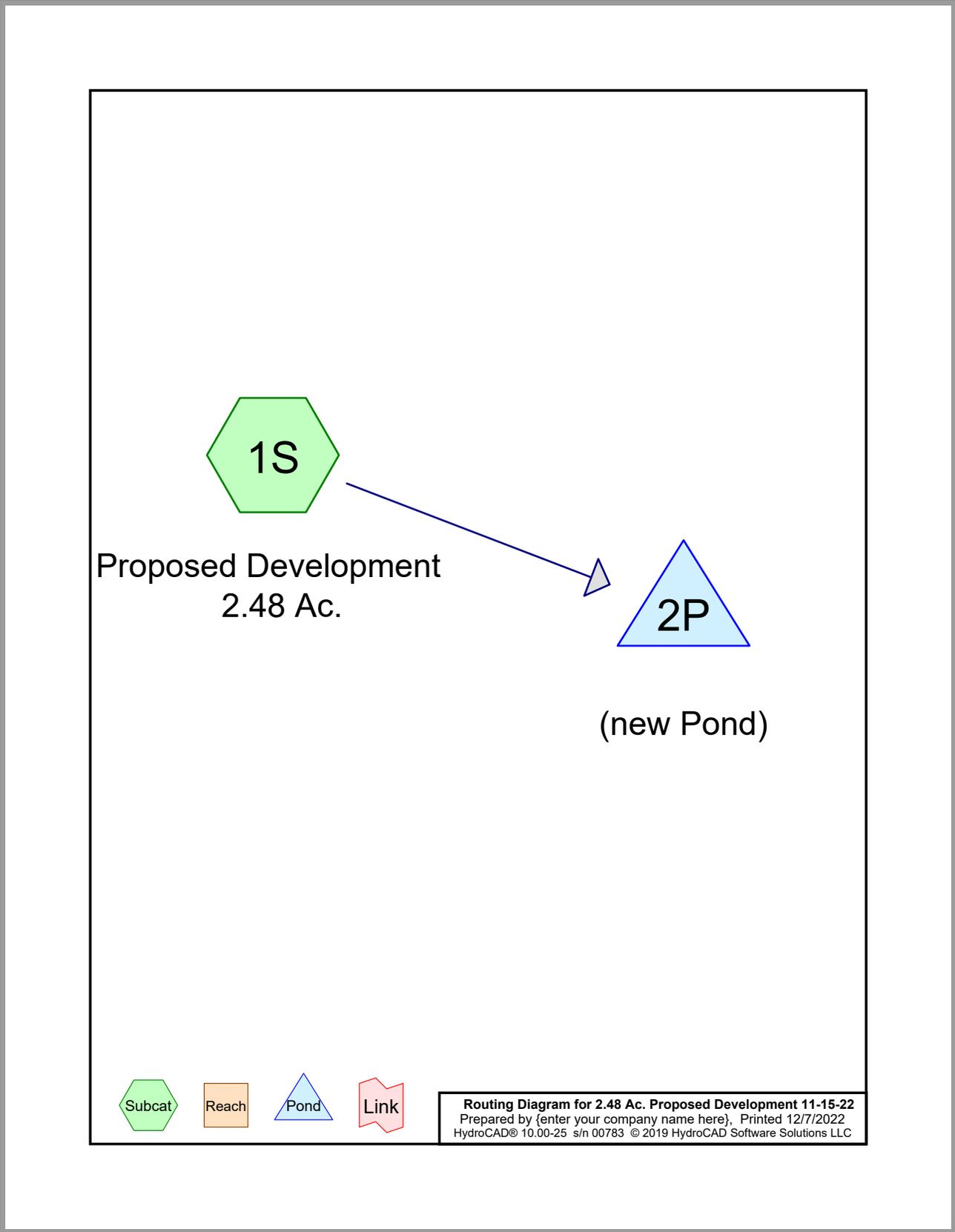
Area (ac)	CN	Description
0.070	80	>75% Grass cover, Good, HSG D
0.070		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	16	0.2850	1.22		Lag/CN Method, Unrestricted Area

Subcatchment 1S: Unrestricted 0.07 Acres

Hydrograph





2.48 Ac. Proposed Development 11-15-22

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Page 2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.284	74	>75% Grass cover, Good, HSG C (1S)
1.343	80	>75% Grass cover, Good, HSG D (1S)
0.853	98	Roofs, Paved parking and driveways HSG C (1S)
2.480	86	TOTAL AREA

2.48 Ac. Proposed Development 11-15-22

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
1.137	HSG C	1S
1.343	HSG D	1S
0.000	Other	
2.480		TOTAL AREA

2.48 Ac. Proposed Development 11-15-22

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Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchme Numbers
0.000	0.000	0.284	1.343	0.000	1.627	>75% Grass cover, Good	
0.000	0.000	0.853	0.000	0.000	0.853	Roofs, Paved parking and driveways	
0.000	0.000	1.137	1.343	0.000	2.480	TOTAL AREA	

2.48 Ac. Proposed Development 11-15-22

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Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	115.0	0.0023	0.020	12.0	0.0	0.0

2.48 Ac. Proposed Development 11-15-22 *Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"*
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Time span=0.00-27.00 hrs, dt=0.10 hrs, 271 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Proposed Development Runoff Area=2.480 ac 34.40% Impervious Runoff Depth=1.96"
Flow Length=535' Tc=17.9 min CN=86 Runoff=0.70 cfs 0.405 af

Pond 2P: (new Pond) Peak Elev=878.40' Storage=13,943 cf Inflow=0.70 cfs 0.405 af
Primary=0.08 cfs 0.103 af Secondary=0.00 cfs 0.000 af Outflow=0.08 cfs 0.103 af

Total Runoff Area = 2.480 ac Runoff Volume = 0.405 af Average Runoff Depth = 1.96"
65.60% Pervious = 1.627 ac 34.40% Impervious = 0.853 ac

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Summary for Subcatchment 1S: Proposed Development 2.48 Ac.

Runoff = 0.70 cfs @ 15.82 hrs, Volume= 0.405 af, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

Area (ac)	CN	Description
0.284	74	>75% Grass cover, Good, HSG C
1.343	80	>75% Grass cover, Good, HSG D
* 0.853	98	Roofs, Paved parking and driveways HSG C
2.480	86	Weighted Average
1.627		65.60% Pervious Area
0.853		34.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.0170	0.11		Sheet Flow, West Side sheet flow Grass: Dense n= 0.240 P2= 3.34"
1.4	190	0.0230	2.27		Shallow Concentrated Flow, West Side of Property Grassed Waterway Kv= 15.0 fps
1.4	115	0.0023	1.41	1.11	Pipe Channel, Pipe under Driveway 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.020 Corrugated PE, corrugated interior
0.2	130	0.0320	9.82	137.48	Channel Flow, Channel Area= 14.0 sf Perim= 12.0' r= 1.17' n= 0.030 Earth, grassed & winding
17.9	535	Total			

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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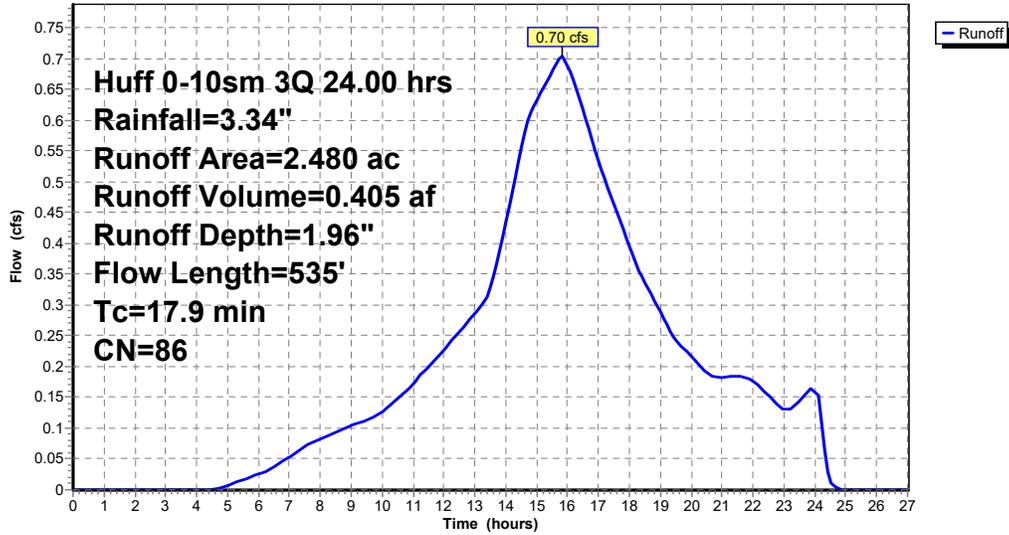
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Subcatchment 1S: Proposed Development 2.48 Ac.

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Hydrograph for Subcatchment 1S: Proposed Development 2.48 Ac.

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.34	1.96	0.00
0.50	0.01	0.00	0.00	27.00	3.34	1.96	0.00
1.00	0.04	0.00	0.00				
1.50	0.08	0.00	0.00				
2.00	0.12	0.00	0.00				
2.50	0.16	0.00	0.00				
3.00	0.20	0.00	0.00				
3.50	0.25	0.00	0.00				
4.00	0.29	0.00	0.00				
4.50	0.33	0.00	0.00				
5.00	0.37	0.00	0.01				
5.50	0.42	0.00	0.02				
6.00	0.46	0.01	0.03				
6.50	0.50	0.02	0.04				
7.00	0.55	0.03	0.05				
7.50	0.61	0.04	0.07				
8.00	0.67	0.06	0.08				
8.50	0.72	0.08	0.09				
9.00	0.78	0.10	0.10				
9.50	0.84	0.12	0.11				
10.00	0.89	0.15	0.13				
10.50	0.96	0.18	0.15				
11.00	1.03	0.21	0.17				
11.50	1.10	0.25	0.20				
12.00	1.19	0.30	0.23				
12.50	1.27	0.35	0.26				
13.00	1.37	0.41	0.29				
13.50	1.47	0.47	0.33				
14.00	1.60	0.56	0.43				
14.50	1.76	0.67	0.56				
15.00	1.94	0.80	0.63				
15.50	2.12	0.94	0.68				
16.00	2.29	1.08	0.69				
16.50	2.45	1.20	0.62				
17.00	2.58	1.31	0.54				
17.50	2.69	1.40	0.46				
18.00	2.78	1.48	0.40				
18.50	2.86	1.54	0.34				
19.00	2.93	1.60	0.29				
19.50	2.98	1.65	0.24				
20.00	3.03	1.69	0.22				
20.50	3.08	1.73	0.19				
21.00	3.12	1.77	0.18				
21.50	3.16	1.80	0.18				
22.00	3.20	1.84	0.18				
22.50	3.24	1.87	0.15				
23.00	3.27	1.89	0.13				
23.50	3.30	1.92	0.15				
24.00	3.34	1.96	0.17				
24.50	3.34	1.96	0.01				
25.00	3.34	1.96	0.00				
25.50	3.34	1.96	0.00				
26.00	3.34	1.96	0.00				

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 1.96"
 Inflow = 0.70 cfs @ 15.82 hrs, Volume= 0.405 af
 Outflow = 0.08 cfs @ 24.27 hrs, Volume= 0.103 af, Atten= 88%, Lag= 507.0 min
 Primary = 0.08 cfs @ 24.27 hrs, Volume= 0.103 af
 Secondary = 0.00 cfs @ 24.27 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
 Peak Elev= 878.40' @ 24.27 hrs Surf.Area= 11,594 sf Storage= 13,943 cf

Plug-Flow detention time= 462.4 min calculated for 0.102 af (25% of inflow)
 Center-of-Mass det. time= 178.3 min (1,137.1 - 958.7)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.08 cfs @ 24.27 hrs HW=878.40' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.08 cfs @ 6.01 fps)

Secondary OutFlow Max=0.00 cfs @ 24.27 hrs HW=878.40' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.16 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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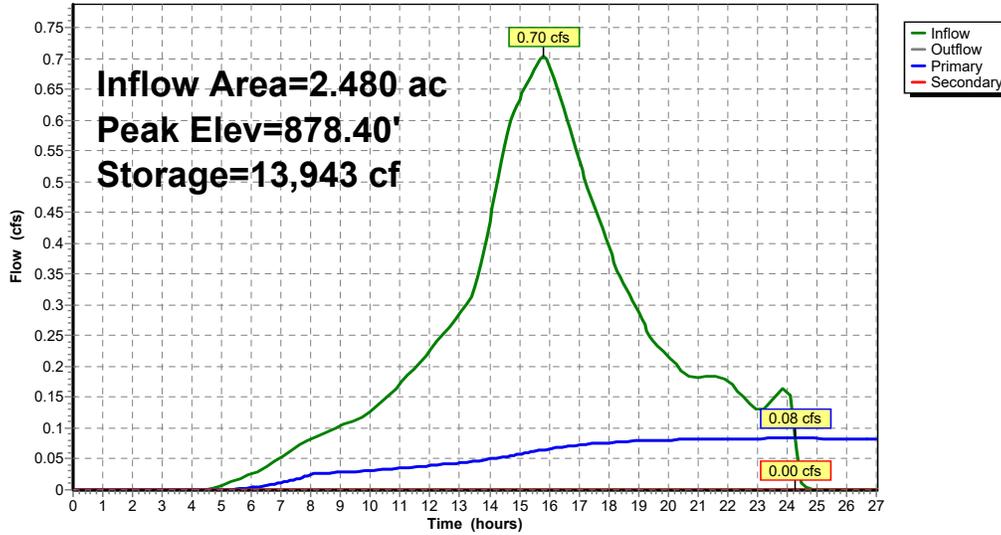
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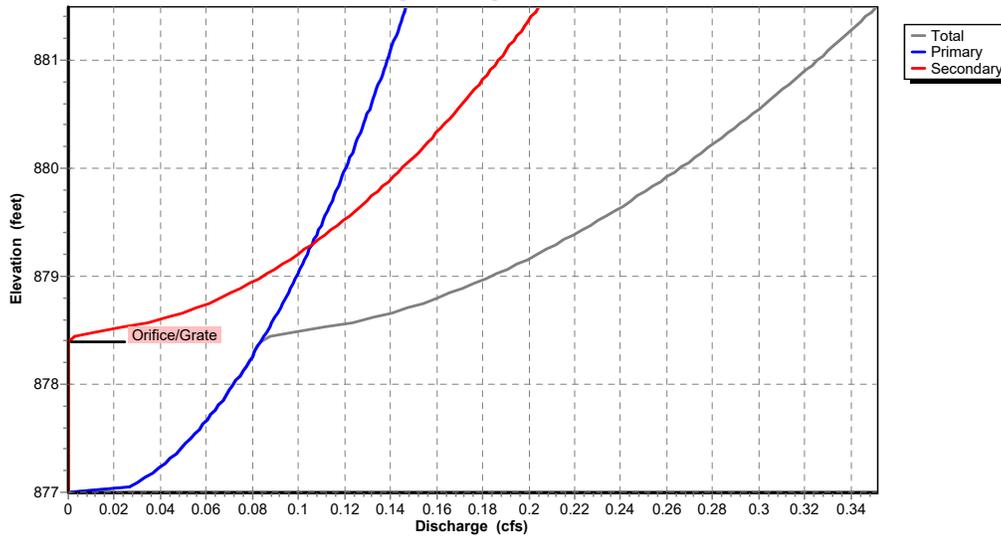
Pond 2P: (new Pond)

Hydrograph



Pond 2P: (new Pond)

Stage-Discharge



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

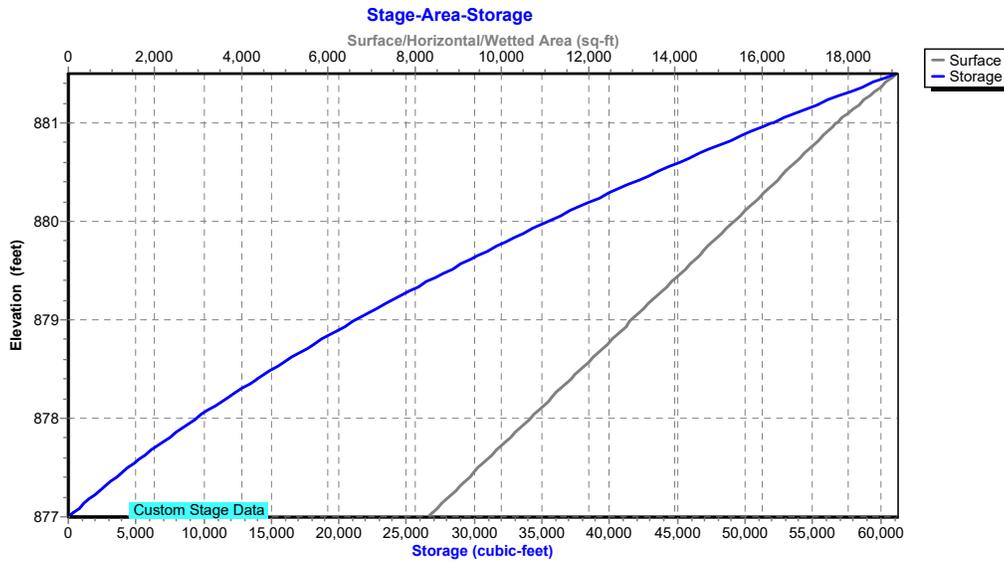
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Pond 2P: (new Pond)



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Hydrograph for Pond 2P: (new Pond)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	877.00	0.00	0.00	0.00
1.00	0.00	0	877.00	0.00	0.00	0.00
2.00	0.00	0	877.00	0.00	0.00	0.00
3.00	0.00	0	877.00	0.00	0.00	0.00
4.00	0.00	0	877.00	0.00	0.00	0.00
5.00	0.01	4	877.00	0.00	0.00	0.00
6.00	0.03	56	877.01	0.00	0.00	0.00
7.00	0.05	165	877.02	0.01	0.01	0.00
8.00	0.08	351	877.04	0.02	0.02	0.00
9.00	0.10	592	877.07	0.03	0.03	0.00
10.00	0.13	896	877.11	0.03	0.03	0.00
11.00	0.17	1,313	877.15	0.03	0.03	0.00
12.00	0.23	1,898	877.22	0.04	0.04	0.00
13.00	0.29	2,671	877.31	0.04	0.04	0.00
14.00	0.43	3,731	877.42	0.05	0.05	0.00
15.00	0.63	5,514	877.61	0.06	0.06	0.00
16.00	0.69	7,727	877.83	0.07	0.07	0.00
17.00	0.54	9,700	878.02	0.07	0.07	0.00
18.00	0.40	11,104	878.15	0.08	0.08	0.00
19.00	0.29	12,039	878.24	0.08	0.08	0.00
20.00	0.22	12,638	878.29	0.08	0.08	0.00
21.00	0.18	13,046	878.32	0.08	0.08	0.00
22.00	0.18	13,408	878.36	0.08	0.08	0.00
23.00	0.13	13,658	878.38	0.08	0.08	0.00
24.00	0.17	13,886	878.40	0.08	0.08	0.00
25.00	0.00	13,760	878.39	0.08	0.08	0.00
26.00	0.00	13,461	878.36	0.08	0.08	0.00
27.00	0.00	13,165	878.33	0.08	0.08	0.00

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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Stage-Discharge for Pond 2P: (new Pond)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
877.00	0.00	0.00	0.00	879.65	0.24	0.11	0.13
877.05	0.03	0.03	0.00	879.70	0.24	0.11	0.13
877.10	0.03	0.03	0.00	879.75	0.25	0.12	0.13
877.15	0.03	0.03	0.00	879.80	0.25	0.12	0.13
877.20	0.04	0.04	0.00	879.85	0.25	0.12	0.14
877.25	0.04	0.04	0.00	879.90	0.26	0.12	0.14
877.30	0.04	0.04	0.00	879.95	0.26	0.12	0.14
877.35	0.05	0.05	0.00	880.00	0.27	0.12	0.14
877.40	0.05	0.05	0.00	880.05	0.27	0.12	0.15
877.45	0.05	0.05	0.00	880.10	0.27	0.12	0.15
877.50	0.05	0.05	0.00	880.15	0.28	0.12	0.15
877.55	0.06	0.06	0.00	880.20	0.28	0.12	0.15
877.60	0.06	0.06	0.00	880.25	0.28	0.13	0.16
877.65	0.06	0.06	0.00	880.30	0.28	0.13	0.16
877.70	0.06	0.06	0.00	880.35	0.29	0.13	0.16
877.75	0.06	0.06	0.00	880.40	0.29	0.13	0.16
877.80	0.06	0.06	0.00	880.45	0.29	0.13	0.16
877.85	0.07	0.07	0.00	880.50	0.30	0.13	0.17
877.90	0.07	0.07	0.00	880.55	0.30	0.13	0.17
877.95	0.07	0.07	0.00	880.60	0.30	0.13	0.17
878.00	0.07	0.07	0.00	880.65	0.31	0.13	0.17
878.05	0.07	0.07	0.00	880.70	0.31	0.13	0.18
878.10	0.07	0.07	0.00	880.75	0.31	0.13	0.18
878.15	0.08	0.08	0.00	880.80	0.31	0.14	0.18
878.20	0.08	0.08	0.00	880.85	0.32	0.14	0.18
878.25	0.08	0.08	0.00	880.90	0.32	0.14	0.18
878.30	0.08	0.08	0.00	880.95	0.32	0.14	0.18
878.35	0.08	0.08	0.00	881.00	0.33	0.14	0.19
878.40	0.08	0.08	0.00	881.05	0.33	0.14	0.19
878.45	0.09	0.09	0.00	881.10	0.33	0.14	0.19
878.50	0.10	0.09	0.02	881.15	0.33	0.14	0.19
878.55	0.12	0.09	0.03	881.20	0.34	0.14	0.19
878.60	0.13	0.09	0.04	881.25	0.34	0.14	0.20
878.65	0.14	0.09	0.05	881.30	0.34	0.14	0.20
878.70	0.15	0.09	0.05	881.35	0.34	0.14	0.20
878.75	0.15	0.09	0.06	881.40	0.35	0.15	0.20
878.80	0.16	0.09	0.07	881.45	0.35	0.15	0.20
878.85	0.17	0.10	0.07	881.50	0.35	0.15	0.20
878.90	0.17	0.10	0.08				
878.95	0.18	0.10	0.08				
879.00	0.18	0.10	0.08				
879.05	0.19	0.10	0.09				
879.10	0.19	0.10	0.09				
879.15	0.20	0.10	0.10				
879.20	0.20	0.10	0.10				
879.25	0.21	0.10	0.10				
879.30	0.21	0.11	0.11				
879.35	0.22	0.11	0.11				
879.40	0.22	0.11	0.11				
879.45	0.22	0.11	0.12				
879.50	0.23	0.11	0.12				
879.55	0.23	0.11	0.12				
879.60	0.24	0.11	0.12				

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=3.34"

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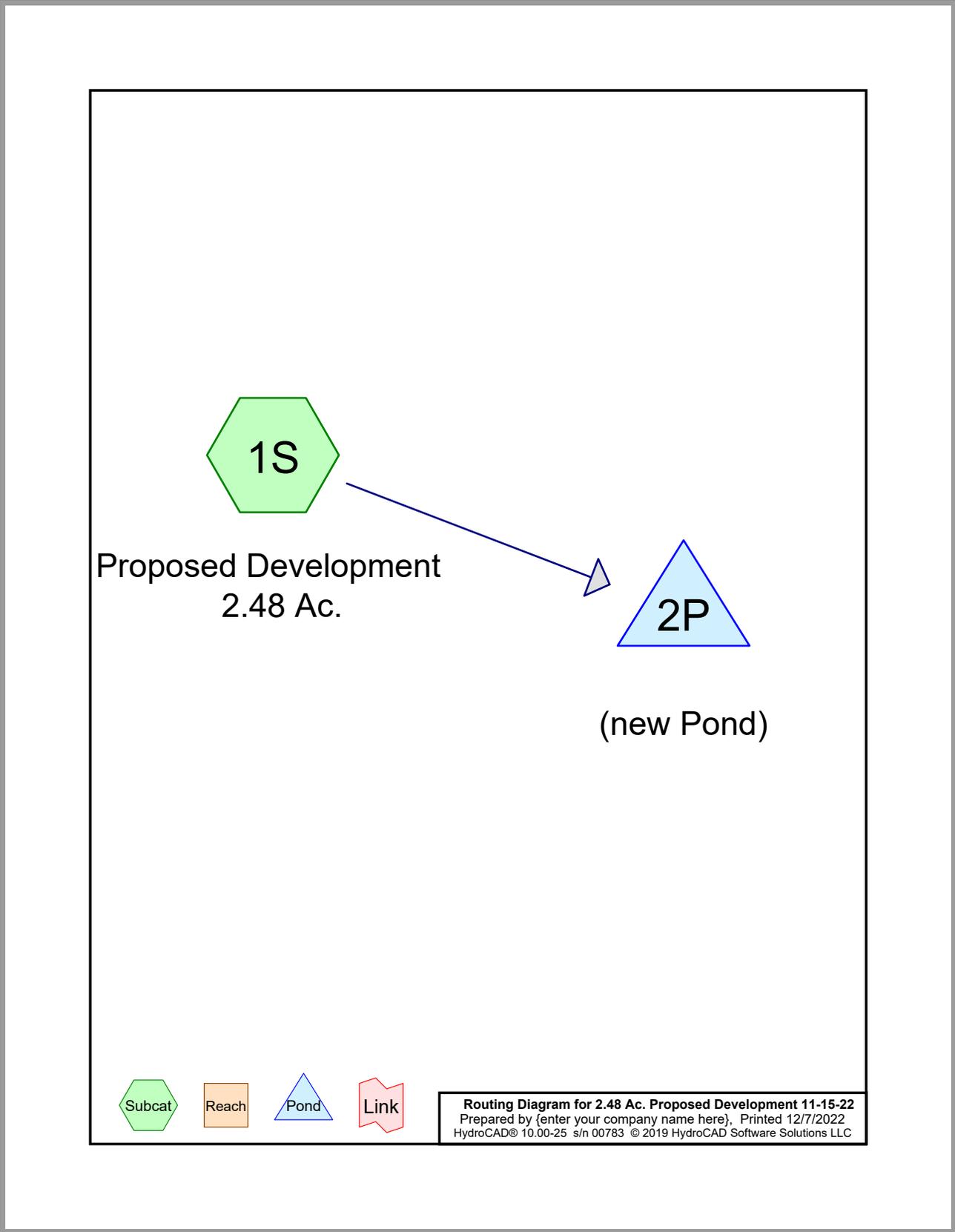
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Stage-Area-Storage for Pond 2P: (new Pond)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
877.00	8,292	0	879.65	14,531	30,241
877.05	8,410	418	879.70	14,649	30,971
877.10	8,527	841	879.75	14,767	31,706
877.15	8,645	1,270	879.80	14,885	32,447
877.20	8,763	1,705	879.85	15,002	33,194
877.25	8,881	2,147	879.90	15,120	33,947
877.30	8,998	2,594	879.95	15,238	34,706
877.35	9,116	3,046	880.00	15,356	35,471
877.40	9,234	3,505	880.05	15,473	36,242
877.45	9,352	3,970	880.10	15,591	37,019
877.50	9,469	4,440	880.15	15,709	37,801
877.55	9,587	4,917	880.20	15,826	38,589
877.60	9,705	5,399	880.25	15,944	39,384
877.65	9,822	5,887	880.30	16,062	40,184
877.70	9,940	6,381	880.35	16,180	40,990
877.75	10,058	6,881	880.40	16,297	41,802
877.80	10,176	7,387	880.45	16,415	42,620
877.85	10,293	7,899	880.50	16,533	43,443
877.90	10,411	8,416	880.55	16,650	44,273
877.95	10,529	8,940	880.60	16,768	45,108
878.00	10,647	9,469	880.65	16,886	45,950
878.05	10,764	10,005	880.70	17,004	46,797
878.10	10,882	10,546	880.75	17,121	47,650
878.15	11,000	11,093	880.80	17,239	48,509
878.20	11,117	11,646	880.85	17,357	49,374
878.25	11,235	12,204	880.90	17,475	50,245
878.30	11,353	12,769	880.95	17,592	51,121
878.35	11,471	13,340	881.00	17,710	52,004
878.40	11,588	13,916	881.05	17,849	52,893
878.45	11,706	14,499	881.10	17,988	53,789
878.50	11,824	15,087	881.15	18,127	54,692
878.55	11,941	15,681	881.20	18,266	55,602
878.60	12,059	16,281	881.25	18,405	56,518
878.65	12,177	16,887	881.30	18,544	57,442
878.70	12,295	17,499	881.35	18,683	58,373
878.75	12,412	18,116	881.40	18,822	59,310
878.80	12,530	18,740	881.45	18,961	60,255
878.85	12,648	19,369	881.50	19,100	61,207
878.90	12,766	20,005			
878.95	12,883	20,646			
879.00	13,001	21,293			
879.05	13,119	21,946			
879.10	13,236	22,605			
879.15	13,354	23,270			
879.20	13,472	23,940			
879.25	13,590	24,617			
879.30	13,707	25,299			
879.35	13,825	25,988			
879.40	13,943	26,682			
879.45	14,061	27,382			
879.50	14,178	28,088			
879.55	14,296	28,800			
879.60	14,414	29,517			



2.48 Ac. Proposed Development 11-15-22

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Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.284	74	>75% Grass cover, Good, HSG C (1S)
1.343	80	>75% Grass cover, Good, HSG D (1S)
0.853	98	Roofs, Paved parking and driveways HSG C (1S)
2.480	86	TOTAL AREA

2.48 Ac. Proposed Development 11-15-22

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Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
1.137	HSG C	1S
1.343	HSG D	1S
0.000	Other	
2.480		TOTAL AREA

2.48 Ac. Proposed Development 11-15-22

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Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchme Numbers
0.000	0.000	0.284	1.343	0.000	1.627	>75% Grass cover, Good	
0.000	0.000	0.853	0.000	0.000	0.853	Roofs, Paved parking and driveways	
0.000	0.000	1.137	1.343	0.000	2.480	TOTAL AREA	

2.48 Ac. Proposed Development 11-15-22

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Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1S	0.00	0.00	115.0	0.0023	0.020	12.0	0.0	0.0

2.48 Ac. Proposed Development 11-15-22 Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"
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Time span=0.00-27.00 hrs, dt=0.10 hrs, 271 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Proposed Development Runoff Area=2.480 ac 34.40% Impervious Runoff Depth=6.88"
Flow Length=535' Tc=17.9 min CN=86 Runoff=2.20 cfs 1.423 af

Pond 2P: (new Pond) Peak Elev=880.82' Storage=48,911 cf Inflow=2.20 cfs 1.423 af
Primary=0.14 cfs 0.190 af Secondary=0.18 cfs 0.180 af Outflow=0.32 cfs 0.369 af

Total Runoff Area = 2.480 ac Runoff Volume = 1.423 af Average Runoff Depth = 6.88"
65.60% Pervious = 1.627 ac 34.40% Impervious = 0.853 ac

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Summary for Subcatchment 1S: Proposed Development 2.48 Ac.

Runoff = 2.20 cfs @ 15.78 hrs, Volume= 1.423 af, Depth= 6.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

Area (ac)	CN	Description
0.284	74	>75% Grass cover, Good, HSG C
1.343	80	>75% Grass cover, Good, HSG D
* 0.853	98	Roofs, Paved parking and driveways HSG C
2.480	86	Weighted Average
1.627		65.60% Pervious Area
0.853		34.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	100	0.0170	0.11		Sheet Flow, West Side sheet flow Grass: Dense n= 0.240 P2= 3.34"
1.4	190	0.0230	2.27		Shallow Concentrated Flow, West Side of Property Grassed Waterway Kv= 15.0 fps
1.4	115	0.0023	1.41	1.11	Pipe Channel, Pipe under Driveway 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.020 Corrugated PE, corrugated interior
0.2	130	0.0320	9.82	137.48	Channel Flow, Channel Area= 14.0 sf Perim= 12.0' r= 1.17' n= 0.030 Earth, grassed & winding
17.9	535	Total			

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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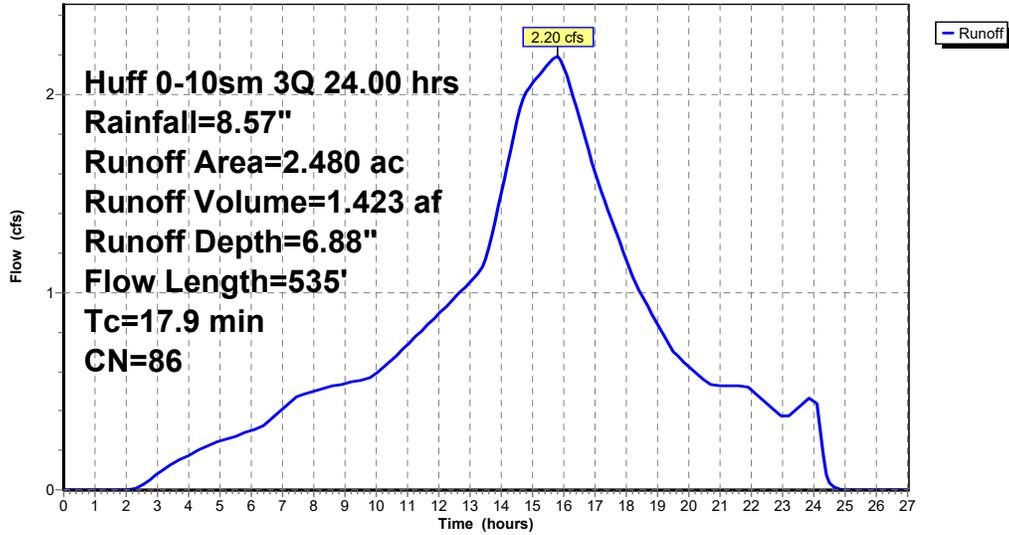
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Subcatchment 1S: Proposed Development 2.48 Ac.

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Hydrograph for Subcatchment 1S: Proposed Development 2.48 Ac.

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.57	6.88	0.00
0.50	0.02	0.00	0.00	27.00	8.57	6.88	0.00
1.00	0.09	0.00	0.00				
1.50	0.20	0.00	0.00				
2.00	0.30	0.00	0.00				
2.50	0.41	0.00	0.02				
3.00	0.52	0.02	0.08				
3.50	0.63	0.05	0.13				
4.00	0.74	0.08	0.18				
4.50	0.85	0.13	0.21				
5.00	0.96	0.18	0.25				
5.50	1.07	0.23	0.27				
6.00	1.17	0.29	0.30				
6.50	1.29	0.36	0.34				
7.00	1.42	0.44	0.41				
7.50	1.57	0.54	0.47				
8.00	1.71	0.64	0.50				
8.50	1.86	0.74	0.52				
9.00	2.00	0.85	0.54				
9.50	2.15	0.96	0.56				
10.00	2.30	1.08	0.59				
10.50	2.46	1.21	0.66				
11.00	2.64	1.36	0.73				
11.50	2.84	1.52	0.81				
12.00	3.05	1.70	0.89				
12.50	3.27	1.90	0.97				
13.00	3.51	2.11	1.05				
13.50	3.78	2.34	1.17				
14.00	4.11	2.65	1.50				
14.50	4.52	3.03	1.87				
15.00	4.97	3.44	2.06				
15.50	5.43	3.87	2.15				
16.00	5.88	4.30	2.14				
16.50	6.28	4.67	1.88				
17.00	6.61	4.99	1.61				
17.50	6.89	5.26	1.38				
18.00	7.13	5.50	1.17				
18.50	7.34	5.69	0.98				
19.00	7.51	5.86	0.84				
19.50	7.65	6.00	0.70				
20.00	7.78	6.12	0.63				
20.50	7.90	6.23	0.55				
21.00	8.00	6.34	0.53				
21.50	8.11	6.44	0.53				
22.00	8.22	6.54	0.51				
22.50	8.31	6.63	0.44				
23.00	8.38	6.70	0.37				
23.50	8.47	6.79	0.41				
24.00	8.57	6.88	0.49				
24.50	8.57	6.88	0.03				
25.00	8.57	6.88	0.00				
25.50	8.57	6.88	0.00				
26.00	8.57	6.88	0.00				

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 6.88"
 Inflow = 2.20 cfs @ 15.78 hrs, Volume= 1.423 af
 Outflow = 0.32 cfs @ 24.22 hrs, Volume= 0.369 af, Atten= 86%, Lag= 506.3 min
 Primary = 0.14 cfs @ 24.22 hrs, Volume= 0.190 af
 Secondary = 0.18 cfs @ 24.22 hrs, Volume= 0.180 af

Routing by Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.10 hrs
 Peak Elev= 880.82' @ 24.22 hrs Surf.Area= 17,294 sf Storage= 48,911 cf

Plug-Flow detention time= 609.2 min calculated for 0.368 af (26% of inflow)
 Center-of-Mass det. time= 260.0 min (1,153.6 - 893.6)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.14 cfs @ 24.22 hrs HW=880.82' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.14 cfs @ 9.70 fps)

Secondary OutFlow Max=0.18 cfs @ 24.22 hrs HW=880.82' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 7.48 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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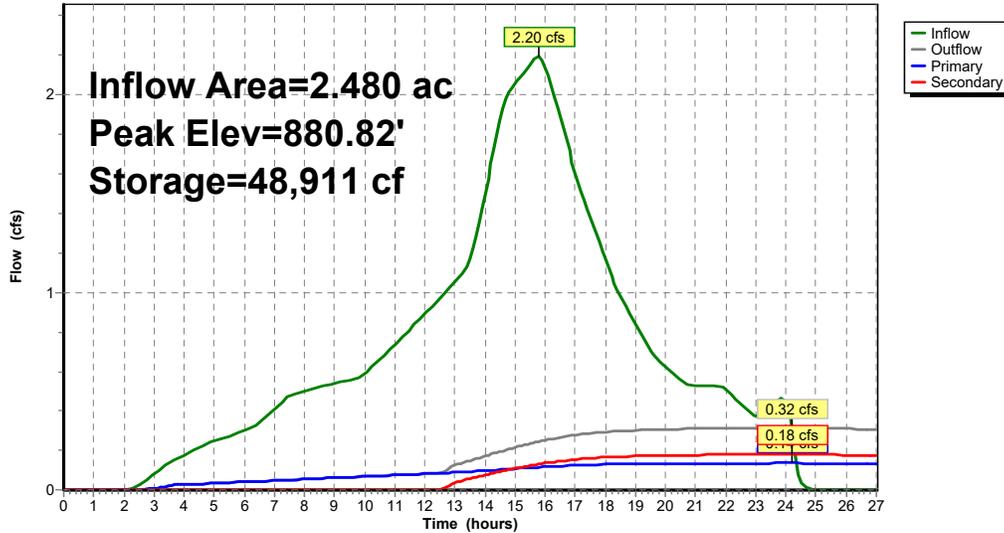
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Page 11

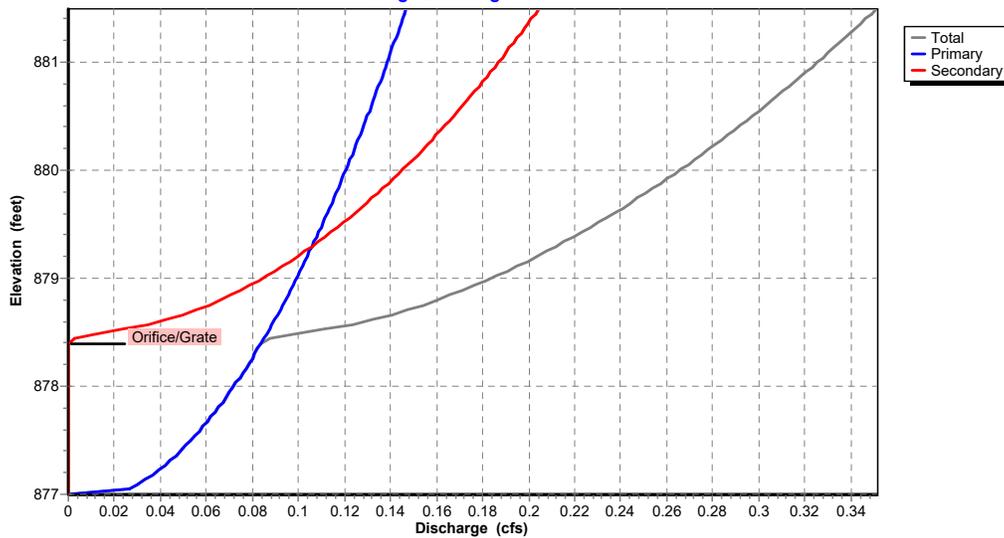
Pond 2P: (new Pond)

Hydrograph



Pond 2P: (new Pond)

Stage-Discharge



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

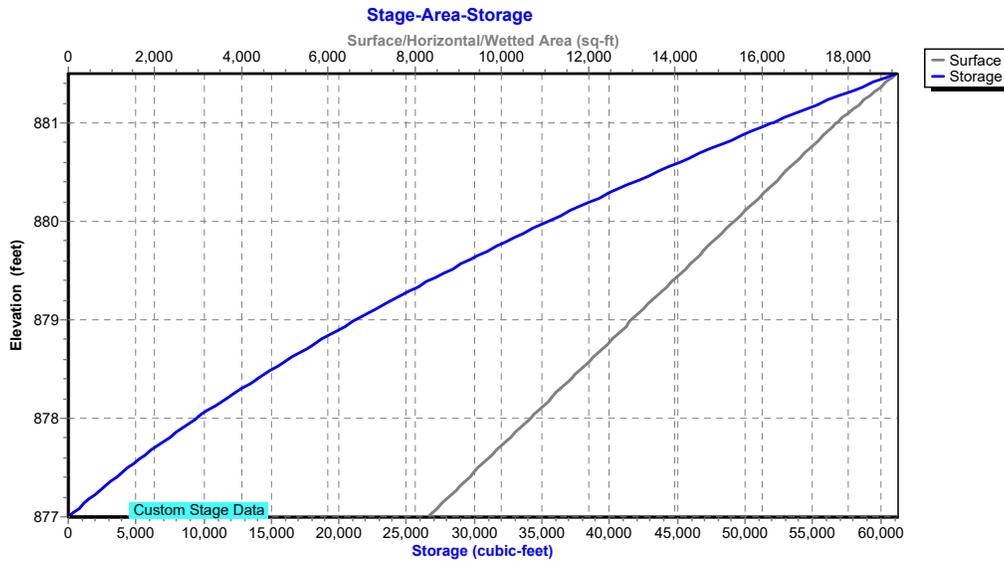
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Pond 2P: (new Pond)



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Hydrograph for Pond 2P: (new Pond)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	877.00	0.00	0.00	0.00
1.00	0.00	0	877.00	0.00	0.00	0.00
2.00	0.00	0	877.00	0.00	0.00	0.00
3.00	0.08	93	877.01	0.01	0.01	0.00
4.00	0.18	500	877.06	0.03	0.03	0.00
5.00	0.25	1,157	877.14	0.03	0.03	0.00
6.00	0.30	2,006	877.23	0.04	0.04	0.00
7.00	0.41	3,087	877.35	0.05	0.05	0.00
8.00	0.50	4,584	877.52	0.05	0.05	0.00
9.00	0.54	6,256	877.69	0.06	0.06	0.00
10.00	0.59	8,032	877.86	0.07	0.07	0.00
11.00	0.73	10,150	878.06	0.07	0.07	0.00
12.00	0.89	12,795	878.30	0.08	0.08	0.00
13.00	1.05	15,955	878.57	0.12	0.09	0.03
14.00	1.50	19,794	878.88	0.17	0.10	0.07
15.00	2.06	25,709	879.33	0.21	0.11	0.11
16.00	2.14	32,582	879.81	0.25	0.12	0.14
17.00	1.61	38,396	880.19	0.28	0.12	0.15
18.00	1.17	42,343	880.43	0.29	0.13	0.16
19.00	0.84	44,836	880.58	0.30	0.13	0.17
20.00	0.63	46,315	880.67	0.31	0.13	0.17
21.00	0.53	47,226	880.73	0.31	0.13	0.18
22.00	0.51	47,997	880.77	0.31	0.13	0.18
23.00	0.37	48,441	880.80	0.31	0.13	0.18
24.00	0.49	48,815	880.82	0.32	0.14	0.18
25.00	0.00	48,183	880.78	0.31	0.13	0.18
26.00	0.00	47,063	880.72	0.31	0.13	0.18
27.00	0.00	45,956	880.65	0.31	0.13	0.17

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"

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Stage-Discharge for Pond 2P: (new Pond)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
877.00	0.00	0.00	0.00	879.65	0.24	0.11	0.13
877.05	0.03	0.03	0.00	879.70	0.24	0.11	0.13
877.10	0.03	0.03	0.00	879.75	0.25	0.12	0.13
877.15	0.03	0.03	0.00	879.80	0.25	0.12	0.13
877.20	0.04	0.04	0.00	879.85	0.25	0.12	0.14
877.25	0.04	0.04	0.00	879.90	0.26	0.12	0.14
877.30	0.04	0.04	0.00	879.95	0.26	0.12	0.14
877.35	0.05	0.05	0.00	880.00	0.27	0.12	0.14
877.40	0.05	0.05	0.00	880.05	0.27	0.12	0.15
877.45	0.05	0.05	0.00	880.10	0.27	0.12	0.15
877.50	0.05	0.05	0.00	880.15	0.28	0.12	0.15
877.55	0.06	0.06	0.00	880.20	0.28	0.12	0.15
877.60	0.06	0.06	0.00	880.25	0.28	0.13	0.16
877.65	0.06	0.06	0.00	880.30	0.28	0.13	0.16
877.70	0.06	0.06	0.00	880.35	0.29	0.13	0.16
877.75	0.06	0.06	0.00	880.40	0.29	0.13	0.16
877.80	0.06	0.06	0.00	880.45	0.29	0.13	0.16
877.85	0.07	0.07	0.00	880.50	0.30	0.13	0.17
877.90	0.07	0.07	0.00	880.55	0.30	0.13	0.17
877.95	0.07	0.07	0.00	880.60	0.30	0.13	0.17
878.00	0.07	0.07	0.00	880.65	0.31	0.13	0.17
878.05	0.07	0.07	0.00	880.70	0.31	0.13	0.18
878.10	0.07	0.07	0.00	880.75	0.31	0.13	0.18
878.15	0.08	0.08	0.00	880.80	0.31	0.14	0.18
878.20	0.08	0.08	0.00	880.85	0.32	0.14	0.18
878.25	0.08	0.08	0.00	880.90	0.32	0.14	0.18
878.30	0.08	0.08	0.00	880.95	0.32	0.14	0.18
878.35	0.08	0.08	0.00	881.00	0.33	0.14	0.19
878.40	0.08	0.08	0.00	881.05	0.33	0.14	0.19
878.45	0.09	0.09	0.00	881.10	0.33	0.14	0.19
878.50	0.10	0.09	0.02	881.15	0.33	0.14	0.19
878.55	0.12	0.09	0.03	881.20	0.34	0.14	0.19
878.60	0.13	0.09	0.04	881.25	0.34	0.14	0.20
878.65	0.14	0.09	0.05	881.30	0.34	0.14	0.20
878.70	0.15	0.09	0.05	881.35	0.34	0.14	0.20
878.75	0.15	0.09	0.06	881.40	0.35	0.15	0.20
878.80	0.16	0.09	0.07	881.45	0.35	0.15	0.20
878.85	0.17	0.10	0.07	881.50	0.35	0.15	0.20
878.90	0.17	0.10	0.08				
878.95	0.18	0.10	0.08				
879.00	0.18	0.10	0.08				
879.05	0.19	0.10	0.09				
879.10	0.19	0.10	0.09				
879.15	0.20	0.10	0.10				
879.20	0.20	0.10	0.10				
879.25	0.21	0.10	0.10				
879.30	0.21	0.11	0.11				
879.35	0.22	0.11	0.11				
879.40	0.22	0.11	0.11				
879.45	0.22	0.11	0.12				
879.50	0.23	0.11	0.12				
879.55	0.23	0.11	0.12				
879.60	0.24	0.11	0.12				

2.48 Ac. Proposed Development 11-15-22*Huff 0-10sm 3Q 24.00 hrs Rainfall=8.57"*

Prepared by {enter your company name here}

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Stage-Area-Storage for Pond 2P: (new Pond)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
877.00	8,292	0	879.65	14,531	30,241
877.05	8,410	418	879.70	14,649	30,971
877.10	8,527	841	879.75	14,767	31,706
877.15	8,645	1,270	879.80	14,885	32,447
877.20	8,763	1,705	879.85	15,002	33,194
877.25	8,881	2,147	879.90	15,120	33,947
877.30	8,998	2,594	879.95	15,238	34,706
877.35	9,116	3,046	880.00	15,356	35,471
877.40	9,234	3,505	880.05	15,473	36,242
877.45	9,352	3,970	880.10	15,591	37,019
877.50	9,469	4,440	880.15	15,709	37,801
877.55	9,587	4,917	880.20	15,826	38,589
877.60	9,705	5,399	880.25	15,944	39,384
877.65	9,822	5,887	880.30	16,062	40,184
877.70	9,940	6,381	880.35	16,180	40,990
877.75	10,058	6,881	880.40	16,297	41,802
877.80	10,176	7,387	880.45	16,415	42,620
877.85	10,293	7,899	880.50	16,533	43,443
877.90	10,411	8,416	880.55	16,650	44,273
877.95	10,529	8,940	880.60	16,768	45,108
878.00	10,647	9,469	880.65	16,886	45,950
878.05	10,764	10,005	880.70	17,004	46,797
878.10	10,882	10,546	880.75	17,121	47,650
878.15	11,000	11,093	880.80	17,239	48,509
878.20	11,117	11,646	880.85	17,357	49,374
878.25	11,235	12,204	880.90	17,475	50,245
878.30	11,353	12,769	880.95	17,592	51,121
878.35	11,471	13,340	881.00	17,710	52,004
878.40	11,588	13,916	881.05	17,849	52,893
878.45	11,706	14,499	881.10	17,988	53,789
878.50	11,824	15,087	881.15	18,127	54,692
878.55	11,941	15,681	881.20	18,266	55,602
878.60	12,059	16,281	881.25	18,405	56,518
878.65	12,177	16,887	881.30	18,544	57,442
878.70	12,295	17,499	881.35	18,683	58,373
878.75	12,412	18,116	881.40	18,822	59,310
878.80	12,530	18,740	881.45	18,961	60,255
878.85	12,648	19,369	881.50	19,100	61,207
878.90	12,766	20,005			
878.95	12,883	20,646			
879.00	13,001	21,293			
879.05	13,119	21,946			
879.10	13,236	22,605			
879.15	13,354	23,270			
879.20	13,472	23,940			
879.25	13,590	24,617			
879.30	13,707	25,299			
879.35	13,825	25,988			
879.40	13,943	26,682			
879.45	14,061	27,382			
879.50	14,178	28,088			
879.55	14,296	28,800			
879.60	14,414	29,517			

IG Consulting, Inc.
 300 Marquardt Drive Suite 101
 WHEELING, ILLINOIS 60090
 (847) 215-1133

JOB MIDLOTHIAN MANOR
 SHEET NO. 1 OF 1
 CALCULATED BY JVK DATE 12-5-22
 CHECKED BY _____ DATE _____
 SCALE NONE

RVR VOLUME CALCULATION

SITE AREA 2.48 ACRES (108,028.80 SF)
 IMPERVIOUS AREA = 0.853 AC. (37,156.68 SF)
 AREA OF NORMAL WATER LEVEL 8,292 SF
 $0.853 / 2.48 = 34.4\%$ OF SITE IS IMPERVIOUS
 34.4% IMPERVIOUS = $34.4\% \times 0.01" = .34"$ DEEP
 $.34" / 12 = 0.028'$ (108,029 SF) = 3,025 CF OF RVR REQ.
 $3025 / 8292 = 0.364'$ (4.37") RVR STORAGE
 $8292 (.67' \text{ THICK OF SOIL MIX}) (.25 \text{ POROSITY}) =$
 $1,390$ CF OF STORAGE IN SOIL MIX
 $(.25) (8292) = 2,073$ CF OF DEAD POOL STORAGE
 $2073 + 1390 = \underline{3,463}$ CF OF RVR PROVIDED

IG Consulting, Inc.
 300 Marquardt Drive Suite 101
 WHEELING, ILLINOIS 60090
 (847) 215-1133

JOB MIDLOTHIAN MAPOR
 SHEET NO. 1 OF 1
 CALCULATED BY JVK DATE 11-30-22
 CHECKED BY _____ DATE _____
 SCALE NONE

<p>STRUCTURE # 3</p> $\frac{0.032}{0.23} \times .90 = .125$ $\frac{.198}{.23} \times .45 = .387$ <p style="text-align: right;">.512' c'</p>	<p>STRUCTURE 6</p> $\frac{.180}{0.20} \times .90 = .810$ $\frac{0.02}{0.20} \times .45 = .045$ <p style="text-align: right;">.855' c'</p>
<p>STRUCTURE # 1</p> $\frac{0.073}{0.23} \times .90 = .286$ $\frac{.157}{0.23} \times .45 = .307$ <p style="text-align: right;">.593' c'</p>	<p>STRUCTURE 7</p> $\frac{.193}{0.20} \times .90 = .868$ $\frac{.007}{0.20} \times .45 = .016$ <p style="text-align: right;">.884' c'</p>
<p>STRUCTURE # 2</p> $\frac{.063}{0.28} \times .90 = .202$ $\frac{.217}{.28} \times .45 = .349$ <p style="text-align: right;">.551' c'</p>	<p>STRUCTURE 8</p> $\frac{.186}{.20} \times .90 = .837$ $\frac{.014}{.20} \times .45 = .031$ <p style="text-align: right;">.87' c'</p>
<p>STRUCTURE 9</p> $\frac{.0069}{.04} \times .90 = .155$ $\frac{.033}{.04} \times .45 = .371$ <p style="text-align: right;">.526' c'</p>	
<p>STRUCTURE 5</p> <p style="text-align: right;">0.45' c'</p>	

STORM SEWER COMPUTATION SHEET

COMPUTED JVK DATE 11-30-22 CHECKED _____ DATE _____
 ROUTE _____ SECTION _____ COUNTY _____
 100 YEAR

STATION	FROM	TO	LENGTH FEET		DRAINAGE AREA "A" (ACRES)		RUNOFF COEFFICIENT "C"	"A" x "C"		FLOW TIME MIN.		RAINFALL INTENSITY "I" in/hour	TOTAL RUNOFF (c.f.s.)	C.I.A. = 0	DIAMETER PIPE inches	CAPACITY FULL c.f.s.	VELOCITY (f.p.s.)		INVERT ELEV		MANHOLE INVERT DROP	SLOPE OF SEWER 1/1'		
			INCREMENT	TOTAL	INCREMENT	TOTAL		TO UPPER END	IN SECTION	FLOWING	DESIGN						UPPER END	LOWER END						
CB1	CB2	98	0.23	0.23	0.59	.136	.136	0.50	10.2	0.322	10.90	1.52	1.55	10"	1.55	2.84	3.26						.005	
CB2	CB3	76	0.28	0.51	0.55	.154	.290	10.7	11.02	0.386	10.75	4.37	3.19	12"	3.19	4.06	4.06							.008
CB3	CB4	99	0.23	0.74	0.51	.117	.407	11.40	11.40	0.288	10.60	5.43	4.56	15"	4.56	3.72	4.27							.005
CB4	CB6	82	0.20	0.94	0.53	.106	.513	11.0	11.0	0.30	10.75	0.29	5.59	15"	5.59	4.56	4.74							.0075
CB5	CB6	50	0.06	0.06	0.45	.027	.027	11.68	11.68	0.27	10.45	7.42	2.19	10"	2.19	4.02	2.81							0.01
CB6	CB7	68	0.20	1.20	0.86	0.17	0.71	11.95	11.95	0.15	10.35	9.17	7.42	18"	7.42	4.20	4.20							.005
CB7	CB8	55	0.20	1.40	0.88	.176	.886	12.10	12.10	0.14	10.20	10.81	9.39	18"	9.39	5.31	6.15							.008
CB8	FES	65	0.21	1.61	0.87	.182	1.06						11.50	18"	11.50	6.51	7.48							.012

Figure 8-008 a



**STORM SEWER
TRIBUTARY EXHIBIT**



DATE	REVISION	BY

ICONSULTING, INC.
 1725 W. STATE STREET, SUITE 200, CHICAGO, ILLINOIS 60604
 TEL: (773) 876-8800 FAX: (773) 876-8801
 WWW: www.iconsulting.com
 SCALE: 1"=30'
 DATE: 11/17/22
 PROJECT No. 22614
 1 of 1

MIDLOTHIAN MANOR
 22843 LAKEWOOD LANE
 LAKE ZURICH, ILLINOIS

BASIN #1 EMERGENCY OVERFLOW SPILLWAY SIZING
100- YEAR STORM EVENT

TOTAL TRIBUTARY AREA= 108,029 FT²
 2.48 AC

REQUIRED OVERFLOW RATE= 10.64 CFS 1-Hour, 100 Year Inflow

OVERFLOW FROM Q= $3.0 L H^{1.5}$

OVERFLOW LENGTH= 14.00 FT

H.W.L ELEV= 881.00 FT

ACTUAL OVERFLOW RATE= 10.7 CFS

WATER HEAD OVER WEIR= 0.401 FT
 4.81 INCH

FREEBOARD ELEVATION= 882.40 FT

Prepared by:



IG Consulting, Inc.

CONSULTING CIVIL ENGINEERS & SURVEYORS
 300 Marquardt Drive, Wheeling, IL 60090 847-215-1133

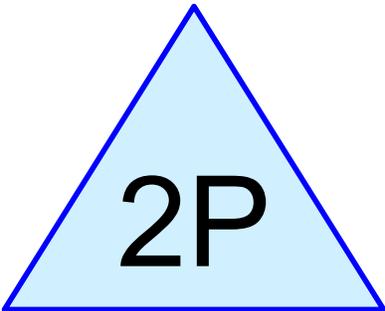
Project: Midlothian Manor, Lake Zurich

IG No. 22614

Date: 11/30/2022

Critical Duration Output Calculations

Critical Duration Calculations



(new Pond)



Routing Diagram for 2.48 Ac. Proposed Development 11-15-22
Prepared by {enter your company name here}, Printed 12/7/2022
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2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 1.00 hrs Rainfall=4.03"

Prepared by {enter your company name here}

Printed 12/7/2022

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Page 2

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 2.57"
 Inflow = 10.64 cfs @ 0.45 hrs, Volume= 0.532 af
 Outflow = 0.19 cfs @ 1.50 hrs, Volume= 0.022 af, Atten= 98%, Lag= 62.5 min
 Primary = 0.10 cfs @ 1.50 hrs, Volume= 0.013 af
 Secondary = 0.09 cfs @ 1.50 hrs, Volume= 0.009 af

Routing by Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
 Peak Elev= 879.09' @ 1.50 hrs Surf.Area= 13,217 sf Storage= 22,497 cf

Plug-Flow detention time= 63.6 min calculated for 0.022 af (4% of inflow)
 Center-of-Mass det. time= 38.6 min (77.4 - 38.8)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.10 cfs @ 1.50 hrs HW=879.09' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.10 cfs @ 7.25 fps)

Secondary OutFlow Max=0.09 cfs @ 1.50 hrs HW=879.09' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 3.81 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 1.00 hrs Rainfall=4.03"

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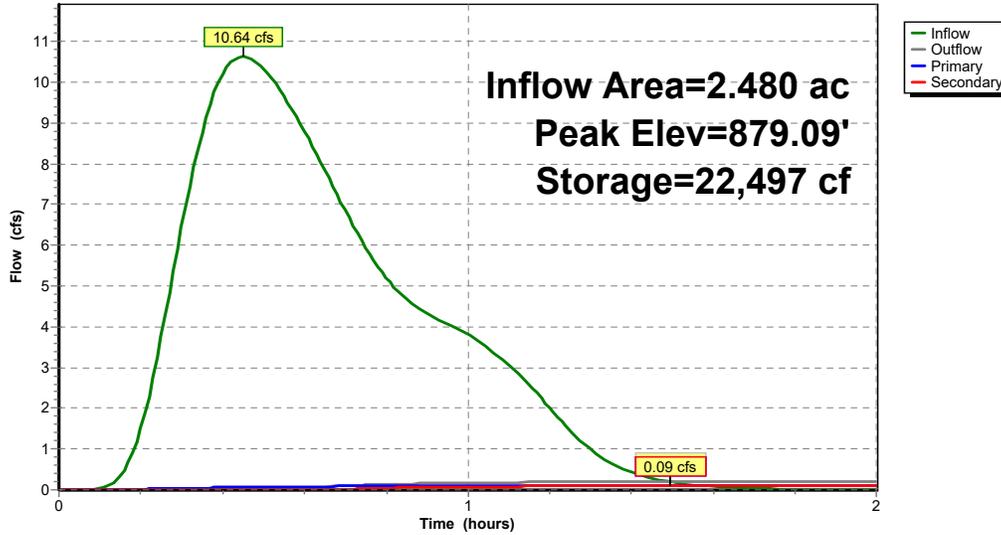
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Page 3

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 3.00 hrs Rainfall=5.49"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 3.93"
 Inflow = 7.42 cfs @ 0.64 hrs, Volume= 0.812 af
 Outflow = 0.26 cfs @ 3.37 hrs, Volume= 0.060 af, Atten= 97%, Lag= 163.9 min
 Primary = 0.12 cfs @ 3.37 hrs, Volume= 0.031 af
 Secondary = 0.14 cfs @ 3.37 hrs, Volume= 0.029 af

Routing by Stor-Ind method, Time Span= 0.00-4.00 hrs, dt= 0.02 hrs
 Peak Elev= 879.85' @ 3.37 hrs Surf.Area= 15,007 sf Storage= 33,222 cf

Plug-Flow detention time= 124.6 min calculated for 0.060 af (7% of inflow)
 Center-of-Mass det. time= 70.5 min (150.8 - 80.4)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.12 cfs @ 3.37 hrs HW=879.85' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 8.42 fps)

Secondary OutFlow Max=0.14 cfs @ 3.37 hrs HW=879.85' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 5.72 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 3.00 hrs Rainfall=5.49"

Prepared by {enter your company name here}

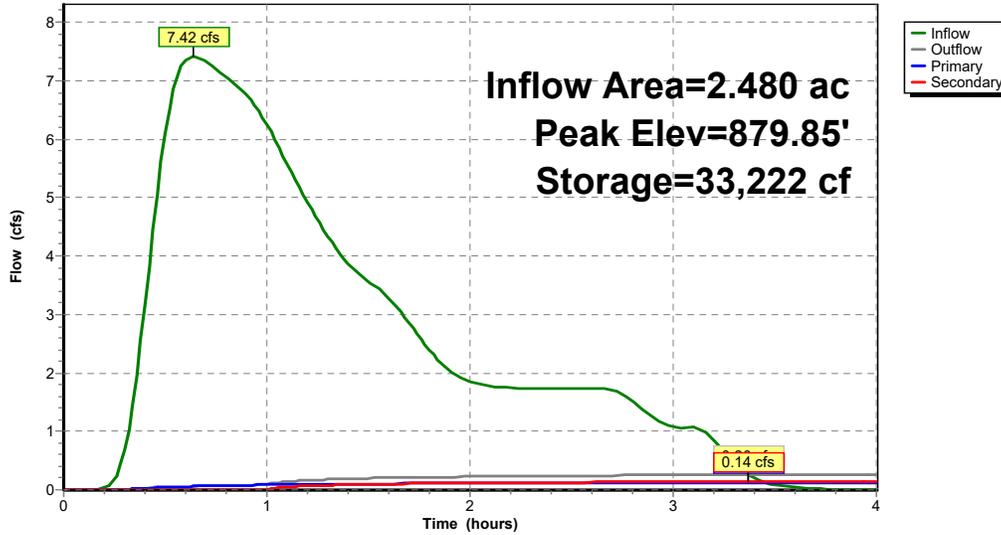
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 6.00 hrs Rainfall=6.43"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 4.82"
 Inflow = 5.53 cfs @ 0.92 hrs, Volume= 0.996 af
 Outflow = 0.28 cfs @ 6.31 hrs, Volume= 0.142 af, Atten= 95%, Lag= 323.5 min
 Primary = 0.12 cfs @ 6.31 hrs, Volume= 0.068 af
 Secondary = 0.15 cfs @ 6.31 hrs, Volume= 0.073 af

Routing by Stor-Ind method, Time Span= 0.00-8.01 hrs, dt= 0.03 hrs
 Peak Elev= 880.21' @ 6.31 hrs Surf.Area= 15,859 sf Storage= 38,809 cf

Plug-Flow detention time= 244.3 min calculated for 0.141 af (14% of inflow)
 Center-of-Mass det. time= 148.1 min (289.7 - 141.6)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.12 cfs @ 6.31 hrs HW=880.21' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 8.92 fps)

Secondary OutFlow Max=0.15 cfs @ 6.31 hrs HW=880.21' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 6.43 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 1Q 6.00 hrs Rainfall=6.43"

Prepared by {enter your company name here}

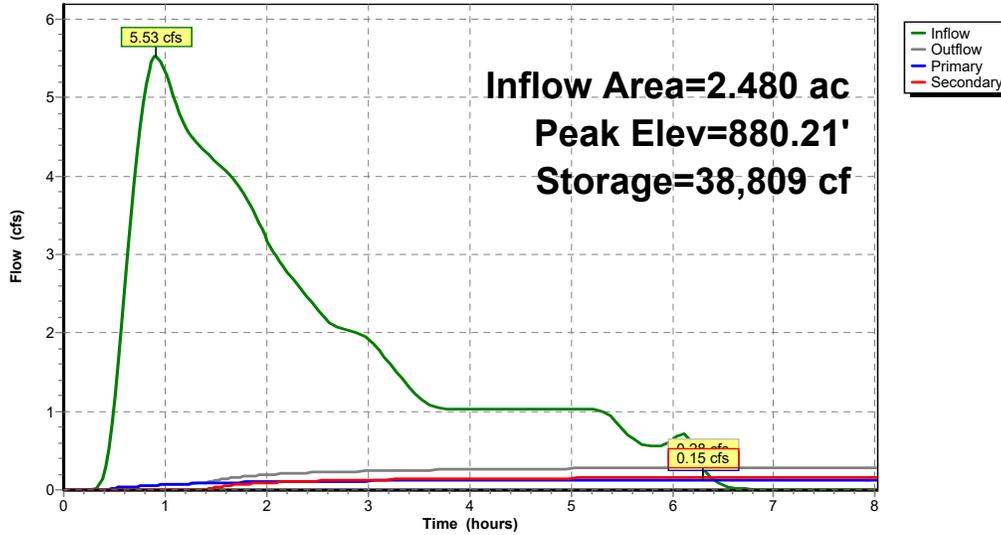
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 2Q 12.00 hrs Rainfall=7.46"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 5.81"
 Inflow = 3.26 cfs @ 5.20 hrs, Volume= 1.201 af
 Outflow = 0.30 cfs @ 12.24 hrs, Volume= 0.244 af, Atten= 91%, Lag= 422.2 min
 Primary = 0.13 cfs @ 12.24 hrs, Volume= 0.117 af
 Secondary = 0.17 cfs @ 12.24 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 0.00-15.00 hrs, dt= 0.05 hrs
 Peak Elev= 880.56' @ 12.24 hrs Surf.Area= 16,684 sf Storage= 44,512 cf

Plug-Flow detention time= 390.3 min calculated for 0.244 af (20% of inflow)
 Center-of-Mass det. time= 221.8 min (593.0 - 371.3)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.13 cfs @ 12.24 hrs HW=880.56' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.13 cfs @ 9.37 fps)

Secondary OutFlow Max=0.17 cfs @ 12.24 hrs HW=880.56' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 7.05 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 2Q 12.00 hrs Rainfall=7.46"

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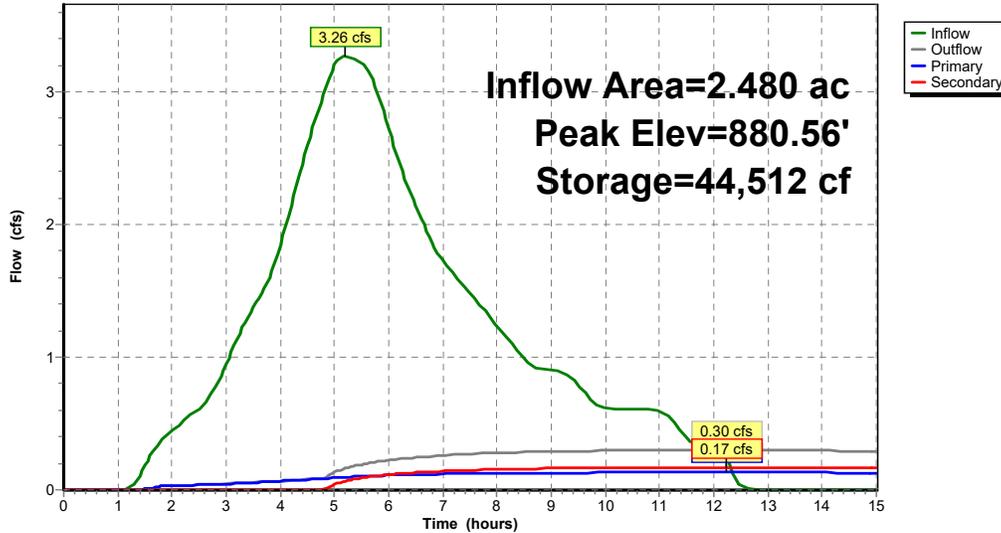
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 18.00 hrs Rainfall=8.06"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 6.39"
 Inflow = 2.73 cfs @ 11.89 hrs, Volume= 1.321 af
 Outflow = 0.31 cfs @ 18.26 hrs, Volume= 0.287 af, Atten= 89%, Lag= 382.4 min
 Primary = 0.13 cfs @ 18.26 hrs, Volume= 0.147 af
 Secondary = 0.18 cfs @ 18.26 hrs, Volume= 0.140 af

Routing by Stor-Ind method, Time Span= 0.00-21.00 hrs, dt= 0.07 hrs
 Peak Elev= 880.77' @ 18.26 hrs Surf.Area= 17,164 sf Storage= 47,963 cf

Plug-Flow detention time= 504.5 min calculated for 0.287 af (22% of inflow)
 Center-of-Mass det. time= 218.3 min (895.4 - 677.1)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.13 cfs @ 18.26 hrs HW=880.77' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.13 cfs @ 9.63 fps)

Secondary OutFlow Max=0.18 cfs @ 18.26 hrs HW=880.77' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 7.39 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 3Q 18.00 hrs Rainfall=8.06"

Prepared by {enter your company name here}

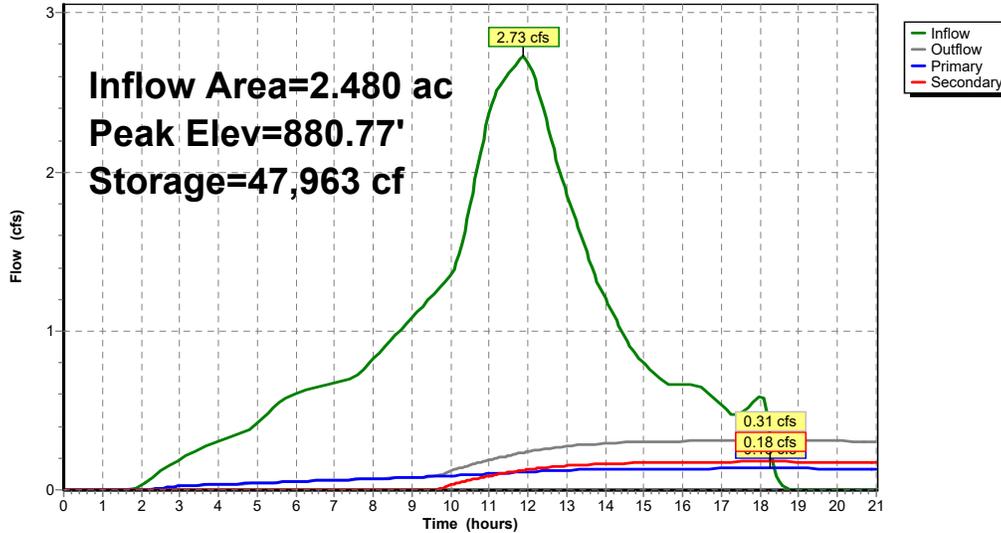
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 4Q 48.00 hrs Rainfall=9.28"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 7.58"
 Inflow = 1.24 cfs @ 41.24 hrs, Volume= 1.566 af
 Outflow = 0.32 cfs @ 48.31 hrs, Volume= 0.473 af, Atten= 74%, Lag= 424.0 min
 Primary = 0.14 cfs @ 48.31 hrs, Volume= 0.289 af
 Secondary = 0.18 cfs @ 48.31 hrs, Volume= 0.184 af

Routing by Stor-Ind method, Time Span= 0.00-49.98 hrs, dt= 0.17 hrs
 Peak Elev= 880.85' @ 48.31 hrs Surf.Area= 17,367 sf Storage= 49,450 cf

Plug-Flow detention time= 922.1 min calculated for 0.473 af (30% of inflow)
 Center-of-Mass det. time= 116.3 min (2,234.7 - 2,118.3)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.14 cfs @ 48.31 hrs HW=880.85' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.14 cfs @ 9.74 fps)

Secondary OutFlow Max=0.18 cfs @ 48.31 hrs HW=880.85' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 7.53 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 4Q 48.00 hrs Rainfall=9.28"

Prepared by {enter your company name here}

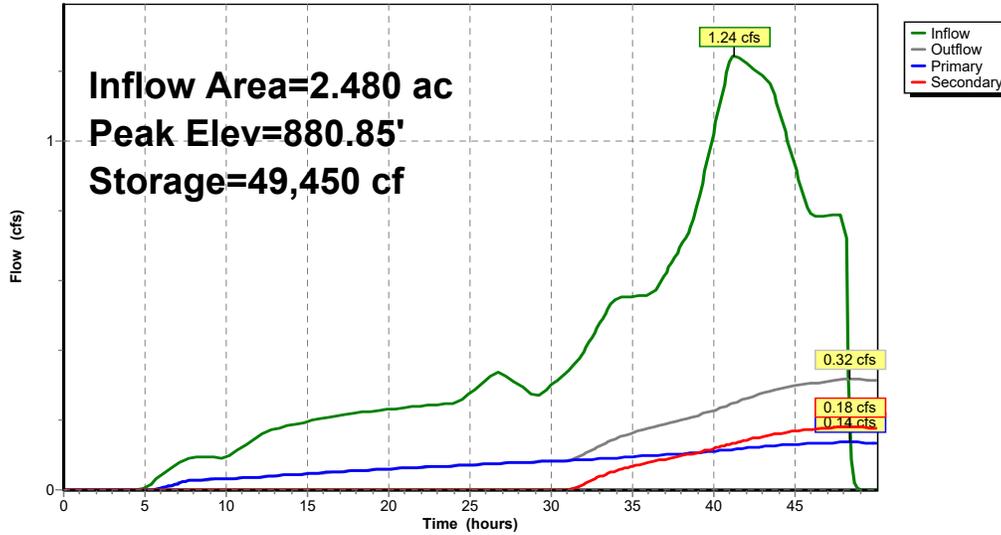
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 4Q 72.00 hrs Rainfall=9.85"

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Page 1

Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 8.13"
 Inflow = 0.88 cfs @ 61.68 hrs, Volume= 1.681 af
 Outflow = 0.31 cfs @ 72.24 hrs, Volume= 0.690 af, Atten= 65%, Lag= 633.5 min
 Primary = 0.13 cfs @ 72.24 hrs, Volume= 0.429 af
 Secondary = 0.17 cfs @ 72.24 hrs, Volume= 0.261 af

Routing by Stor-Ind method, Time Span= 0.00-75.00 hrs, dt= 0.25 hrs
 Peak Elev= 880.66' @ 72.24 hrs Surf.Area= 16,908 sf Storage= 46,110 cf

Plug-Flow detention time= 1,107.9 min calculated for 0.690 af (41% of inflow)
 Center-of-Mass det. time= 183.2 min (3,340.4 - 3,157.1)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

Primary OutFlow Max=0.13 cfs @ 72.24 hrs HW=880.66' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.13 cfs @ 9.50 fps)

Secondary OutFlow Max=0.17 cfs @ 72.24 hrs HW=880.66' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 7.21 fps)

2.48 Ac. Proposed Development 11-15-22

Huff 0-10sm 4Q 72.00 hrs Rainfall=9.85"

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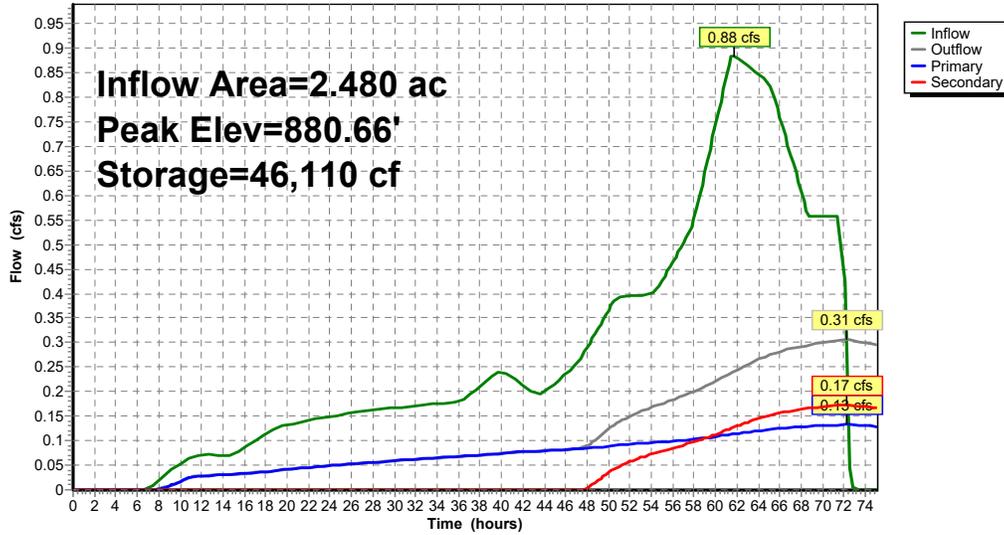
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Page 2

Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22 Huff 0-10sm 4Q 120.00 hrs Rainfall=10.66"
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Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 8.93"
 Inflow = 0.58 cfs @ 102.55 hrs, Volume= 1.845 af
 Outflow = 0.28 cfs @ 120.01 hrs, Volume= 1.157 af, Atten= 51%, Lag= 1,048.1 min
 Primary = 0.12 cfs @ 120.01 hrs, Volume= 0.731 af
 Secondary = 0.16 cfs @ 120.01 hrs, Volume= 0.426 af

Routing by Stor-Ind method, Time Span= 10.00-130.00 hrs, dt= 0.40 hrs
 Peak Elev= 880.24' @ 120.01 hrs Surf.Area= 15,914 sf Storage= 39,181 cf

Plug-Flow detention time= 1,326.8 min calculated for 1.153 af (63% of inflow)
 Center-of-Mass det. time= 501.0 min (5,725.9 - 5,224.9)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

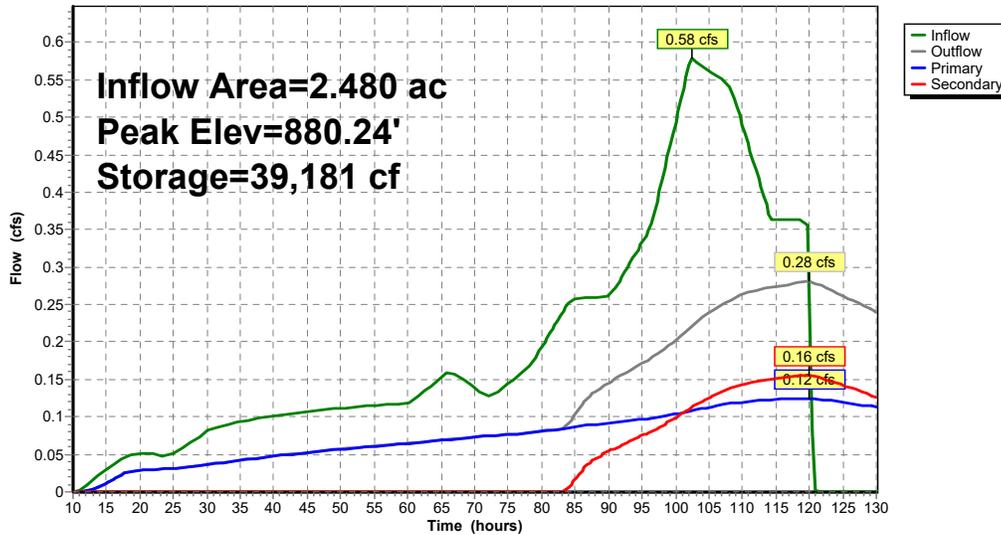
Primary OutFlow Max=0.12 cfs @ 120.01 hrs HW=880.24' (Free Discharge)
 ↑ **1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 8.95 fps)

Secondary OutFlow Max=0.16 cfs @ 120.01 hrs HW=880.24' (Free Discharge)
 ↑ **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 6.47 fps)

2.48 Ac. Proposed Development 11-15-22 Huff 0-10sm 4Q 120.00 hrs Rainfall=10.66"
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Pond 2P: (new Pond)

Hydrograph



2.48 Ac. Proposed Development 11-15-22 Huff 0-10sm 4Q 240.00 hrs Rainfall=12.65"
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Summary for Pond 2P: (new Pond)

Inflow Area = 2.480 ac, 34.40% Impervious, Inflow Depth = 10.89"
 Inflow = 0.35 cfs @ 204.72 hrs, Volume= 2.250 af
 Outflow = 0.23 cfs @ 226.19 hrs, Volume= 1.769 af, Atten= 32%, Lag= 1,288.2 min
 Primary = 0.11 cfs @ 226.19 hrs, Volume= 1.244 af
 Secondary = 0.12 cfs @ 226.19 hrs, Volume= 0.526 af

Routing by Stor-Ind method, Time Span= 10.00-250.00 hrs, dt= 0.80 hrs
 Peak Elev= 879.58' @ 226.19 hrs Surf.Area= 14,363 sf Storage= 29,208 cf

Plug-Flow detention time= 1,489.6 min calculated for 1.764 af (78% of inflow)
 Center-of-Mass det. time= 590.4 min (10,917.7 - 10,327.3)

Volume	Invert	Avail.Storage	Storage Description
#1	877.00'	61,207 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
877.00	8,292	0	0
881.00	17,710	52,004	52,004
881.50	19,100	9,203	61,207

Device	Routing	Invert	Outlet Devices
#1	Primary	876.83'	1.6" Vert. Orifice/Grate C= 0.610
#2	Secondary	878.40'	2.1" Vert. Orifice/Grate C= 0.610

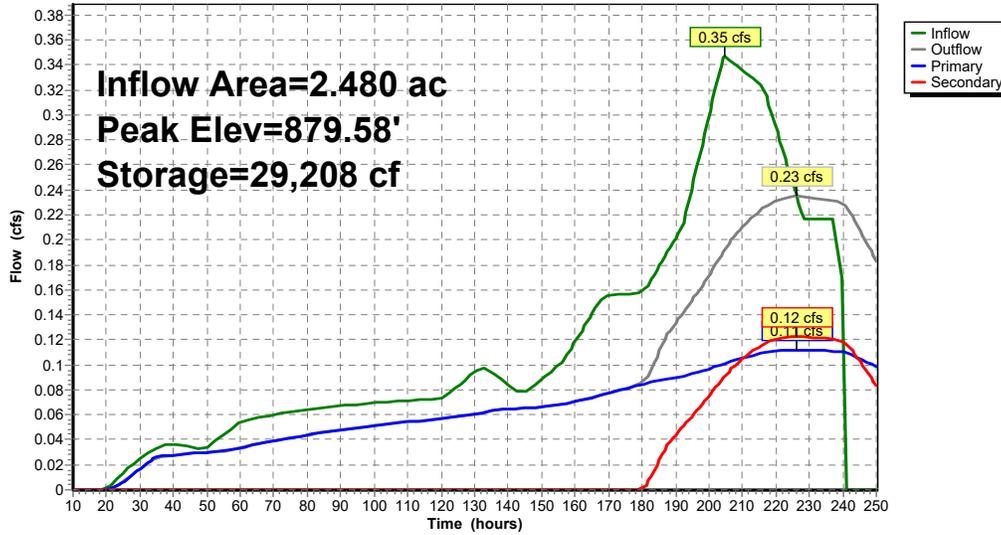
Primary OutFlow Max=0.11 cfs @ 226.19 hrs HW=879.58' (Free Discharge)
 ↑**1=Orifice/Grate** (Orifice Controls 0.11 cfs @ 8.02 fps)

Secondary OutFlow Max=0.12 cfs @ 226.19 hrs HW=879.58' (Free Discharge)
 ↑**2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 5.11 fps)

2.48 Ac. Proposed Development 11-15-22 Huff 0-10sm 4Q 240.00 hrs Rainfall=12.65"
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Pond 2P: (new Pond)

Hydrograph



MIDLOTHIAN MANOR AFFORDABLE HOUSING DEVELOPMENT

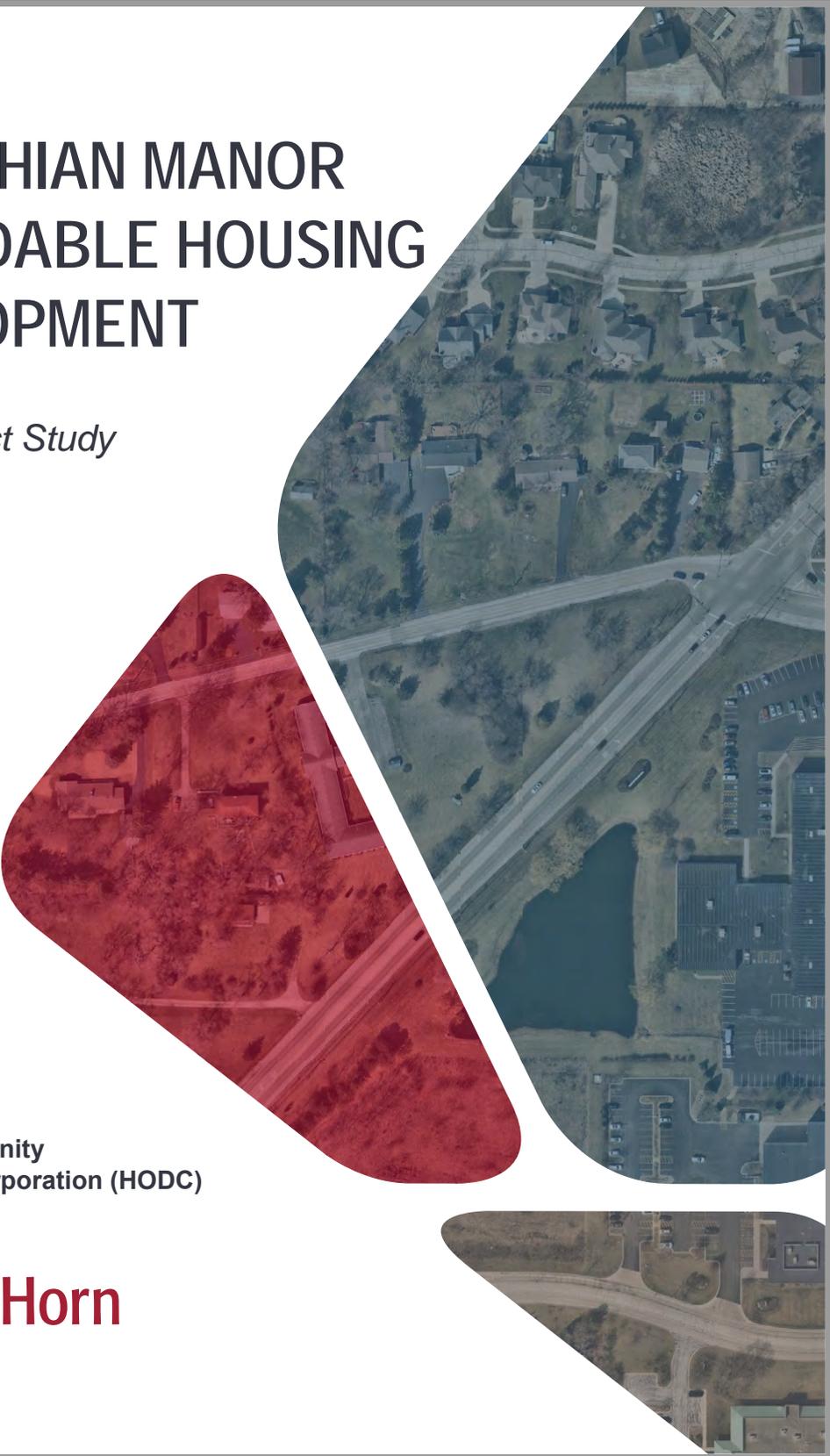
Traffic Impact Study

Lake Zurich, IL

October 2022

Prepared for:

**Housing Opportunity
Development Corporation (HODC)**





TRAFFIC IMPACT STUDY

To: Dr. Richard Koenig, PHD, FAICP
Housing Opportunity Development Corporation

From: Bill Grieve, P.E., PTOE
Senior Transportation Engineer

Date: October 11, 2022

Subject: Midlothian Manor
22795 Lakewood Lane
Lake Zurich, Illinois

1. INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained by the Housing Opportunity Development Corporation (HODC) to conduct a traffic impact study for a proposed affordable housing development to be located on the south side of Lakewood Lane, just west of its intersection with Midlothian Road. The subject site was previously an assisted living facility. The development will replace the existing building and the new building will provide 24 affordable housing units.

Access will be via the existing full-access driveway along the northern frontage of the site along Lakewood Lane. This proposed driveway is located approximately 500 feet west of Midlothian Road. An aerial view of the study location and the surrounding roadway network is illustrated in **Exhibit 1**.

As part of this traffic impact study (TIS), site trip generation characteristics were established for the development and added to the background traffic volumes to assess the site's potential impact on the area roadway network. This report presents and documents data collection, summarizes the evaluation of the existing and projected future traffic conditions on the surrounding roadways, and identifies recommendations to address the potential impact of site-generated traffic on the adjacent roadway network.

Briefly concluding, we believe the proposed affordable housing development traffic can be successfully accommodated. Reasons include:

- The proposed building with 24 affordable housing units will replace the existing building, and no other buildings generating traffic are proposed to be constructed.
- In general, residents of affordable housing tend to have lower vehicle ownership rates as opposed to market rate housing, thus generating less traffic.



Kimley»Horn

EXHIBIT 1
SITE LOCATION MAP



2. EXISTING CONDITIONS

Kimley-Horn conducted a field review of the subject site including existing land uses in the surrounding area, the adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, crash history, and parking operations. This section of the report details information on the existing conditions. **Exhibit 2** summarizes the existing traffic operations, which are discussed below.

Area Land Uses

The subject site was previously an assisted care facility. The site is located directly west of the intersection of Midlothian Road and Lakewood Lane. It is bounded by Lakewood Lane to the north, Midlothian Road to the south and east, and a defined property line to the west. It should also be noted there is an existing parking lot on the northeast corner of the site which provides approximately 19 parking spaces.

Several industrial and commercial businesses are located just southeast of the development along Midlothian Road. Lake Zurich High School is located about a half mile south of the development.

Existing Roadway Characteristics

A field investigation was conducted within the study area. As a result of this visit, the following information was obtained about the existing roadway network.

Midlothian Road is a northeast-southwest oriented roadway located just east of the site. The Illinois Department of Transportation (IDOT) classifies Midlothian Road as a Minor Arterial. Through the study area, two travel lanes are provided; one through travel lane in each direction with a striped center median. At the signalized intersection of Midlothian Road and Lakewood Lane-Oakwood Road, the south leg provides a dedicated right-turn lane, a dedicated left-turn lane, and a dedicated through lane. On the north leg of the intersection, a dedicated left-turn lane and a shared right-through lane are provided. On Midlothian Road, a speed limit of 40 miles per hour (mph) is posted through the study area. Additionally, Midlothian Road is under the jurisdiction of IDOT.

Lakewood Lane is an east-west street located along the northern frontage of the site. IDOT classifies this road as a Major Collector. Through the study area, one travel lane is provided in each direction. At its signalized intersection with Midlothian Road, a dedicated right turn lane and a dedicated through-left turn lane are provided on the east leg of the intersection and a shared right-left-through lane is provided on the west leg. At its unsignalized intersection with Echo Lake Road, Lakewood Lane provides a shared left-right-through lane on both the east and west legs of the intersection. Lakewood lane transitions its name to Oakwood Road east of Midlothian Road. A speed limit of 25 miles per hour (mph) is posted on Lakewood Lane through the study area. West of Echo Lake Road and east of Midlothian Road, Lakewood Lane is under the jurisdiction of the Village of Lake Zurich. In between Echo Lake Road and Midlothian Road, Lakewood Lane is under the jurisdiction of Ela Township.

Echo Lake Road is a north-south road that runs just west of the site. Through the study area, one travel lane is provided in each direction. At its unsignalized intersection with Lakewood Lane, Echo Lake Road provides a shared left-right-through lane on both north and south legs of the intersection.



A speed limit of 25 miles per hour (mph) is posted on Echo Lake Road through the study area. Echo Lake Road is under the jurisdiction of the Village of Lake Zurich.

Traffic Count Data

Turning movement count data was collected in July 2022 at the intersections listed below. The counts were conducted on a typical weekday from 7:00 to 9:00AM and 4:00 to 6:00PM. These time periods coincide with the typical peak traffic periods of the surrounding street system.

- Midlothian Road / Lakewood Lane-Oakwood Road
- Lakewood Lane / Echo Lake Road

The weekday peak traffic volumes occur within the study area from 7:30 to 8:30AM and 4:00 to 5:00PM. Existing peak hour traffic volumes are presented in **Exhibit 3**. A summary of the traffic count data is provided in **Appendix A**.

It should be noted that traffic was spot-checked at the Midlothian Road / Lakewood Lane intersection in September 2022 to see if volumes and/or travel patterns changed since schools are now in session. It was determined that that the volumes shown on Exhibit 3 accurately reflect existing conditions. In addition to this, the northbound and southbound traffic volumes on Midlothian Road were compared to IDOT historical data collected in 2019 Pre-COVID 19 pandemic. The data collected in 2022 is within accepted daily variations (less than 5%) as compared to the historical data.

Crash Analysis

Kimley-Horn obtained crash data from IDOT Division of Safety for the most recent available five years (2016-2020) throughout the study area. A total of 11 crashes occurred within the study area over the five-year data collection period. Approximately 91% (10 of 11) of these crashed resulted in property damage only. One crash resulted in a possible injury. No crashes resulted in fatalities.

All of the crashes reviewed occurred at the Midlothian Road / Lakewood Lane intersection. There was one crash involving a cyclist. Crash types by intersection and segment are summarized in **Table 2.1**, and an exhibit of crash locations is provided in **Appendix B**.

Table 2.1 Crash Summary (2016-2020)

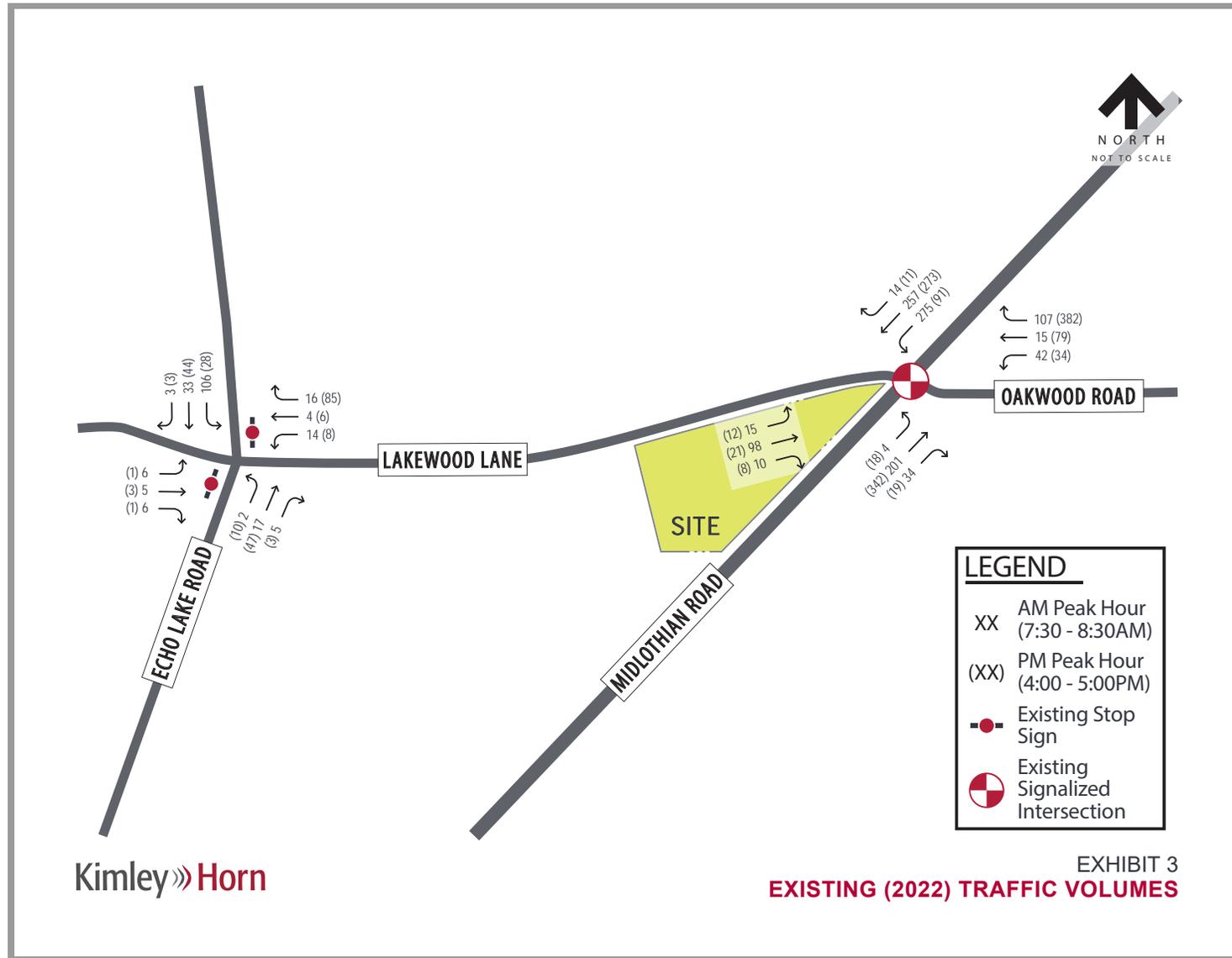
Location	No. of Crashes	Severity ^B					Crash Type ^D									Percent During Wet/Icy Conditions	
		PD	PI ^C			F	CM	FTR	RTF	HO	SSD	SOD	FO	OOB	Ped		Bike
			A	B	C												
Intersections - Crashes within 200' of intersection																	
Midlothian Ave / Lakewood Ave	11	10	-	-	1	-	2	7	-	-	-	-	-	1	-	1	0%
Lakewood Ave / Echo Lake Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
Total (2016-20)	11	10	0	0	1	0	2	7	0	0	0	0	0	1	0	1	0%

^A Source: IDOT Division of Transportation Safety for the 2016-2020 calendar years.
^B PD = property damage only; PI = personal injury; F = fatality.
^C Type A (incapacitating injury); Type B (non-incapacitating injury); Type C (possible injury).
^D CM = cross movement/angle; FTR = front to rear; RTF = rear to front; HO = head on; SSD = Sideswipe Same Direction; SOD = Sideswipe Opposite Direction; FO = fixed object; OOB = Other Object; Ped = pedestrian.



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EXHIBIT 2
EXISTING SITE OPERATIONS



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EXHIBIT 3
EXISTING (2022) TRAFFIC VOLUMES



Existing Capacity Analysis

Capacity analysis for the existing and future conditions was performed using Synchro Version 11. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). LOS C is often considered for “design” purposes and LOS D is often considered as the lower threshold of providing acceptable traffic operations.

The LOS grades shown below, which are provided in the Transportation Research Board’s Highway Capacity Manual (HCM), quantify and categorize the driver’s discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.2**.

Table 2.2 Level of Service (LOS) Grading Descriptions¹

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

¹Highway Capacity Manual, 6th Edition.

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.3**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, note that higher delays are tolerated for the corresponding LOS ratings.

Table 2.3 Level of Service (LOS) Grading Criteria¹

Level of Service	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F ²	> 50	> 80

¹Highway Capacity Manual, 6th Edition

²All movements with a Volume to Capacity (v/C) ratio greater than 1 receive a rating of LOS F.

Based on these standards, capacity results were identified for the study intersections under existing conditions. The results of the capacity analyses for existing conditions are summarized in **Table 2.4**.



In this table, operation on each approach is quantified according to the average delay per vehicle and the corresponding level of service. The results for the study intersections are based on HCM 6th Edition capacity analysis. Copies of the Synchro reports are provided in **Appendix C**.

Table 2.1 Existing (2022) Levels of Service

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Midlothian Road / Lakewood Lane-Oakwood Road *				
Eastbound	32	C	42	D
Westbound	30	C	33	C
Northbound	22	C	32	C
Southbound	14	B	24	C
<i>Intersection</i>	<i>20</i>	<i>C</i>	<i>30</i>	<i>C</i>
Lakewood Lane / Echo Lake Road △				
Eastbound	10+	B	10+	B
Westbound	10+	B	9	A
Northbound (Left)	7	A	7	A
Southbound (Left)	7	A	7	A

△ - Minor-Leg Stop-Controlled Intersection

* - Signalized Intersection

Midlothian Road / Lakewood Lane-Oakwood Road

At the intersection of Midlothian Road / Lakewood Lane-Oakwood Road, all legs currently operate at acceptable LOS D or better during both the morning and evening peak hour. The 95th percentile queues for most movements at this intersection are contained within the provided storage sections. The one exception to this is the westbound right-turn movement during the evening peak hour with a 95th percentile queue at approximately 13 vehicles (325 feet). This queue extends past the provided 185-foot storage and is close to exceeding the 150-foot taper section. Based on this analysis, the queue does not spillback to block the adjacent drive of Enterprise Parkway along Oakwood Road.

Lakewood Lane / Echo Lake Road

At the intersection of Lakewood Lane / Echo Lake Road, all approaches currently operate at LOS B or better during both morning and evening peak hours. The 95th percentile queues for east- and westbound stop-controlled movements are one vehicle or less during both peak hours.



3. DEVELOPMENT CHARACTERISTICS

This section of the report outlines the proposed site plan, summarizes site-specific traffic characteristics, and develops future traffic projections for analysis.

Proposed Site Plan

The proposed development would include one multi-family residential building with 24 affordable residential units. A site plan prepared by Cordogan Clark, as well as an existing landscape survey, can be found in the **Appendix D**. Auto access to the residential building will be provided via the existing drive along Lakewood Lane. A parking lot will be provided on site for residents and visitors.

Trip Generation

To calculate trips generated by the proposed development, data was referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual, Eleventh Edition. Copies of the ITE data sheets are provided in **Appendix E**.

To provide a conservative analysis scenario and estimate the number of trips generated by the affordable housing units, multiple land use codes (LUCs) were compared to determine a conservative fit that would appropriately model transportation demand. Because this residential development contains characteristics that align with multiple LUCs, **Tables 3.1 and 3.2** below display the differences in the predicted number of generated trips.

Table 3.1 ITE Trip Generation Data

ITE Land Use	Unit	Weekday		
		Daily	AM Peak Hour	PM Peak Hour
Multi-Family Housing (Low-Rise) – Not Close to Rail Transit - LUC 220	Dwelling Units	$6.41X + 75.31$	$0.31X + 22.85$	$0.43X + 0.34$
Affordable Housing – LUC 223	Dwelling Units	$3.73X + 139.35$	$0.21X + 17.21$	$\ln(T) = 0.72 \ln(X) + 0.64$

Table 3.2 ITE Trip Generation Comparison

Land Use	Size	Daily	Weekday					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multi-Family Housing (Low-Rise) – Not Close to Rail Transit	24 DU	229	7	23	30	19	12	31
Affordable Housing	24 DU	229	6	16	24	11	8	19

Based on a comparison of the difference in estimated site-generated trips arising from using various ITE Land Use Codes, it was determined to utilize Multi-Family Housing (Low-Rise) – LUC 220 to provide the most conservative estimate for the projected site-generated traffic volumes.



Directional Distribution

The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as the nature of surrounding land uses, prevailing traffic volumes/patterns, characteristics of the street system, and the ease of motorist travel. The anticipated directional distribution is shown in **Table 3.3**.

Table 2.3 Estimated Trip Distribution

Traveling to/from	Estimated Trip Distribution
North on Midlothian Rd.	30%
South on Midlothian Rd.	30%
East on Oakwood Rd.	20%
West on Lakewood Ln.	5%
North on Echo Lake Rd.	10%
South on Echo Lake Rd.	5%
Total	100%

Based on these assumptions, the site-generated trip assignment is illustrated in **Exhibit 4**.



4. FUTURE CONDITIONS

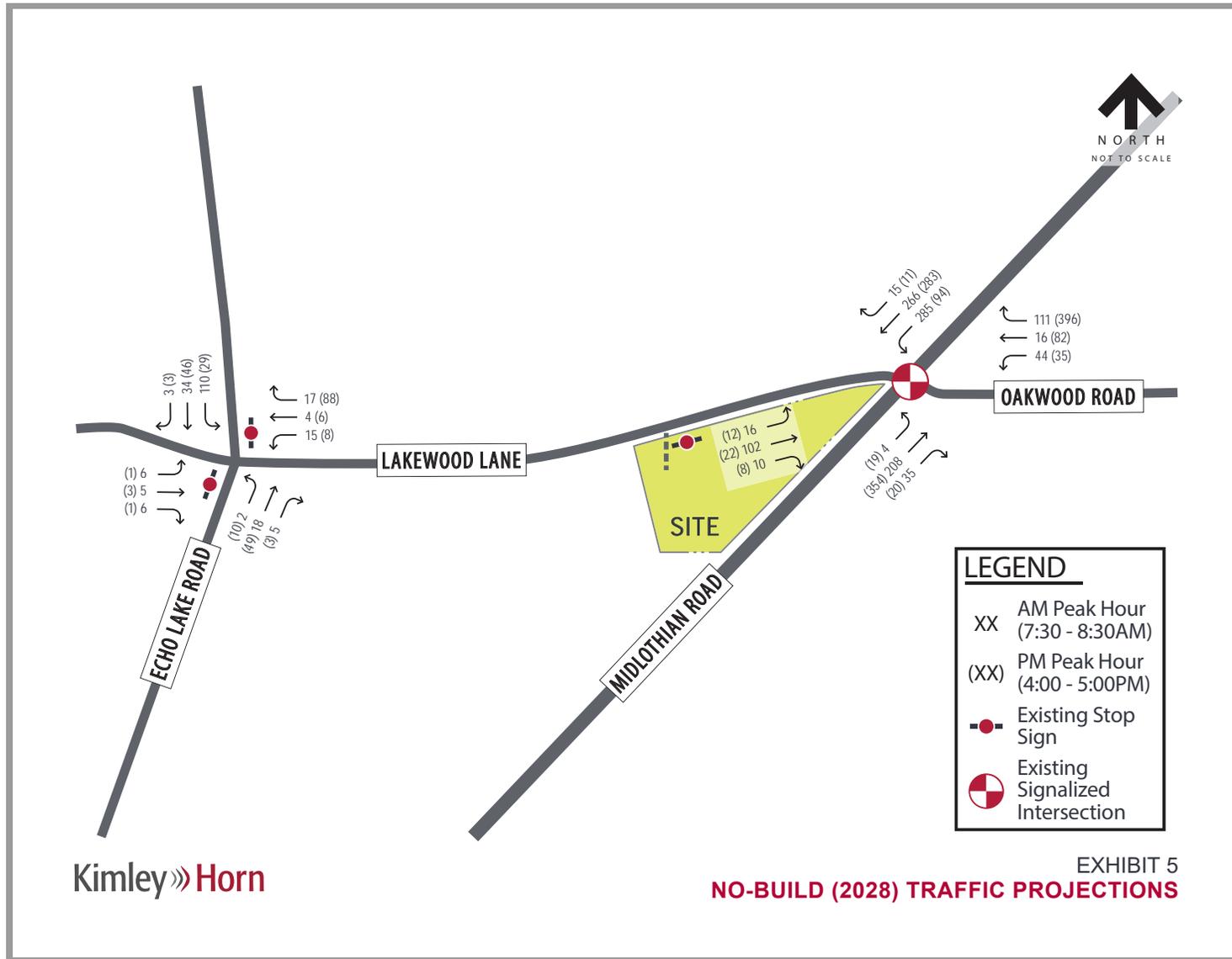
This section of the report develops future traffic projections for analysis. The proposed development is expected to be completed in 2023; and therefore, Year 2028 (build-plus-five) was assumed for the analysis per typical IDOT requirements.

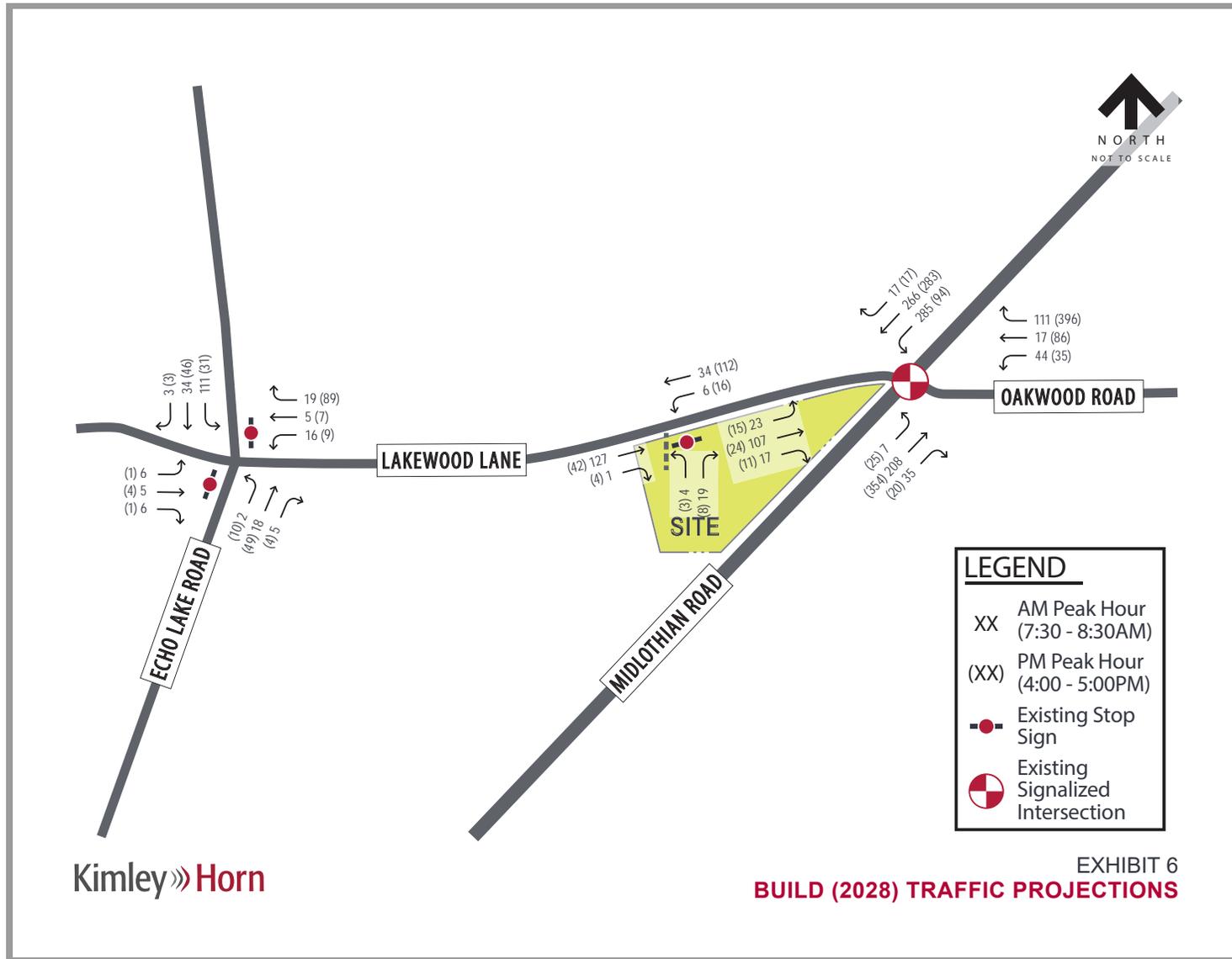
Future (2028) No-Build Traffic Projections

Background traffic volumes were estimated using data from the Chicago Metropolitan Agency for Planning (CMAP). Based on information received from CMAP, traffic growth on the roadway network is projected at a compounded rate of roughly 0.6 percent annually through Year 2050. An annual growth rate of 0.6 percent was applied to all study intersections to account for background traffic growth. An official letter from CMAP documenting the projected Year 2050 traffic volume on the roadway network is included in the **Appendix F**. The future no-build traffic volumes for Year 2028 are presented in **Exhibit 5**.

Future (2028) Build Traffic Projections

To develop future build traffic projections, total site trips (**Exhibit 4**) were added to the no-build traffic projections to calculate future build traffic volumes. Traffic projections for the Year 2028 build scenario are illustrated in **Exhibit 6**.







Future (2028) No-Build Capacity Analysis

Based on the volume projections presented in Exhibit 5, capacity results were identified for the study intersections under Future (2028) No-Build conditions. The results of the capacity analysis are summarized in **Table 4.1**. Consistent with the Existing (2022) analysis, the results for the study intersections are based on Synchro's HCM 6th Edition reports. Copies of the Synchro reports are provided in the **Appendix G**.

Table 4.1 No-Build (2028) Levels of Service

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Midlothian Road / Lakewood Lane- Oakwood Road *				
Eastbound	33	C	44	D
Westbound	31	C	36	D
Northbound	23	C	33	C
Southbound	14	B	24	C
<i>Intersection</i>	<i>21</i>	<i>C</i>	<i>32</i>	<i>C</i>
Lakewood Lane / Echo Lake Road Δ				
Eastbound	11	B	10+	B
Westbound	10+	B	9	B
Northbound (Left)	7	A	7	A
Southbound (Left)	8	A	7	A

Δ - Minor-Leg Stop-Controlled Intersection

* - Signalized Intersection

Midlothian Road / Lakewood Lane-Oakwood Road

At the intersection of Midlothian Road / Lakewood Lane-Oakwood Road, all legs are projected to continue operating at acceptable LOS D or better during both the morning and evening peak hour. The 95th percentile queues for most movements at this intersection are projected to be contained within the provided storage sections. The same exception as existing conditions remains, the westbound right-turn movement during the evening peak hour. The projected 95th percentile queue is anticipated at 15 vehicles (375 feet), as compared to 13 vehicles under existing conditions. Based on this analysis, the queue may spillback to block the adjacent drive of Enterprise Parkway along Oakwood Road.

Lakewood Lane / Echo Lake Road

At the intersection of Lakewood Lane / Echo Lake Road, all approaches are projected to continue operating at LOS B or better during both morning and evening peak hours. The 95th percentile queues for east- and westbound stop-controlled movements remain at one vehicle or less during both peak hours.



Future (2029) Build Capacity Analysis

Based on the volume projections presented in Exhibit 6, capacity results were identified for the study intersections under Future (2028) Build conditions. The results of the capacity analysis are summarized in **Table 4.2**. Consistent with the Existing (2022) and Future (2028) No-Build analyses, the results for the study intersections are based on Synchro's HCM 6th Edition reports. Copies of the Synchro reports are provided in the **Appendix H**.

Table 4.2 Build (2028) Levels of Service

Intersection	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Midlothian Road / Lakewood Lane- Oakwood Road *				
Eastbound	35	C	40	D
Westbound	33	C	48	D
Northbound	32	C	40	D
Southbound	21	C	31	C
<i>Intersection</i>	<i>27</i>	<i>C</i>	<i>41</i>	<i>D</i>
Lakewood Lane / Echo Lake Road △				
Eastbound	11	B	10+	B
Westbound	10+	B	9	B
Northbound (Left)	7	A	7	A
Southbound (Left)	8	A	7	A
Lakewood Lane / Site Access △				
Westbound (Left)	8	A	7	A
Northbound	9	A	9	A

△ - Minor-Leg Stop-Controlled Intersection

* - Signalized Intersection

Midlothian Road / Lakewood Lane-Oakwood Road

At the intersection of Midlothian Road / Lakewood Lane-Oakwood Road, all legs are projected to continue operating at acceptable LOS D or better during both the morning and evening peak hour with the introduction of site traffic. The 95th percentile queues for most movements at this intersection are projected to be contained within the provided storage sections. The same exception as existing and no-build conditions remains, the westbound right-turn movement during the evening peak hour. The projected 95th percentile queue is anticipated at 18 vehicles (450 feet), as compared to 15 vehicles under no-build conditions. Based on this analysis, the queue spillback may continue blocking the adjacent drive of Enterprise Parkway along Oakwood Road.

Lakewood Lane / Echo Lake Road

At the intersection of Lakewood Lane / Echo Lake Road, all approaches are projected to continue operating at LOS B or better during both morning and evening peak hours. The 95th percentile queues for east- and westbound stop-controlled movements remain at one vehicle or less during both peak hours.



Lakewood Lane / Site Access

At the intersection of Lakewood Lane / Site Access, all approaches are projected to operate at LOS A during both morning and evening peak hours. The 95th percentile queue for the northbound stop-controlled movement is projected at one vehicle or less during both peak hours.



5. RECOMMENDATIONS & CONCLUSIONS

Based on Kimley-Horn's review of the proposed site plan and evaluation of existing and future traffic conditions, the existing roadway network will readily accommodate the proposed development traffic. No major geometric improvements, such as adding turn lanes, are anticipated to be needed.

- **Lakewood Lane / Site Access**
 - Continue to provide one inbound lane and one outbound lane with minor leg stop control and a stop sign and stop bar on the south leg of the intersection
- **General Site Design**
 - Bicycle storage racks should be provided to encourage non-motorized travel.

No further improvements are recommended for the existing signalized intersection of Midlothian Road / Lakewood Lane-Oakwood Road. Additionally, no improvements are recommended for the intersection of Lakewood Lane / Echo Lake Road.



TECHNICAL APPENDIX

- A. Traffic Count Data
- B. IDOT Crash Data
- C. Existing (2022) Capacity Reports
- D. Site Plan
- E. ITE Trip Generation Data
- F. CMAP Correspondence
- G. No Build (2028) Capacity Reports
- H. Build (2028) Capacity Reports



A. TRAFFIC COUNT DATA

Affordable Housing Development – Lake Zurich, IL

1_Midlothian Road & Lakewood Lane / Oakwood ... - TMC

Wed Jul 20, 2022

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 972390, Location: 42.21188, -88.076996

Provided by: Kimley-Horn and Associates,

Inc.

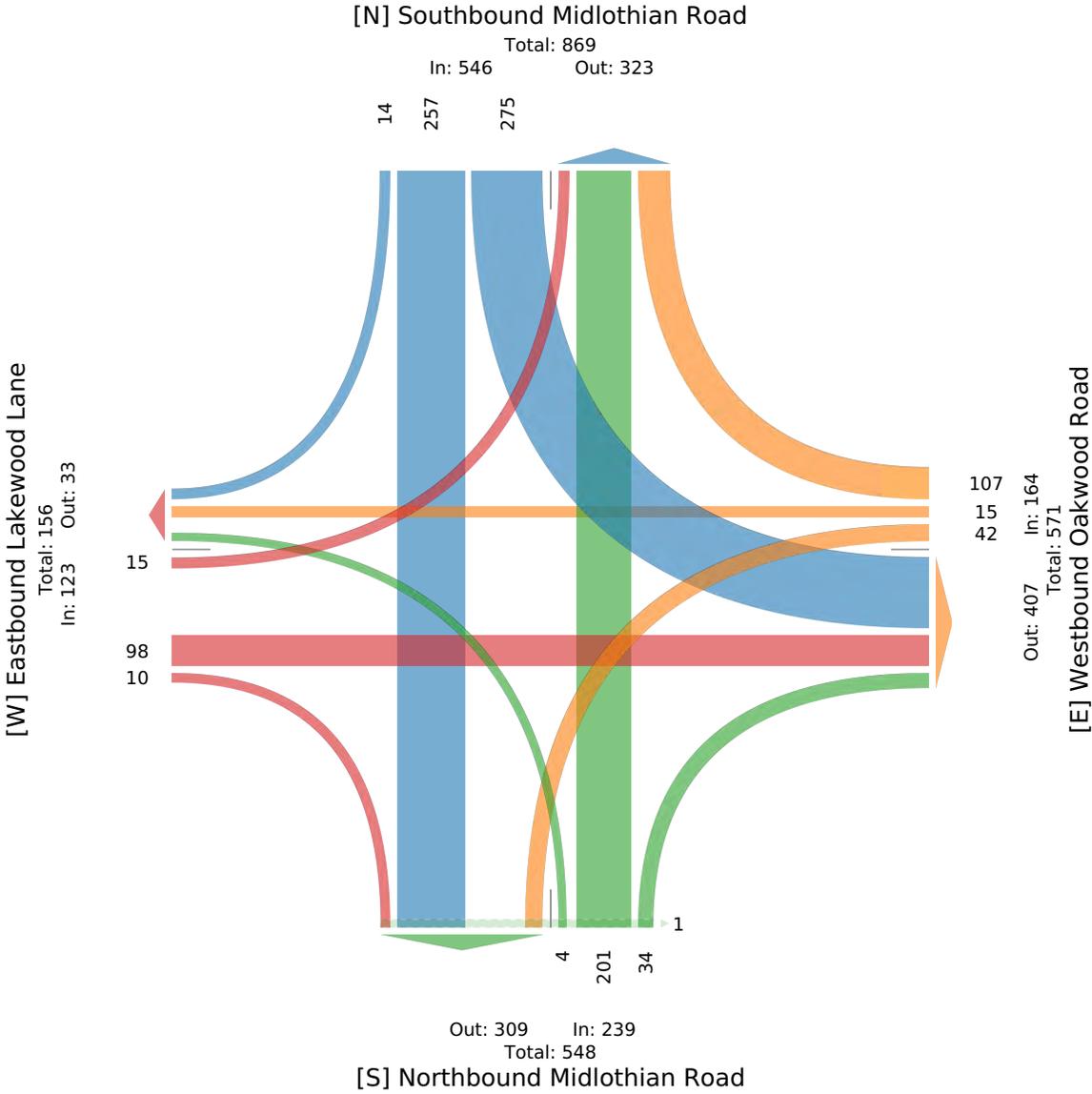
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	Eastbound Lakewood Lane Eastbound					Westbound Oakwood Road Westbound					Northbound Midlothian Road Northbound					Southbound Midlothian Road Southbound					Int				
	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*					
2022-07-20 7:30AM	4	22	1	0	27	0	5	4	33	0	42	0	0	46	2	0	48	0	78	56	3	0	137	0	254
7:45AM	5	35	3	0	43	0	19	7	29	0	55	0	0	56	10	0	66	1	84	68	4	0	156	0	320
8:00AM	3	24	3	0	30	0	10	1	19	0	30	0	1	36	9	0	46	0	54	57	3	0	114	0	220
8:15AM	3	17	3	0	23	0	8	3	26	0	37	0	3	63	13	0	79	0	59	76	4	0	139	0	278
Total	15	98	10	0	123	0	42	15	107	0	164	0	4	201	34	0	239	1	275	257	14	0	546	0	1072
% Approach	12.2%	79.7%	8.1%	0%	-	-	25.6%	9.1%	65.2%	0%	-	-	1.7%	84.1%	14.2%	0%	-	-	50.4%	47.1%	2.6%	0%	-	-	-
% Total	1.4%	9.1%	0.9%	0%	11.5%	-	3.9%	1.4%	10.0%	0%	15.3%	-	0.4%	18.8%	3.2%	0%	22.3%	-	25.7%	24.0%	1.3%	0%	50.9%	-	-
PHF	0.750	0.700	0.833	-	0.715	-	0.553	0.583	0.811	-	0.755	-	0.333	0.798	0.654	-	0.756	-	0.818	0.845	0.875	-	0.875	-	0.839
Lights	14	98	10	0	122	-	39	14	96	0	149	-	3	196	30	0	229	-	269	251	14	0	534	-	1034
% Lights	93.3%	100%	100%	0%	99.2%	-	92.9%	93.3%	89.7%	0%	90.9%	-	75.0%	97.5%	88.2%	0%	95.8%	-	97.8%	97.7%	100%	0%	97.8%	-	96.5%
Articulated Trucks	0	0	0	0	0	-	1	0	3	0	4	-	0	0	2	0	2	-	2	1	0	0	3	-	9
% Articulated Trucks	0%	0%	0%	0%	0%	-	2.4%	0%	2.8%	0%	2.4%	-	0%	0%	5.9%	0%	0.8%	-	0.7%	0.4%	0%	0%	0.5%	-	0.8%
Buses and Single-Unit Trucks	1	0	0	0	1	-	2	0	8	0	10	-	1	5	2	0	8	-	4	5	0	0	9	-	28
% Buses and Single-Unit Trucks	6.7%	0%	0%	0%	0.8%	-	4.8%	0%	7.5%	0%	6.1%	-	25.0%	2.5%	5.9%	0%	3.3%	-	1.5%	1.9%	0%	0%	1.6%	-	2.6%
Bicycles on Road	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	6.7%	0%	0%	0.6%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

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

1_Midlothian Road & Lakewood Lane / Oakwood ... - TMC
 Wed Jul 20, 2022
 AM Peak (7:30 AM - 8:30 AM)
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
 All Movements
 ID: 972390, Location: 42.21188, -88.076996

Provided by: Kimley-Horn and Associates, Inc.
 767 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



1_Midlothian Road & Lakewood Lane / Oakwood ... - TMC

Wed Jul 20, 2022

PM Peak (4 PM - 5 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 972390, Location: 42.21188, -88.076996

Provided by: Kimley-Horn and Associates,

Inc.

767 Eustis Street, Suite 100,

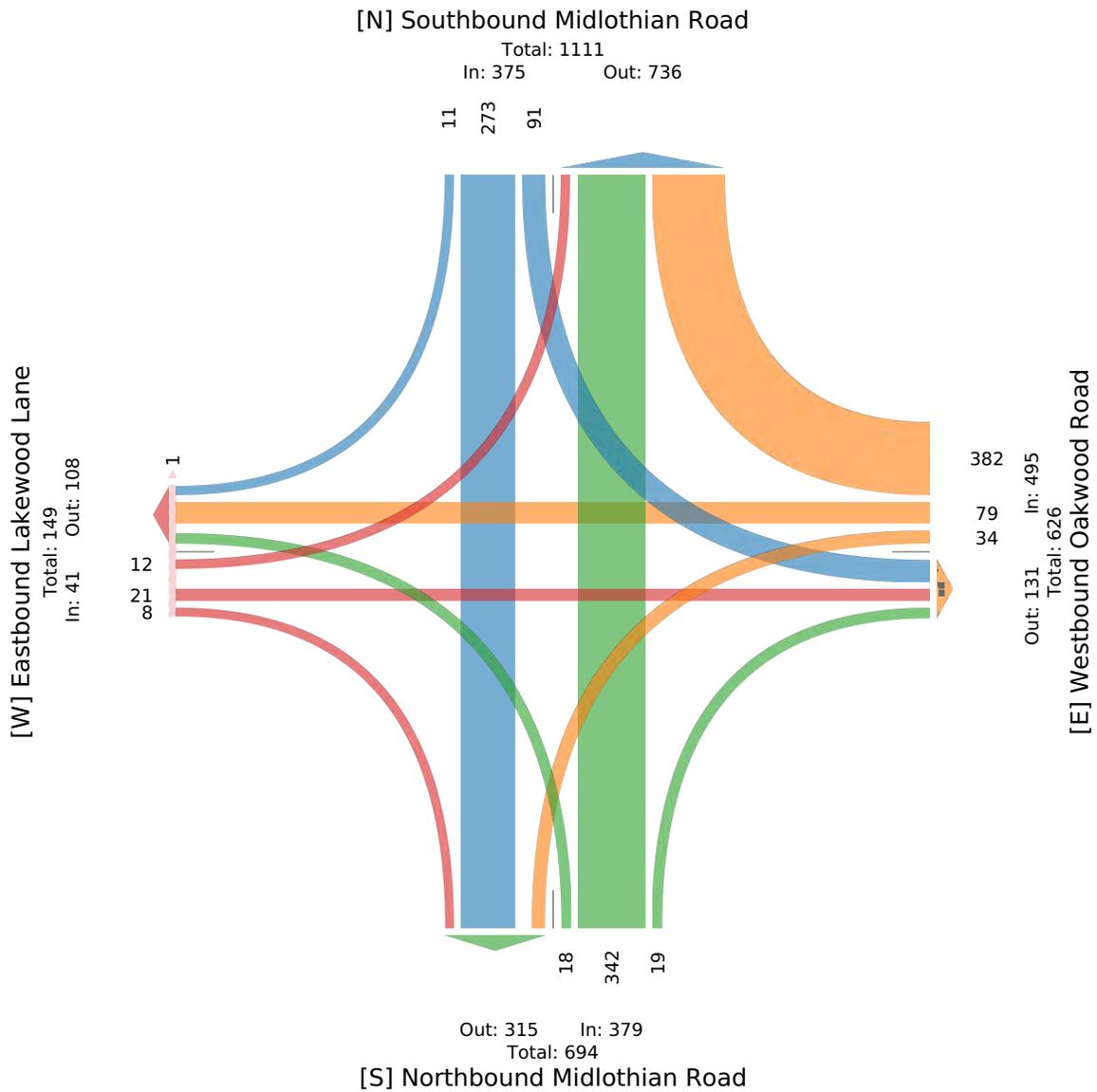
Saint Paul, MN, 55114, US

Leg Direction	Eastbound Lakewood Lane Eastbound						Westbound Oakwood Road Westbound						Northbound Midlothian Road Northbound						Southbound Midlothian Road Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2022-07-20 4:00PM	6	4	1	0	11	0	11	19	101	0	131	0	9	98	7	0	114	0	19	69	3	0	91	0	347
4:15PM	1	5	3	0	9	0	3	13	62	0	78	0	3	102	1	0	106	0	33	71	3	0	107	0	300
4:30PM	4	3	1	0	8	1	9	29	138	0	176	0	5	71	4	0	80	0	20	76	2	0	98	0	362
4:45PM	1	9	3	0	13	0	11	18	81	0	110	0	1	71	7	0	79	0	19	57	3	0	79	0	281
Total	12	21	8	0	41	1	34	79	382	0	495	0	18	342	19	0	379	0	91	273	11	0	375	0	1290
% Approach	29.3%	51.2%	19.5%	0%	-	-	6.9%	16.0%	77.2%	0%	-	-	4.7%	90.2%	5.0%	0%	-	-	24.3%	72.8%	2.9%	0%	-	-	-
% Total	0.9%	1.6%	0.6%	0%	3.2%	-	2.6%	6.1%	29.6%	0%	38.4%	-	1.4%	26.5%	1.5%	0%	29.4%	-	7.1%	21.2%	0.9%	0%	29.1%	-	-
PHF	0.500	0.583	0.667	-	0.788	-	0.773	0.672	0.692	-	0.702	-	0.500	0.838	0.679	-	0.831	-	0.689	0.898	0.917	-	0.876	-	0.890
Lights	11	19	8	0	38	-	34	77	372	0	483	-	17	334	18	0	369	-	82	270	11	0	363	-	1253
% Lights	91.7%	90.5%	100%	0%	92.7%	-	100%	97.5%	97.4%	0%	97.6%	-	94.4%	97.7%	94.7%	0%	97.4%	-	90.1%	98.9%	100%	0%	96.8%	-	97.1%
Articulated Trucks	1	0	0	0	1	-	0	0	5	0	5	-	0	3	1	0	4	-	4	0	0	0	4	-	14
% Articulated Trucks	8.3%	0%	0%	0%	2.4%	-	0%	0%	1.3%	0%	1.0%	-	0%	0.9%	5.3%	0%	1.1%	-	4.4%	0%	0%	0%	1.1%	-	1.1%
Buses and Single-Unit Trucks	0	2	0	0	2	-	0	1	5	0	6	-	1	5	0	0	6	-	5	3	0	0	8	-	22
% Buses and Single-Unit Trucks	0%	9.5%	0%	0%	4.9%	-	0%	1.3%	1.3%	0%	1.2%	-	5.6%	1.5%	0%	0%	1.6%	-	5.5%	1.1%	0%	0%	2.1%	-	1.7%
Bicycles on Road	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	1.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

1_Midlothian Road & Lakewood Lane / Oakwood ... - TMC
 Wed Jul 20, 2022
 PM Peak (4 PM - 5 PM) - Overall Peak Hour
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
 All Movements
 ID: 972390, Location: 42.21188, -88.076996

Provided by: Kimley-Horn and Associates, Inc.
 767 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



2 Lakewood Lane & Echo Lake Road - TMC

Wed Jul 20, 2022

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 972391, Location: 42.211326, -88.08346

Provided by: Kimley-Horn and Associates,

Inc.

767 Eustis Street, Suite 100,

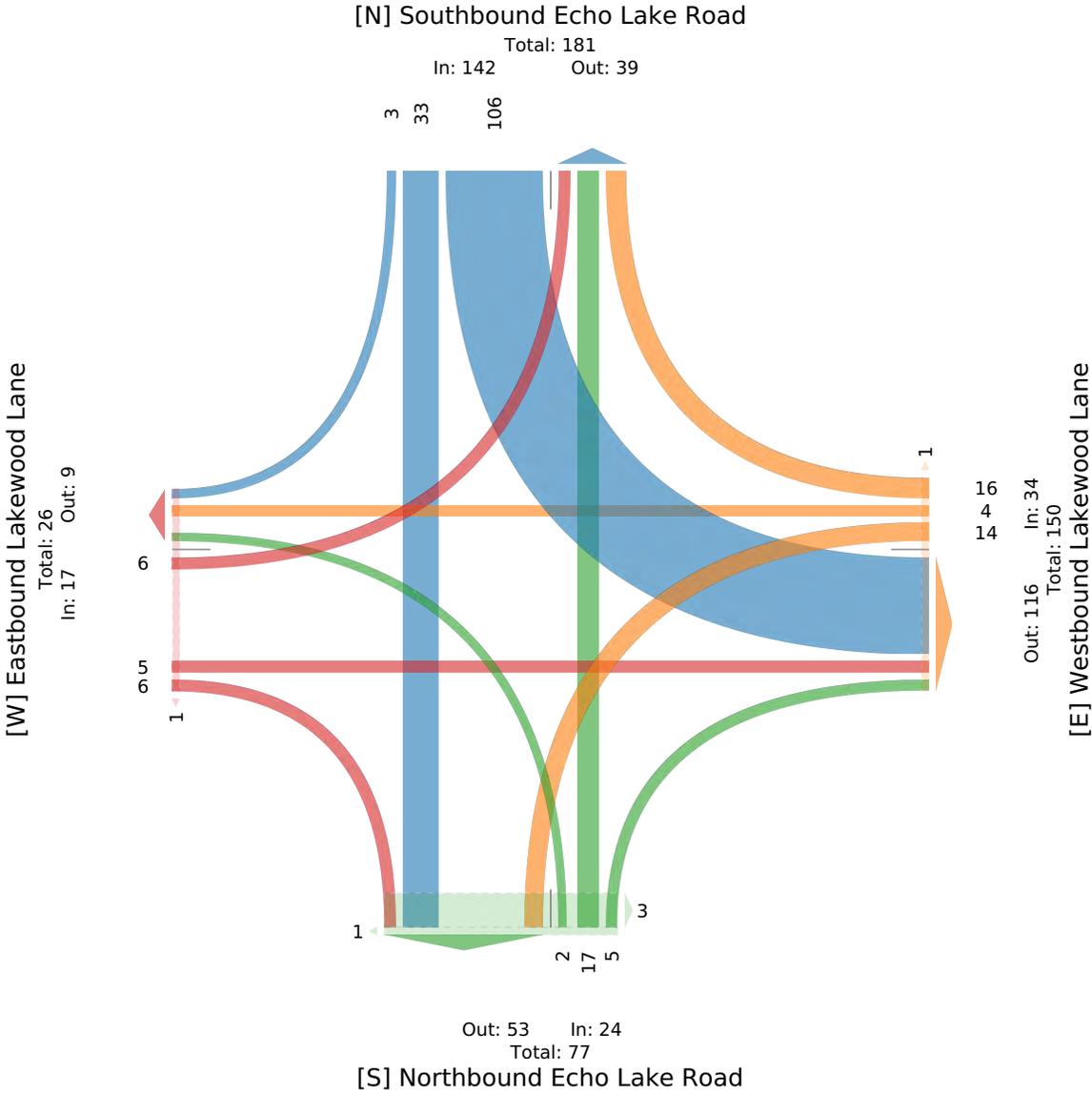
Saint Paul, MN, 55114, US

Leg Direction	Eastbound Lakewood Lane Eastbound						Westbound Lakewood Lane Westbound						Northbound Echo Lake Road Northbound						Southbound Echo Lake Road Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2022-07-20 7:30AM	0	1	1	0	2	0	3	1	3	0	7	1	0	3	0	0	3	2	28	5	0	0	33	0	45
7:45AM	0	2	0	0	2	0	3	0	4	0	7	0	0	3	2	0	5	1	39	10	2	0	51	0	65
8:00AM	3	1	4	0	8	0	4	1	2	0	7	0	0	1	2	0	3	0	21	7	1	0	29	0	47
8:15AM	3	1	1	0	5	1	4	2	7	0	13	0	2	10	1	0	13	1	18	11	0	0	29	0	60
Total	6	5	6	0	17	1	14	4	16	0	34	1	2	17	5	0	24	4	106	33	3	0	142	0	217
% Approach	35.3%	29.4%	35.3%	0%	-	-	41.2%	11.8%	47.1%	0%	-	-	8.3%	70.8%	20.8%	0%	-	-	74.6%	23.2%	2.1%	0%	-	-	-
% Total	2.8%	2.3%	2.8%	0%	7.8%	-	6.5%	1.8%	7.4%	0%	15.7%	-	0.9%	7.8%	2.3%	0%	11.1%	-	48.8%	15.2%	1.4%	0%	65.4%	-	-
PHF	0.500	0.625	0.375	-	0.531	-	0.875	0.500	0.571	-	0.654	-	0.250	0.425	0.625	-	0.462	-	0.679	0.750	0.375	-	0.696	-	0.835
Lights	6	5	5	0	16	-	12	4	16	0	32	-	2	16	4	0	22	-	106	33	3	0	142	-	212
% Lights	100%	100%	83.3%	0%	94.1%	-	85.7%	100%	100%	0%	94.1%	-	100%	94.1%	80.0%	0%	91.7%	-	100%	100%	100%	0%	100%	-	97.7%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	0	1	0	1	-	2	0	0	0	2	-	0	1	1	0	2	-	0	0	0	0	0	-	5
% Buses and Single-Unit Trucks	0%	0%	16.7%	0%	5.9%	-	14.3%	0%	0%	0%	5.9%	-	0%	5.9%	20.0%	0%	8.3%	-	0%	0%	0%	0%	0%	-	2.3%
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%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-	-	-	-	-	-	

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

2_Lakewood Lane & Echo Lake Road - TMC
 Wed Jul 20, 2022
 AM Peak (7:30 AM - 8:30 AM)
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
 All Movements
 ID: 972391, Location: 42.211326, -88.08346

Provided by: Kimley-Horn and Associates, Inc.
 767 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



2 Lakewood Lane & Echo Lake Road - TMC

Wed Jul 20, 2022

Forced Peak (4 PM - 5 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 972391, Location: 42.211326, -88.08346

Provided by: Kimley-Horn and Associates,

Inc.

767 Eustis Street, Suite 100,

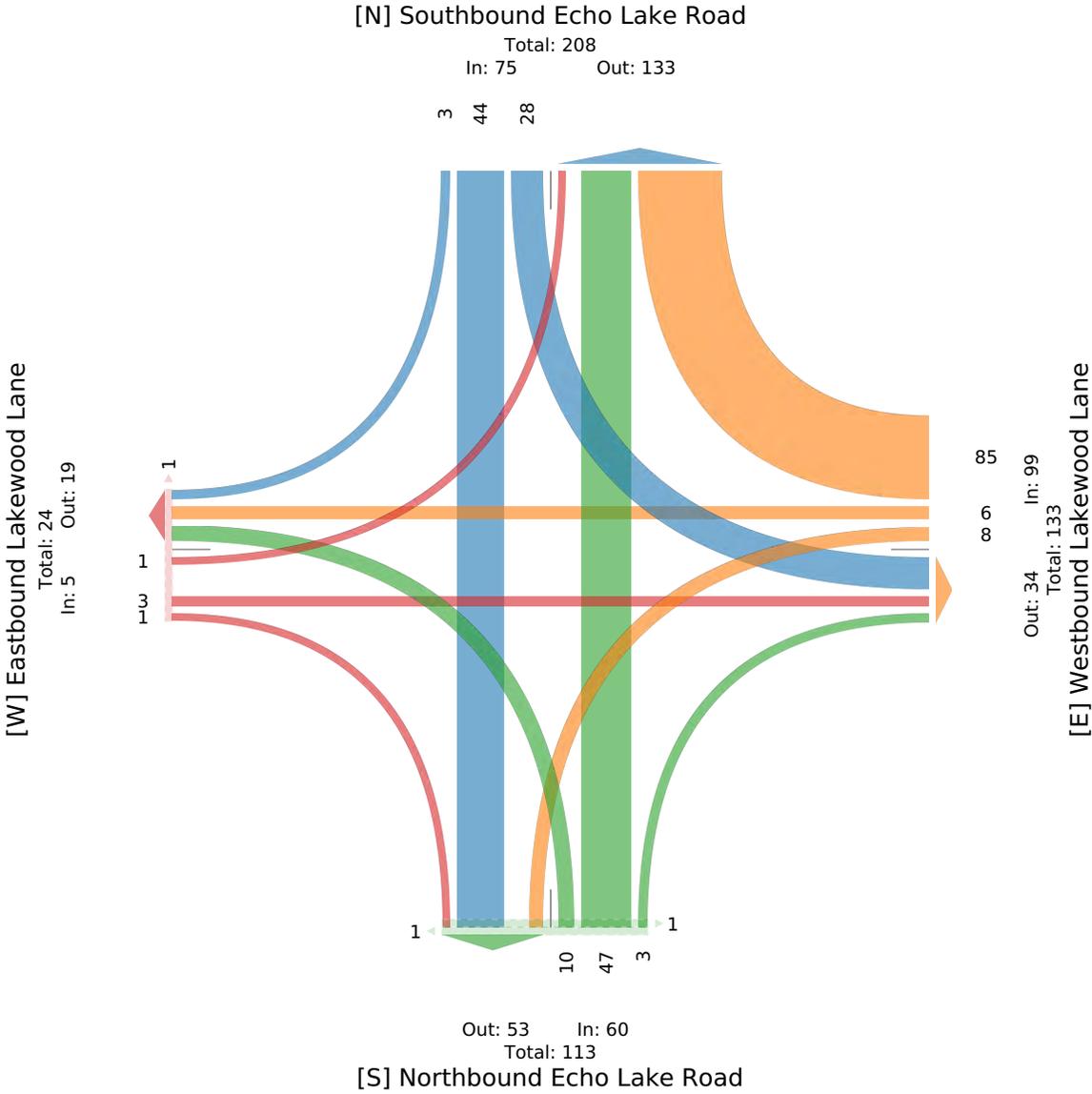
Saint Paul, MN, 55114, US

Leg Direction	Eastbound Lakewood Lane Eastbound					Westbound Lakewood Lane Westbound					Northbound Echo Lake Road Northbound					Southbound Echo Lake Road Southbound					Int				
	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*					
Time	0	0	0	0	0	1	2	1	23	0	26	0	0	18	3	0	21	1	5	15	1	0	21	0	68
2022-07-20 4:00PM	0	1	0	0	1	0	2	3	12	0	17	0	2	9	0	0	11	1	7	9	1	0	17	0	46
4:15PM	1	1	1	0	3	0	3	2	33	0	38	0	3	12	0	0	15	0	6	6	0	0	12	0	68
4:30PM	0	1	0	0	1	0	1	0	17	0	18	0	5	8	0	0	13	0	10	14	1	0	25	0	57
4:45PM	Total																								
	1	3	1	0	5	1	8	6	85	0	99	0	10	47	3	0	60	2	28	44	3	0	75	0	239
% Approach	20.0%	60.0%	20.0%	0%	-	-	8.1%	6.1%	85.9%	0%	-	-	16.7%	78.3%	5.0%	0%	-	-	37.3%	58.7%	4.0%	0%	-	-	-
% Total	0.4%	1.3%	0.4%	0%	2.1%	-	3.3%	2.5%	35.6%	0%	41.4%	-	4.2%	19.7%	1.3%	0%	25.1%	-	11.7%	18.4%	1.3%	0%	31.4%	-	-
PHF	0.250	0.750	0.250	-	0.417	-	0.667	0.500	0.644	-	0.651	-	0.500	0.653	0.250	-	0.714	-	0.700	0.733	0.750	-	0.750	-	0.879
Lights	1	3	1	0	5	-	8	6	84	0	98	-	9	46	3	0	58	-	25	44	3	0	72	-	233
% Lights	100%	100%	100%	0%	100%	-	100%	100%	98.8%	0%	99.0%	-	90.0%	97.9%	100%	0%	96.7%	-	89.3%	100%	100%	0%	96.0%	-	97.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	1	0	0	0	1	-	1	0	0	0	1	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	10.0%	0%	0%	0%	1.7%	-	3.6%	0%	0%	0%	1.3%	-	0.8%
Buses and Single-Unit Trucks	0	0	0	0	0	-	0	0	1	0	1	-	0	1	0	0	1	-	2	0	0	0	2	-	4
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	0%	0%	1.2%	0%	1.0%	-	0%	2.1%	0%	0%	1.7%	-	7.1%	0%	0%	0%	2.7%	-	1.7%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	-

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

2_Lakewood Lane & Echo Lake Road - TMC
Wed Jul 20, 2022
Forced Peak (4 PM - 5 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 972391, Location: 42.211326, -88.08346

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US





Volume Count Report

LOCATION INFO	
Location ID	049 4391_NB
Type	LINK
Funct'l Class	4
Located On	Midlothian Rd
From Road	Lakewood Ln
To Road	Echo Lake Rd
Direction	NB
County	Lake
Community	LAKE ZURICH
MPO ID	
HPMS ID	
Agency	Illinois DOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Tue 7/16/2019
End Date	Wed 7/17/2019
Start Time	5:00:00 PM
End Time	5:00:00 PM
Direction	NB
Notes	
Station	MIDLOTHIAN RD
Study	
Speed Limit	
Description	
Sensor Type	
Source	CombineVolumeCountsIncremental
Latitude,Longitude	

INTERVAL:60-MIN	
Time	Hourly Count
0:00-1:00	16
1:00-2:00	2
2:00-3:00	4
3:00-4:00	8
4:00-5:00	12
5:00-6:00	72
6:00-7:00	140
7:00-8:00	244
8:00-9:00	248
9:00-10:00	219
10:00-11:00	259
11:00-12:00	219
12:00-13:00	341
13:00-14:00	275
14:00-15:00	313
15:00-16:00	315
16:00-17:00	389
17:00-18:00	346
18:00-19:00	265
19:00-20:00	239
20:00-21:00	182
21:00-22:00	157
22:00-23:00	93
23:00-24:00	32
Total	4,390
AM Peak	10:00-11:00 259
PM Peak	16:00-17:00 389



Volume Count Report

LOCATION INFO	
Location ID	049 4390_SB
Type	LINK
Funct'l Class	4
Located On	Midlothian Rd
From Road	Old McHenry Rd
To Road	Lakewood Ln
Direction	SB
County	Lake
Community	HAWTHORN WOODS
MPO ID	
HPMS ID	
Agency	Illinois DOT

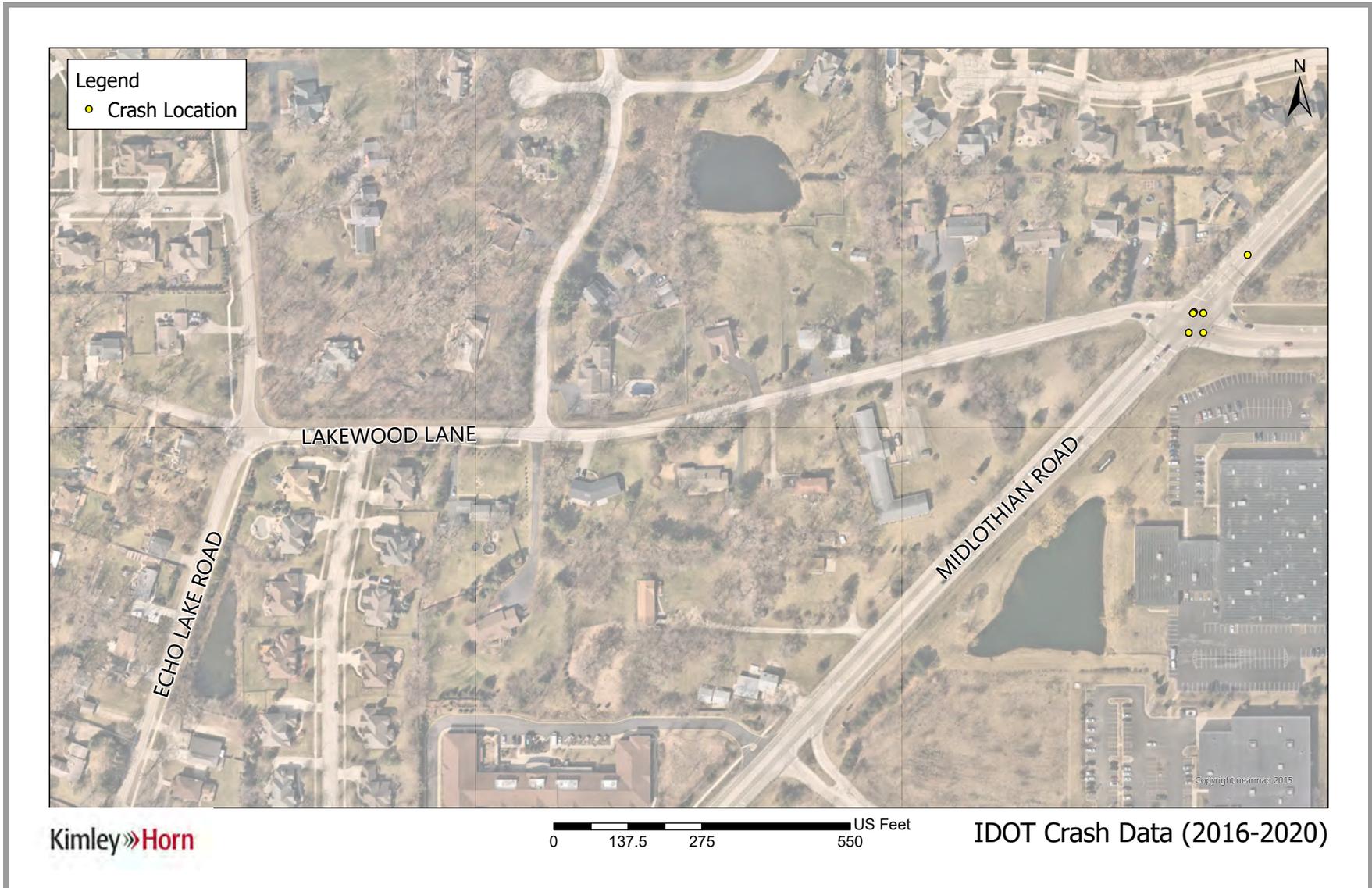
COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Tue 7/16/2019
End Date	Wed 7/17/2019
Start Time	5:00:00 PM
End Time	5:00:00 PM
Direction	SB
Notes	
Station	MIDLOTHIAN RD
Study	
Speed Limit	
Description	
Sensor Type	
Source	CombineVolumeCountsIncremental
Latitude,Longitude	

INTERVAL:60-MIN	
Time	Hourly Count
0:00-1:00	16
1:00-2:00	18
2:00-3:00	7
3:00-4:00	18
4:00-5:00	120
5:00-6:00	358
6:00-7:00	625
7:00-8:00	551
8:00-9:00	554
9:00-10:00	462
10:00-11:00	387
11:00-12:00	372
12:00-13:00	363
13:00-14:00	404
14:00-15:00	401
15:00-16:00	381
16:00-17:00	386
17:00-18:00	417
18:00-19:00	365
19:00-20:00	227
20:00-21:00	188
21:00-22:00	169
22:00-23:00	74
23:00-24:00	31
Total	6,894
AM Peak	06:00-07:00 625
PM Peak	17:00-18:00 417



B. IDOT CRASH DATA

Affordable Housing Development – Lake Zurich, IL





C. EXISTING (2022) CAPACITY REPORTS

Affordable Housing Development – Lake Zurich, IL

HCM 6th Signalized Intersection Summary Existing (2022) Traffic Volumes
 100: Midlothian Road & Lakewood Lane/Oakwood Road AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (veh/h)	15	98	10	42	15	107	4	201	34	275	257	14
Future Volume (veh/h)	15	98	10	42	15	107	4	201	34	275	257	14
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	16	107	11	46	16	116	4	218	37	299	279	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	26	172	18	167	58	185	341	457	359	564	706	38
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.00	0.25	0.25	0.16	0.40	0.40
Sat Flow, veh/h	219	1463	150	1338	465	1485	1457	1856	1459	1781	1759	95
Grp Volume(v), veh/h	134	0	0	62	0	116	4	218	37	299	0	294
Grp Sat Flow(s),veh/h/ln	1832	0	0	1803	0	1485	1457	1856	1459	1781	0	1853
Q Serve(g_s), s	4.2	0.0	0.0	1.9	0.0	4.5	0.1	6.1	1.2	6.9	0.0	6.9
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.9	0.0	4.5	0.1	6.1	1.2	6.9	0.0	6.9
Prop In Lane	0.12		0.08	0.74		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	216	0	0	225	0	185	341	457	359	564	0	744
V/C Ratio(X)	0.62	0.00	0.00	0.28	0.00	0.63	0.01	0.48	0.10	0.53	0.00	0.40
Avail Cap(c_a), veh/h	632	0	0	474	0	390	444	1066	839	1057	0	1734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	0.0	24.2	0.0	25.3	17.2	19.6	17.8	12.3	0.0	13.0
Incr Delay (d2), s/veh	6.1	0.0	0.0	1.4	0.0	7.2	0.0	3.5	0.6	0.8	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	1.5	0.0	3.4	0.1	5.0	0.7	4.2	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.7	0.0	0.0	25.6	0.0	32.5	17.2	23.1	18.3	13.1	0.0	14.6
LnGrp LOS	C	A	A	C	A	C	B	C	B	B	A	B
Approach Vol, veh/h		134			178			259			593	
Approach Delay, s/veh		31.7			30.1			22.4			13.8	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	21.0		13.2	3.7	30.4		13.6				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	26.5	35.0		21.0	4.5	57.0		16.0				
Max Q Clear Time (g_c+1), s	8.9	8.1		6.2	2.1	8.9		6.5				
Green Ext Time (p_c), s	0.8	4.1		1.0	0.0	6.2		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				20.3								
HCM 6th LOS				C								

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

Existing (2022) Traffic Volumes
AM Peak Hour

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	5	6	14	4	16	2	17	5	106	33	3
Future Vol, veh/h	6	5	6	14	4	16	2	17	5	106	33	3
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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	7	5	7	15	4	17	2	18	5	115	36	3
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	303	295	38	299	294	21	39	0	0	23	0	0
Stage 1	268	268	-	25	25	-	-	-	-	-	-	-
Stage 2	35	27	-	274	269	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	649	616	993	630	617	1056	1571	-	-	1592	-	-
Stage 1	738	687	-	963	874	-	-	-	-	-	-	-
Stage 2	981	873	-	707	687	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	598	570	993	586	571	1056	1571	-	-	1592	-	-
Mov Cap-2 Maneuver	598	570	-	586	571	-	-	-	-	-	-	-
Stage 1	737	636	-	962	873	-	-	-	-	-	-	-
Stage 2	959	872	-	645	636	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	10.4		10.1		0.6			5.6				
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1571	-	-	684	738	1592	-	-				
HCM Lane V/C Ratio	0.001	-	-	0.027	0.05	0.072	-	-				
HCM Control Delay (s)	7.3	0	-	10.4	10.1	7.4	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.2	-	-				

HCM 6th Signalized Intersection Summary Existing (2022) Traffic Volumes
 100: Midlothian Road & Lakewood Lane/Oakwood Road PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	12	21	8	34	79	382	18	342	19	91	273	11
Future Volume (veh/h)	12	21	8	34	79	382	18	342	19	91	273	11
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	13	23	9	37	86	415	20	372	21	99	297	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	32	57	22	183	425	490	281	537	422	297	592	24
Arrive On Green	0.06	0.06	0.06	0.33	0.33	0.33	0.01	0.29	0.29	0.06	0.33	0.33
Sat Flow, veh/h	514	910	356	554	1288	1485	1457	1856	1459	1781	1785	72
Grp Volume(v), veh/h	45	0	0	123	0	415	20	372	21	99	0	309
Grp Sat Flow(s),veh/h/ln	1781	0	0	1843	0	1485	1457	1856	1459	1781	0	1857
Q Serve(g_s), s	2.0	0.0	0.0	3.9	0.0	21.3	0.8	14.6	0.8	3.0	0.0	10.9
Cycle Q Clear(g_c), s	2.0	0.0	0.0	3.9	0.0	21.3	0.8	14.6	0.8	3.0	0.0	10.9
Prop In Lane	0.29		0.20	0.30		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	111	0	0	608	0	490	281	537	422	297	0	616
V/C Ratio(X)	0.40	0.00	0.00	0.20	0.00	0.85	0.07	0.69	0.05	0.33	0.00	0.50
Avail Cap(c_a), veh/h	239	0	0	810	0	653	324	997	784	361	0	1089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.9	0.0	0.0	19.7	0.0	25.5	20.5	25.9	21.0	19.1	0.0	21.9
Incr Delay (d2), s/veh	5.0	0.0	0.0	0.3	0.0	10.8	0.1	7.2	0.2	0.7	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	0.0	3.0	0.0	13.4	0.5	11.4	0.5	2.2	0.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	0.0	0.0	20.1	0.0	36.3	20.6	33.0	21.2	19.8	0.0	24.8
LnGrp LOS	D	A	A	C	A	D	C	C	C	B	A	C
Approach Vol, veh/h		45			538			413			408	
Approach Delay, s/veh		41.9			32.6			31.8			23.6	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	29.7		11.1	4.6	33.2		33.0				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	7.5	44.0		11.0	3.5	48.0		36.0				
Max Q Clear Time (g_c+1), s	5.0	16.6		4.0	2.8	12.9		23.3				
Green Ext Time (p_c), s	0.0	7.1		0.1	0.0	6.0		3.7				
Intersection Summary												
HCM 6th Ctrl Delay				30.0								
HCM 6th LOS				C								

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

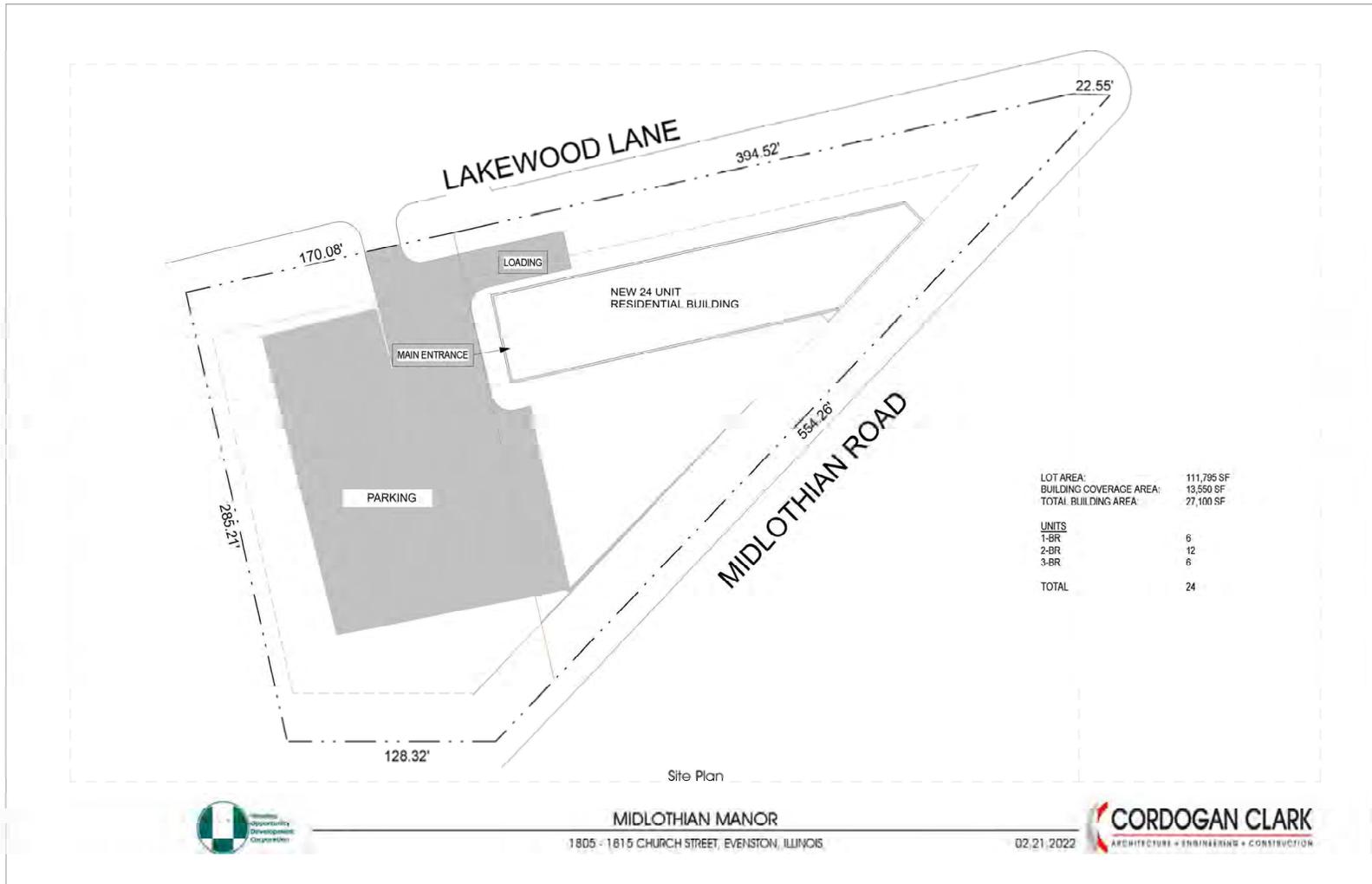
Existing (2022) Traffic Volumes
 PM Peak Hour

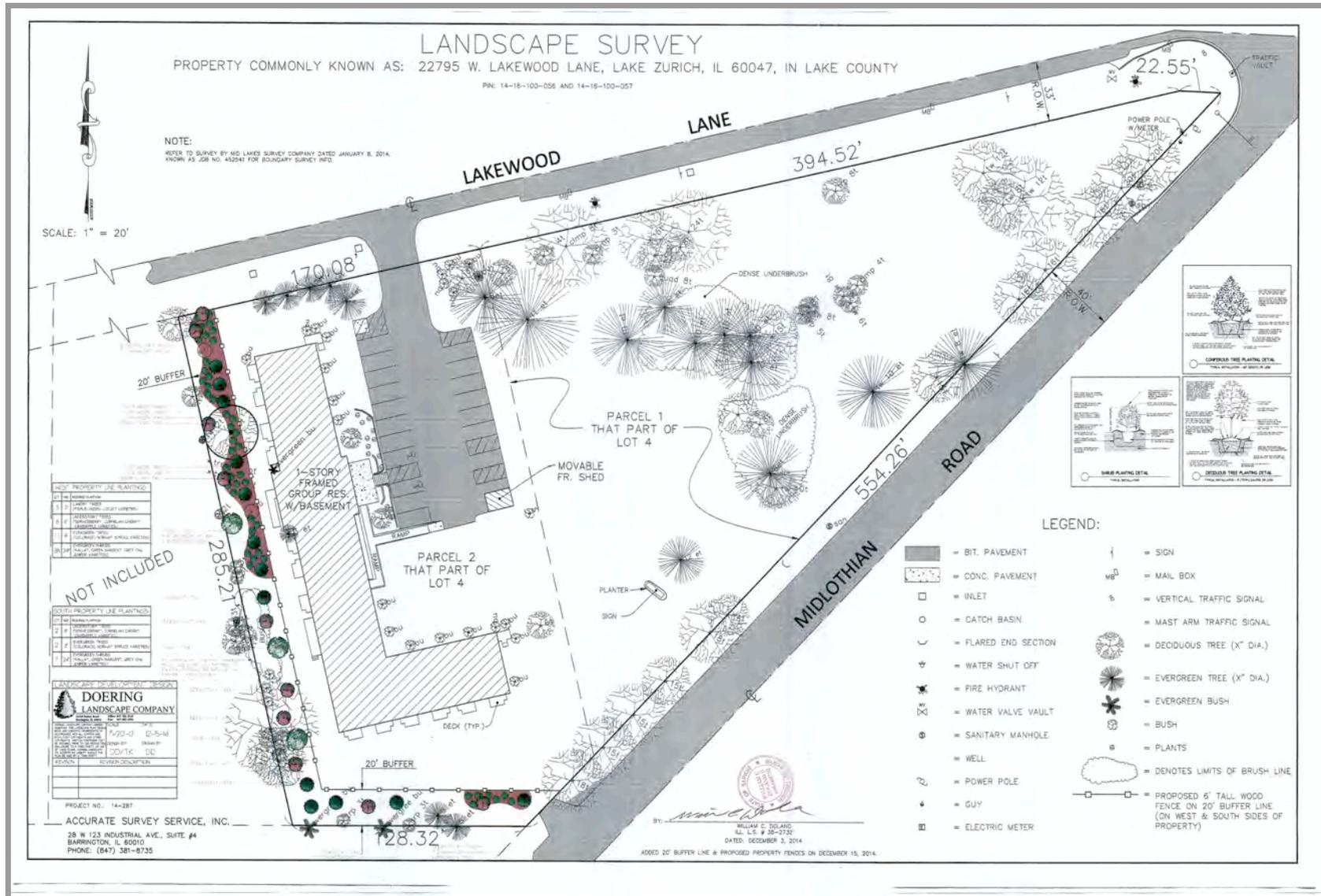
Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	1	8	6	85	10	47	3	28	44	3
Future Vol, veh/h	1	3	1	8	6	85	10	47	3	28	44	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	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	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	1	3	1	9	7	92	11	51	3	30	48	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	234	186	50	187	186	53	51	0	0	54	0	0
Stage 1	110	110	-	75	75	-	-	-	-	-	-	-
Stage 2	124	76	-	112	111	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	721	708	977	748	708	1014	1555	-	-	1551	-	-
Stage 1	895	804	-	905	833	-	-	-	-	-	-	-
Stage 2	880	832	-	865	804	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	637	689	977	729	689	1014	1555	-	-	1551	-	-
Mov Cap-2 Maneuver	637	689	-	729	689	-	-	-	-	-	-	-
Stage 1	889	788	-	899	827	-	-	-	-	-	-	-
Stage 2	788	826	-	843	788	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10		9.2			1.2			2.8			
HCM LOS	B		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1555	-	-	720	956	1551	-	-				
HCM Lane V/C Ratio	0.007	-	-	0.008	0.113	0.02	-	-				
HCM Control Delay (s)	7.3	0	-	10	9.2	7.4	0	-				
HCM Lane LOS	A	A	-	B	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.1	-	-				



D. SITE PLAN

Affordable Housing Development – Lake Zurich, IL







E. ITE TRIP GENERATION DATA

Affordable Housing Development – Lake Zurich, IL

Affordable Housing - Income Limits (223)

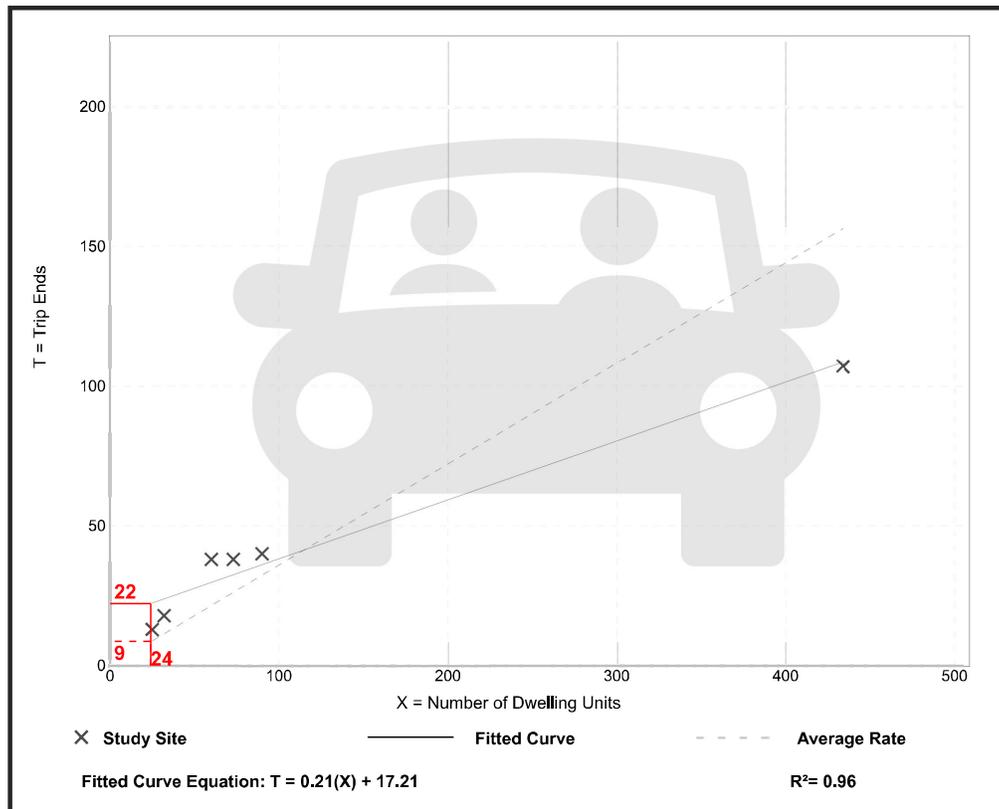
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. Num. of Dwelling Units: 119
 Directional Distribution: 29% entering, 71% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.25 - 0.63	0.16

Data Plot and Equation



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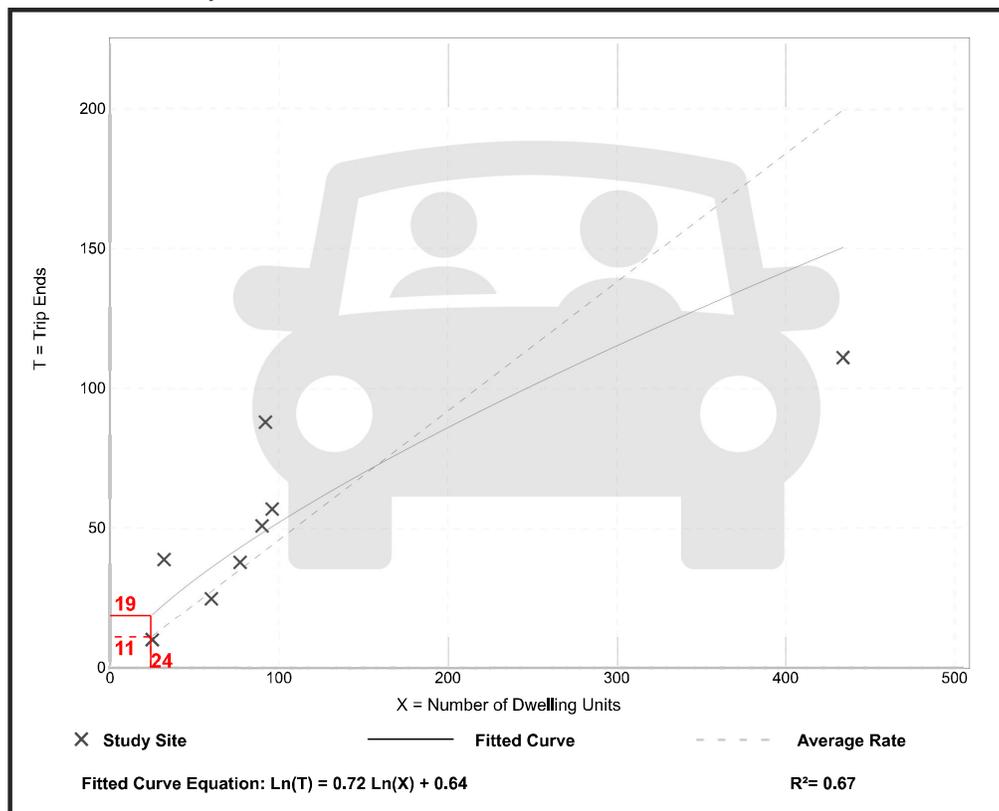
Affordable Housing - Income Limits (223)

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: 8
 Avg. Num. of Dwelling Units: 113
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.26 - 1.22	0.28

Data Plot and Equation



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Affordable Housing - Income Limits (223)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

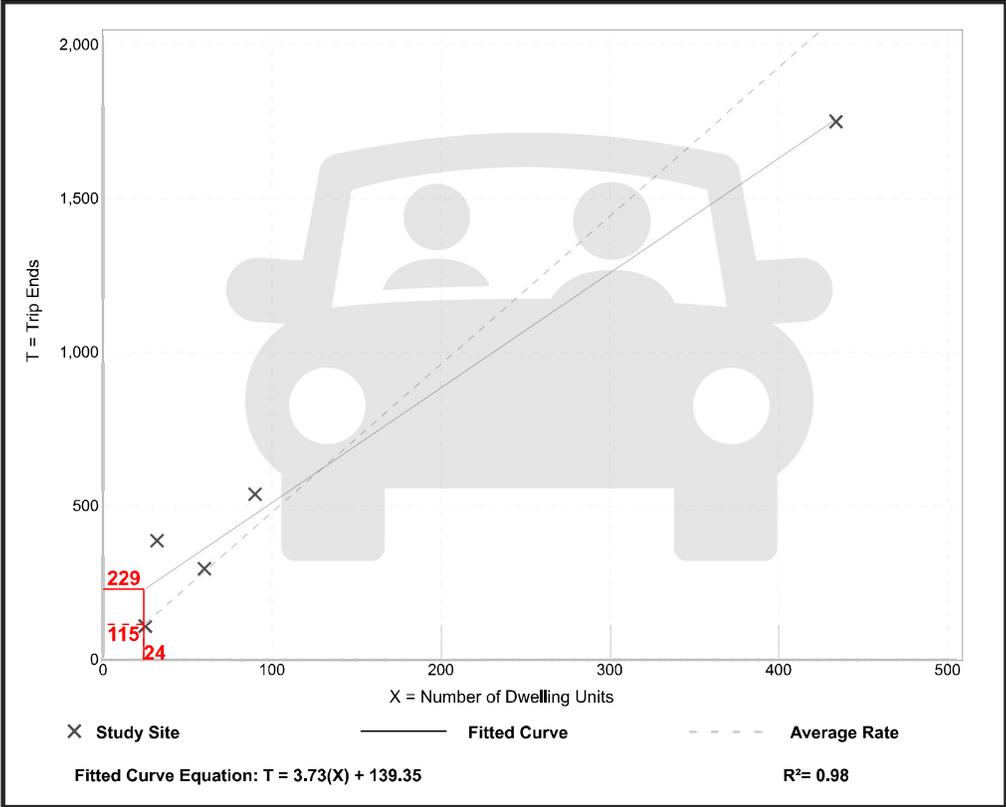
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 128
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.81	4.03 - 12.16	2.03

Data Plot and Equation

Caution – Small Sample Size



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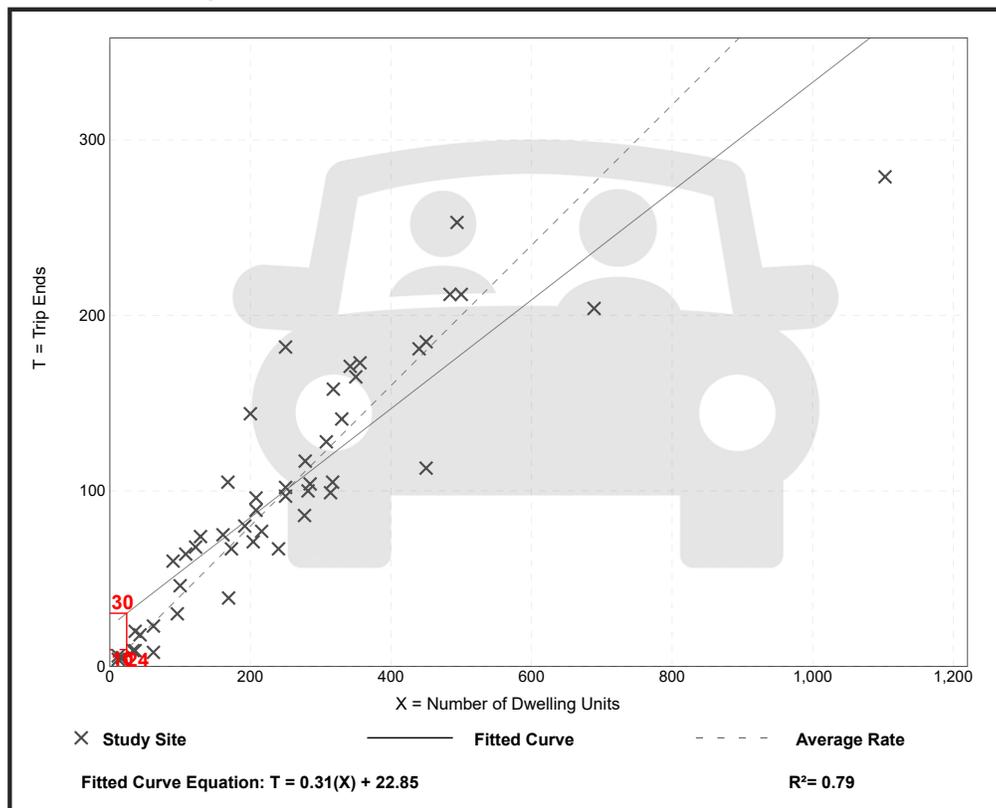
Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

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: 49
 Avg. Num. of Dwelling Units: 249
 Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



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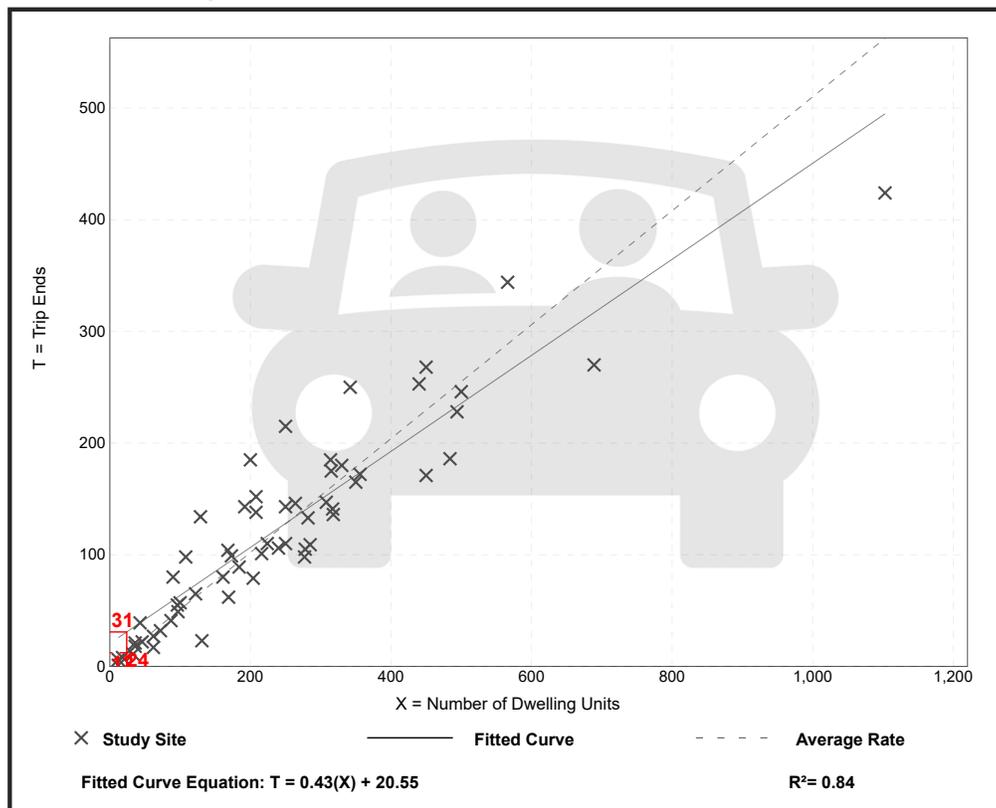
Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

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: 59
 Avg. Num. of Dwelling Units: 241
 Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



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Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

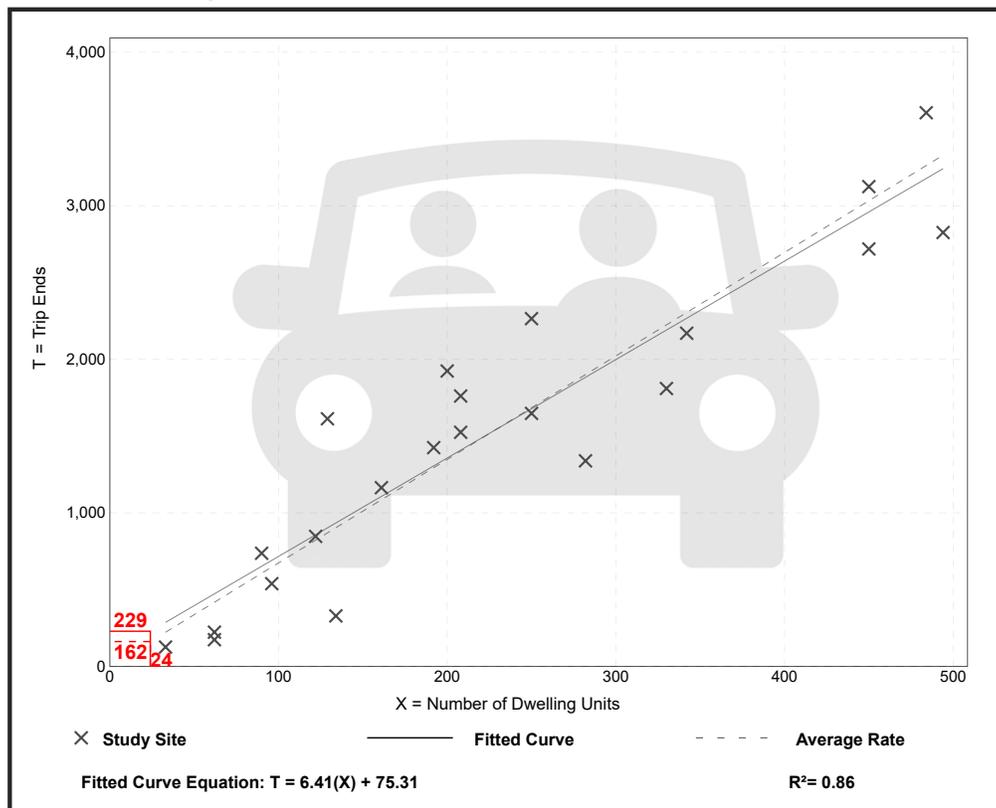
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



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F. CMAP CORRESPONDENCE

Affordable Housing Development – Lake Zurich, IL



Chicago Metropolitan
Agency for Planning

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

August 8, 2022

Justin Opitz, AICP
Transportation Planner
Kimley-Horn
570 Lake Cook Rd, Suite 200
Deerfield, IL, 60015

Subject: *Midlothian Road @ Lakewood Lane*
IDOT

Dear Mr. Opitz:

In response to a request made on your behalf and dated August 5, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT (2019)	Year 2050 ADT
Oakwood Road East of Midlothian Road	4,300	5,500
Lakewood Lane West of Midlothian Road	4,300	5,400
Midlothian Road North of Lakewood Lane	11,900	13,900
Midlothian Road South of Lakewood Lane	7,650	8,800
Echo Lake Road North of Lakewood Lane	1,700	2,200
Echo Lake Road South of Lakewood Lane	1,700	1,900

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

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

Sincerely,

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

cc: Rios (IDOT)
2022_ForecastTraffic\LakeZurich\la-40-22\la-40-22.docx



G. NO-BUILD (2028) CAPACITY REPORTS

Affordable Housing Development – Lake Zurich, IL

HCM 6th Signalized Intersection Summary No Build (2028) Traffic Projections
 100: Midlothian Road & Lakewood Lane/Oakwood Road AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (veh/h)	16	102	10	44	16	111	4	208	35	285	266	15
Future Volume (veh/h)	16	102	10	44	16	111	4	208	35	285	266	15
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	17	111	11	48	17	121	4	226	38	310	289	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	26	173	17	166	59	185	336	453	356	563	709	39
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.00	0.24	0.24	0.16	0.40	0.40
Sat Flow, veh/h	224	1464	145	1332	472	1485	1457	1856	1459	1781	1756	97
Grp Volume(v), veh/h	139	0	0	65	0	121	4	226	38	310	0	305
Grp Sat Flow(s),veh/h/ln	1833	0	0	1804	0	1485	1457	1856	1459	1781	0	1853
Q Serve(g_s), s	4.4	0.0	0.0	2.0	0.0	4.8	0.1	6.4	1.2	7.3	0.0	7.2
Cycle Q Clear(g_c), s	4.4	0.0	0.0	2.0	0.0	4.8	0.1	6.4	1.2	7.3	0.0	7.2
Prop In Lane	0.12		0.08	0.74		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	216	0	0	225	0	185	336	453	356	563	0	748
V/C Ratio(X)	0.64	0.00	0.00	0.29	0.00	0.65	0.01	0.50	0.11	0.55	0.00	0.41
Avail Cap(c_a), veh/h	597	0	0	529	0	435	415	1057	832	1012	0	1720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	0.0	24.4	0.0	25.6	17.4	20.0	18.0	12.5	0.0	13.1
Incr Delay (d2), s/veh	6.6	0.0	0.0	1.5	0.0	8.0	0.0	3.9	0.6	0.8	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	0.0	0.0	1.6	0.0	3.6	0.1	5.3	0.8	4.4	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	25.9	0.0	33.7	17.5	23.9	18.6	13.3	0.0	14.7
LnGrp LOS	C	A	A	C	A	C	B	C	B	B	A	B
Approach Vol, veh/h		139			186			268			615	
Approach Delay, s/veh		32.5			30.9			23.0			14.0	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	21.0		13.3	3.7	30.8		13.7				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	25.5	35.0		20.0	3.5	57.0		18.0				
Max Q Clear Time (g_c+1), s	9.3	8.4		6.4	2.1	9.2		6.8				
Green Ext Time (p_c), s	0.8	4.3		1.0	0.0	6.5		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				20.7								
HCM 6th LOS				C								

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

No Build (2028) Traffic Projections
 AM Peak Hour

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	5	6	15	4	17	2	18	5	110	34	3
Future Vol, veh/h	6	5	6	15	4	17	2	18	5	110	34	3
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	7	5	7	16	4	18	2	20	5	120	37	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	317	308	39	312	307	23	40	0	0	25	0	0
Stage 1	279	279	-	27	27	-	-	-	-	-	-	-
Stage 2	38	29	-	285	280	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	636	606	991	618	607	1054	1570	-	-	1589	-	-
Stage 1	728	680	-	960	873	-	-	-	-	-	-	-
Stage 2	977	871	-	697	679	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	584	559	991	573	560	1054	1570	-	-	1589	-	-
Mov Cap-2 Maneuver	584	559	-	573	560	-	-	-	-	-	-	-
Stage 1	727	628	-	959	872	-	-	-	-	-	-	-
Stage 2	954	870	-	634	627	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	10.2	0.6	5.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1570	-	-	673	728	1589	-	-
HCM Lane V/C Ratio	0.001	-	-	0.027	0.054	0.075	-	-
HCM Control Delay (s)	7.3	0	-	10.5	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.2	-	-

HCM 6th Signalized Intersection Summary No Build (2028) Traffic Projections
 100: Midlothian Road & Lakewood Lane/Oakwood Road PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	12	22	8	35	82	396	19	354	20	94	283	11
Future Volume (veh/h)	12	22	8	35	82	396	19	354	20	94	283	11
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	13	24	9	38	89	430	21	385	22	102	308	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	31	58	22	184	431	495	278	549	432	294	605	24
Arrive On Green	0.06	0.06	0.06	0.33	0.33	0.33	0.01	0.30	0.30	0.06	0.34	0.34
Sat Flow, veh/h	504	930	349	551	1291	1485	1457	1856	1459	1781	1788	70
Grp Volume(v), veh/h	46	0	0	127	0	430	21	385	22	102	0	320
Grp Sat Flow(s),veh/h/ln	1782	0	0	1843	0	1485	1457	1856	1459	1781	0	1858
Q Serve(g_s), s	2.1	0.0	0.0	4.2	0.0	23.2	0.9	15.7	0.9	3.2	0.0	11.7
Cycle Q Clear(g_c), s	2.1	0.0	0.0	4.2	0.0	23.2	0.9	15.7	0.9	3.2	0.0	11.7
Prop In Lane	0.28		0.20	0.30		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	111	0	0	615	0	495	278	549	432	294	0	629
V/C Ratio(X)	0.41	0.00	0.00	0.21	0.00	0.87	0.08	0.70	0.05	0.35	0.00	0.51
Avail Cap(c_a), veh/h	209	0	0	756	0	609	318	1000	787	350	0	1089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	0.0	20.3	0.0	26.7	21.0	26.7	21.5	19.7	0.0	22.6
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.4	0.0	13.4	0.1	7.3	0.2	0.7	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.0	0.0	3.3	0.0	14.7	0.5	12.1	0.6	2.3	0.0	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	0.0	0.0	20.7	0.0	40.0	21.1	34.0	21.7	20.4	0.0	25.5
LnGrp LOS	D	A	A	C	A	D	C	C	C	C	A	C
Approach Vol, veh/h		46			557			428			422	
Approach Delay, s/veh		43.7			35.6			32.7			24.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	31.2		11.3	4.7	34.9		34.5				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	7.5	46.0		10.0	3.5	50.0		35.0				
Max Q Clear Time (g_c+1), s	5.2	17.7		4.1	2.9	13.7		25.2				
Green Ext Time (p_c), s	0.0	7.5		0.1	0.0	6.4		3.3				
Intersection Summary												
HCM 6th Ctrl Delay				31.7								
HCM 6th LOS				C								

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

No Build (2028) Traffic Projections
 PM Peak Hour

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	1	8	6	88	10	49	3	29	46	3
Future Vol, veh/h	1	3	1	8	6	88	10	49	3	29	46	3
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	1	3	1	9	7	96	11	53	3	32	50	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	244	194	52	195	194	55	53	0	0	56	0	0
Stage 1	116	116	-	77	77	-	-	-	-	-	-	-
Stage 2	128	78	-	118	117	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	710	701	975	739	701	1012	1553	-	-	1549	-	-
Stage 1	889	800	-	903	831	-	-	-	-	-	-	-
Stage 2	876	830	-	858	799	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	625	681	975	720	681	1012	1553	-	-	1549	-	-
Mov Cap-2 Maneuver	625	681	-	720	681	-	-	-	-	-	-	-
Stage 1	883	783	-	897	825	-	-	-	-	-	-	-
Stage 2	781	824	-	836	782	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.1		9.3		1.2		2.7	
HCM LOS	B		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1553	-	-	711	954	1549	-	-
HCM Lane V/C Ratio	0.007	-	-	0.008	0.116	0.02	-	-
HCM Control Delay (s)	7.3	0	-	10.1	9.3	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.1	-	-



H. BUILD (2028) CAPACITY REPORTS

Affordable Housing Development – Lake Zurich, IL

HCM 6th Signalized Intersection Summary Build (2028) Traffic Projections
 100: Midlothian Road & Lakewood Lane/Oakwood Road AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	107	17	44	17	111	7	208	35	285	266	17
Future Volume (veh/h)	23	107	17	44	17	111	7	208	35	285	266	17
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	25	116	18	48	18	121	8	226	38	310	289	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	51	238	37	238	89	269	312	446	351	506	663	41
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.01	0.24	0.24	0.15	0.38	0.38
Sat Flow, veh/h	286	1327	206	1313	492	1485	1457	1856	1459	1781	1742	109
Grp Volume(v), veh/h	159	0	0	66	0	121	8	226	38	310	0	307
Grp Sat Flow(s),veh/h/ln	1819	0	0	1805	0	1485	1457	1856	1459	1781	0	1851
Q Serve(g_s), s	6.9	0.0	0.0	2.7	0.0	6.4	0.4	9.2	1.8	10.7	0.0	10.8
Cycle Q Clear(g_c), s	6.9	0.0	0.0	2.7	0.0	6.4	0.4	9.2	1.8	10.7	0.0	10.8
Prop In Lane	0.16		0.11	0.73		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	326	0	0	327	0	269	312	446	351	506	0	704
V/C Ratio(X)	0.49	0.00	0.00	0.20	0.00	0.45	0.03	0.51	0.11	0.61	0.00	0.44
Avail Cap(c_a), veh/h	458	0	0	413	0	340	401	679	534	732	0	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	0.0	30.4	0.0	31.9	24.5	28.7	25.9	19.0	0.0	20.1
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.6	0.0	2.5	0.0	4.1	0.6	1.2	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.8	0.0	0.0	2.2	0.0	4.4	0.2	7.8	1.2	7.3	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	0.0	31.1	0.0	34.4	24.5	32.8	26.5	20.2	0.0	22.1
LnGrp LOS	C	A	A	C	A	C	C	C	C	C	A	C
Approach Vol, veh/h		159			187			272			617	
Approach Delay, s/veh		34.7			33.2			31.7			21.1	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.9	27.0		21.7	4.6	39.3		21.8				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	24.5	32.0		22.0	6.5	50.0		20.0				
Max Q Clear Time (g_c+I1), s	12.7	11.2		8.9	2.4	12.8		8.4				
Green Ext Time (p_c), s	0.7	3.8		1.2	0.0	5.9		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			27.0									
HCM 6th LOS			C									

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

Build (2028) Traffic Projections
AM Peak Hour

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	5	6	16	5	19	2	18	5	111	34	3
Future Vol, veh/h	6	5	6	16	5	19	2	18	5	111	34	3
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	7	5	7	17	5	21	2	20	5	121	37	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	321	310	39	314	309	23	40	0	0	25	0	0
Stage 1	281	281	-	27	27	-	-	-	-	-	-	-
Stage 2	40	29	-	287	282	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	632	605	991	616	605	1054	1570	-	-	1589	-	-
Stage 1	726	678	-	960	873	-	-	-	-	-	-	-
Stage 2	975	871	-	695	678	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	578	557	991	571	557	1054	1570	-	-	1589	-	-
Mov Cap-2 Maneuver	578	557	-	571	557	-	-	-	-	-	-	-
Stage 1	725	625	-	959	872	-	-	-	-	-	-	-
Stage 2	949	870	-	631	625	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.5		10.3		0.6		5.6	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1570	-	-	669	727	1589	-	-
HCM Lane V/C Ratio	0.001	-	-	0.028	0.06	0.076	-	-
HCM Control Delay (s)	7.3	0	-	10.5	10.3	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.2	-	-

**HCM 6th TWSC
300: Access A & Lakewood Lane**

**Build (2028) Traffic Projections
AM Peak Hour**

Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	127	1	6	34	4	19
Future Vol, veh/h	127	1	6	34	4	19
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	138	1	7	37	4	21
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	139	0	190	139
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1445	-	799	909
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1445	-	795	909
Mov Cap-2 Maneuver	-	-	-	-	795	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	966	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	1.1	9.2			
HCM LOS						A
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	887	-	-	1445	-	
HCM Lane V/C Ratio	0.028	-	-	0.005	-	
HCM Control Delay (s)	9.2	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 6th Signalized Intersection Summary Build (2028) Traffic Projections
 100: Midlothian Road & Lakewood Lane/Oakwood Road PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Volume (veh/h)	15	24	11	35	86	396	25	354	20	94	283	17
Future Volume (veh/h)	15	24	11	35	86	396	25	354	20	94	283	17
Initial Q (Ob), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1870	1870	1796	1870	1752	1530	1856	1722	1870	1870	1870
Adj Flow Rate, veh/h	16	26	12	38	93	430	27	385	22	102	308	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	7	2	10	25	3	12	2	2	2
Cap, veh/h	66	107	50	169	413	468	258	514	404	270	533	31
Arrive On Green	0.13	0.13	0.13	0.32	0.32	0.32	0.03	0.28	0.28	0.06	0.30	0.30
Sat Flow, veh/h	525	854	394	535	1309	1485	1457	1856	1459	1781	1750	102
Grp Volume(v), veh/h	54	0	0	131	0	430	27	385	22	102	0	326
Grp Sat Flow(s),veh/h/ln	1773	0	0	1844	0	1485	1457	1856	1459	1781	0	1852
Q Serve(g_s), s	2.7	0.0	0.0	5.1	0.0	27.3	1.3	18.5	1.1	3.9	0.0	14.5
Cycle Q Clear(g_c), s	2.7	0.0	0.0	5.1	0.0	27.3	1.3	18.5	1.1	3.9	0.0	14.5
Prop In Lane	0.30		0.22	0.29		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	223	0	0	581	0	468	258	514	404	270	0	564
V/C Ratio(X)	0.24	0.00	0.00	0.23	0.00	0.92	0.10	0.75	0.05	0.38	0.00	0.58
Avail Cap(c_a), veh/h	308	0	0	622	0	501	305	797	627	277	0	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	0.0	24.7	0.0	32.3	24.4	32.3	26.0	24.0	0.0	28.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.4	0.0	22.7	0.2	9.7	0.3	0.9	0.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	0.0	4.1	0.0	18.2	0.8	14.3	0.7	2.8	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	0.0	0.0	25.1	0.0	55.0	24.6	42.0	26.2	24.9	0.0	33.0
LnGrp LOS	D	A	A	C	A	D	C	D	C	C	A	C
Approach Vol, veh/h		54			561			434			428	
Approach Delay, s/veh		39.7			48.0			40.1			31.1	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	33.1		18.3	6.9	35.8		36.8				
Change Period (Y+Rc), s	3.5	6.0		6.0	3.5	6.0		6.0				
Max Green Setting (Gmax), s	6.5	42.0		17.0	6.5	42.0		33.0				
Max Q Clear Time (g_c+1), s	5.9	20.5		4.7	3.3	16.5		29.3				
Green Ext Time (p_c), s	0.0	6.5		0.3	0.0	5.5		1.5				
Intersection Summary												
HCM 6th Ctrl Delay			40.5									
HCM 6th LOS			D									

HCM 6th TWSC
200: Echo Lake Road & Lakewood Lane

Build (2028) Traffic Projections
PM Peak Hour

Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	4	1	9	7	89	10	49	4	31	46	3
Future Vol, veh/h	1	4	1	9	7	89	10	49	4	31	46	3
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	17	14	2	2	2	6	20	2	2	2
Mvmt Flow	1	4	1	10	8	97	11	53	4	34	50	3

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	250	199	52	199	198	55	53	0	0	57	0	0
Stage 1	120	120	-	77	77	-	-	-	-	-	-	-
Stage 2	130	79	-	122	121	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.37	7.24	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.24	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.453	3.626	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	703	697	975	734	698	1012	1553	-	-	1547	-	-
Stage 1	884	796	-	903	831	-	-	-	-	-	-	-
Stage 2	874	829	-	854	796	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	616	676	975	713	677	1012	1553	-	-	1547	-	-
Mov Cap-2 Maneuver	616	676	-	713	677	-	-	-	-	-	-	-
Stage 1	878	778	-	897	825	-	-	-	-	-	-	-
Stage 2	778	823	-	829	778	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	9.3	1.2	2.9
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1553	-	-	700	947	1547	-	-
HCM Lane V/C Ratio	0.007	-	-	0.009	0.121	0.022	-	-
HCM Control Delay (s)	7.3	0	-	10.2	9.3	7.4	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0.1	-	-

HCM 6th TWSC
300: Access A & Lakewood Lane

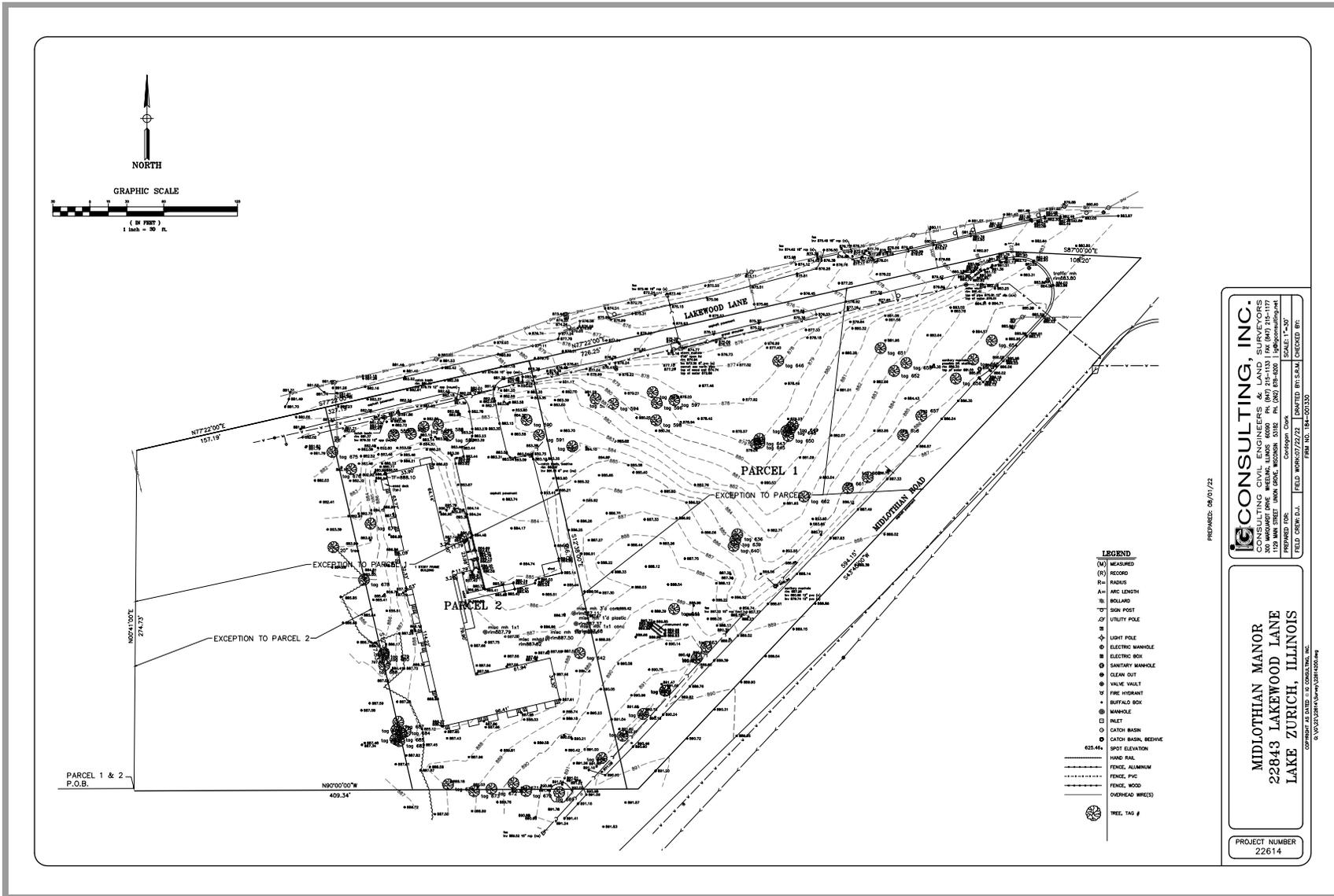
Build (2028) Traffic Projections
 PM Peak Hour

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	42	4	16	112	3	8
Future Vol, veh/h	42	4	16	112	3	8
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	4	17	122	3	9
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	50	0	204	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1557	-	784	1021
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1557	-	775	1021
Mov Cap-2 Maneuver	-	-	-	-	775	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	862	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.9	8.9			
HCM LOS						A
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	940	-	-	1557	-	
HCM Lane V/C Ratio	0.013	-	-	0.011	-	
HCM Control Delay (s)	8.9	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	



Kimley»Horn

570 Lake Cook Road | Suite 200 | Deerfield, IL 60015
630-487-5550



TREE INVENTORY
7/22/22
IG #22614

Tag No.	Size (")	Common Name	Cond	Form	Notes
585	8	Eastern White Pine	2	4	
586	9	Eastern White Pine	2	2	
587	9	Eastern White Pine	2	2	
588	11	Dead	5	5	
589	13	Blue Spruce	3	2	
590	*	Common Lilac	3	3	*15" at base, multi limb
591	10	Blue Spruce	4	5	Leaning, exposed & damaged roots
592	12	Juniper	3	3	
593	*	Mulberry	3	4	*Multi limb 24" at base included bark
594	*	Buckthorn	3	3	*Multi limb 15" at base
595	20	Linden	2	1	
596	16	Linden	4	3	Trunk rot
597	12	Boxelder	3	3	
598	*	Mulberry	3	4	Included bark, multi limb 20" at base
601	11	Juniper	3	3	
602	4,5,2	Buckthorn	3	3	
603	4,3	Mulberry	3	3	
604	*	Buckthorn	3	3	Multi limb, 20" at base
605	5	Siberian Elm	3	3	
606	10	Juniper	3	3	
607	4	Staghorn Sumac	3	3	
608	3	Juniper	3	2	
609	5,3	Buckthorn	3	3	
610	4,4,3	Buckthorn	3	3	
611	11	Juniper	3	2	
612	4	Buckthorn	3	3	
613	15,8	Mulberry	3	4	Included bark, trunk rot
614	16	Mulberry	3	3	
615	4	Buckthorn	3	3	
616	8	Juniper	3	3	
617		Not used			
618	4	Staghorn Sumac	3	3	
619	4	Buckthorn	3	5	
620	9	Juniper	3	2	
621	5,4	Buckthorn	3	3	
622	8	Juniper	3	2	
623	*	Buckthorn	4	4	Multi limb 16" at base included bark, trunk rot
624	13	Dead	5	5	
625	5,4,3	Buckthorn	3	3	
626	4	Buckthorn	3	3	
627	8	Boxelder	3	4	30° lean
628	5	Buckthorn	3	3	
629	16	Boxelder	3	3	
630	15,5	Mulberry	3	5	Included bark, trunk rot
631	4,4	Buckthorn	3	3	
632	4	Buckthorn	3	3	
633	6	Buckthorn	3	3	
634	4	Buckthorn	3	3	
635	*	Buckthorn	3	3	Multi limb 18" at base
636	10	Juniper	3	2	
637	4	Buckthorn	3	3	
638	5	Buckthorn	4	3	Trunk rot
639	4	Buckthorn	3	3	
640	15	Mulberry	4	4	Included bark
641	13	Juniper	2	2	
642	11	Honey Locust	2	3	Included bark
643	10	Boxelder	3	3	
644	9,4	Boxelder	4	4	Included bark, trunk rot
645	10,9,5	Boxelder	3	4	

IG #22614
/Tree Inventory, 7-22-22
.xls

TREE INVENTORY
7/22/22
IG #22614

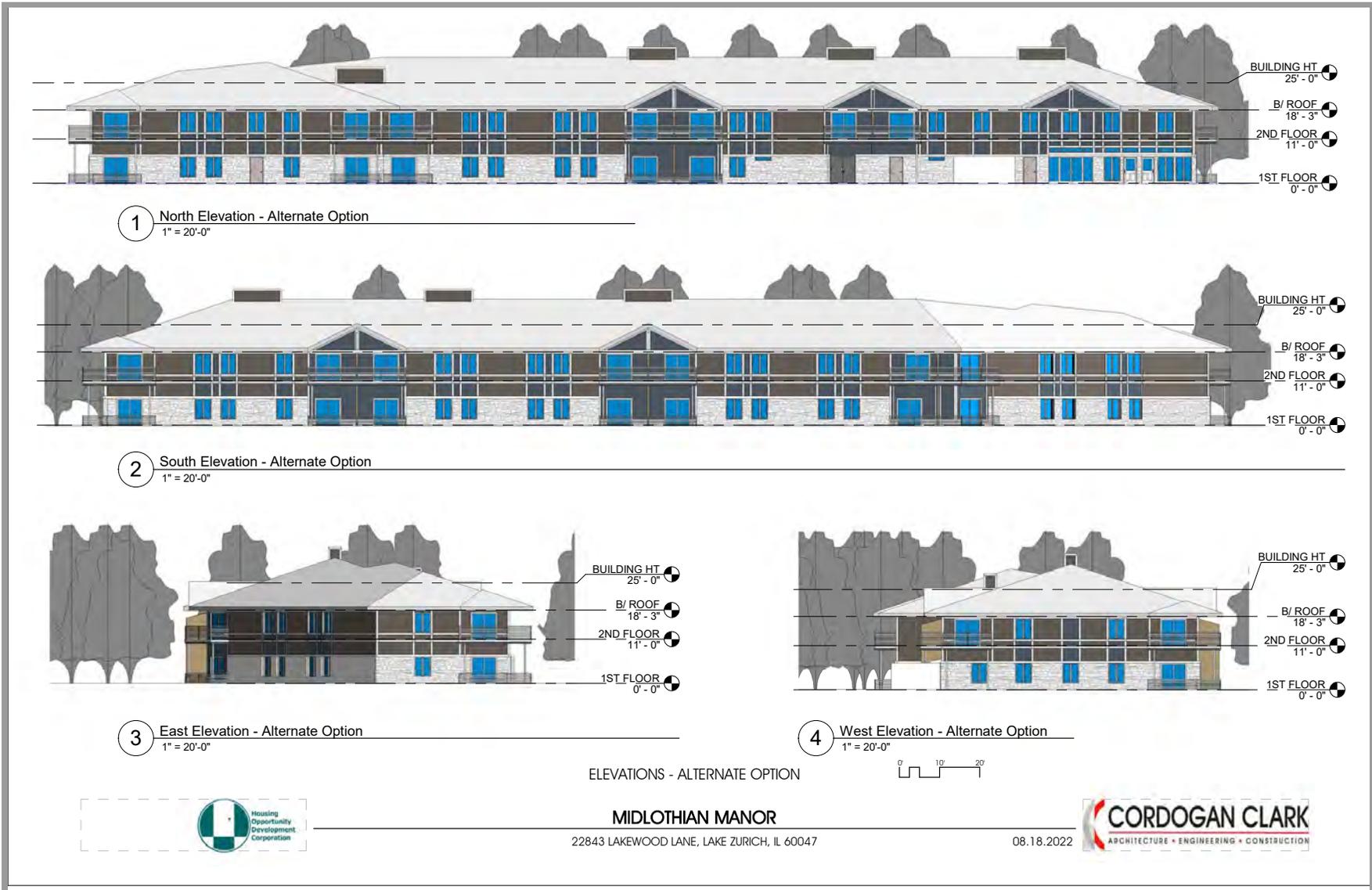
646	11,10,10	Mulberry	3	3	
647	10,9	Boxelder	4	4	
648	**	Dead	5	5	Multi limb, 15" at base
649	*	Buckthorn	3	3	12" at base
650	111,8	Boxelder	3	3	
651	25	Mulberry	4	4	Trunk rot, included bark
652	9,9	Mulberry	3	3	Included bark
653	12,15	Mulberry	3	4	Included bark, trunk rot
654	19	Dead	6	5	Risk to adj row
655	17	Dead	5	5	Risk to adj row
656	18	Norway Maple	5	5	>50% dieback ?????? Risk to ROW
657	18	Dead	5	5	Risk to adj row
658	16	Dead	5	5	
659		Not used			
660	15	Juniper	3	3	Trunk damage
661	22	American Elm	3	3	
662	12,10	Juniper	3	4	Split leader, included bark
663	15	Norway Maple	5	5	>50% dieback
664	22	Siberian Elm	3	3	
665	13	Norway Maple	5	5	>50% dieback
666	19	Norway Maple	4	4	>20% dieback, girdled roots
667	17	Norway Maple	3	3	
668	19	Norway Maple	4	4	Topped at 20'
669	*	American Elm	4	4	Multi limb +/- 30" at base, dead trunk
670	9	White Spruce	3	3	
671	5	Dead	5	5	
672	10,8	Black Walnut	3	3	Included bark
673	4,4	Arborvitae	1	1	
674	6,5,4	Boxelder	4	4	Trunk rot, included bark
675	17	Cottonwood	3	1	
676	6	Eastern White Pine	2	3	
677	26	Boxelder	3	4	Included bark
678	4	Aspen	3	3	
679	7	Sugar Maple	3	3	
680	12,9,7	American Elm	3	4	Included bark, trunk rot
681	15	Boxelder	3	4	>30° lean
682	23	Siberian Elm	3	3	
683	15	Black Walnut	3	3	
684	7	Black Walnut	3	3	
685	20	Black Walnut	2	3	
686	5	Boxelder	3	3	
687	20	Boxelder	3	4	>30° lean
688	10	American Elm	4	4	20% dieback

Code	Description
1	Specimen
2	Good
3	Average
4	Poor
5	Dead

The condition of the trees shall be based on a five (5) point scale with one (1) being the best and five (5) being the worst

G/IG/22614
/Tree Inventory, 7-22-22
.xls







Axley Place, Glenview



Hearts's Place, Arlington Heights

Community Meeting Regarding a proposed redevelopment of 22843 Lakewood Lane, Lake Zurich

HODC will present our proposal to revitalize the former Midlothian Manor site and create new affordable and workforce housing for Lake County including time for questions and answers.



WHEN:
SATURDAY JANUARY 28, 2023
3:00-4:00 P.M.

WHERE:
HOPE COLLECTIVE
23153 W MILLER RD, LAKE ZURICH

WHO:
Richard Koenig, Executive Director
Housing Opportunity Development Corp
847-564-2900
rkoenig@hodc.org
www.hodc.org



FAQs 22843 Lakewood Lane, Lake Zurich**Who is the developer?**

Housing Opportunity Development Corporation (HODC) is a community-based nonprofit whose mission is to create affordable housing in the northern suburbs. The organization was founded in 1983 and is overseen by a board of directors. HODC has completed over 30 housing developments with more than 500 units in 18 communities. Information is available at www.hodc.org.

What is being proposed?

The project would include demolition of the existing building to be replaced by a new two-story building with 24 units having a mix of 1br, 2br and 3br apartments. There would be over 40 parking spaces and extensive landscaping. The building would be energy efficient and obtain green certification. Rents would average \$600 for 1 bedroom, \$750 for 2 bedrooms, and \$950 for 3 bedrooms.

Why this location?

The site is owned by the Lake County Housing Authority but has not been used as housing for years. The location has great access to many local amenities. There is a need for housing for local workers in and around Lake Zurich.

Who would live here?

Families who live and work in Lake Zurich and need affordable rents are the focus. Potential tenants would be screened through background checks and credit checks. Rents would be affordable to households earning about \$20,000-\$40,000 per year or about \$10-\$20 per hour.

What are the benefits?

Benefits to the community include putting this government-owned property back on the tax rolls and creating storm water detention to reduce area flooding. It would replace a dilapidated building with a new, attractive, modern building that is energy efficient, accessible, and sprinklered. The project would provide added landscaping and fencing as well as reorient the building to reduce west exposure.

How will the project be financed?

Financing would likely come from Low Income Housing Tax Credits and Lake County Community Development funds. HODC would own and manage the property upon completion for at least thirty years and beyond.

From: [Ray Keller](#)
To: [Sarosh Saher](#); [Mike Brown](#); [Roy Witherow](#); [Kyle Kordell](#); [Tom Poynton](#)
Subject: Midlothian Manor Redevelopment - neighborhood meeting recap
Date: Monday, January 30, 2023 10:34:25 AM

Good morning,

I attended the HODC's neighborhood meeting at the Hope Collective church on Saturday afternoon. There were about 40 people there, a good mix of nearby neighbors and individuals who were there to support the initiative. Hope Collective Pastor Dave Mudd and Executive Director Terrance Wallace were also in attendance. Richard Koenig did a good job facilitating the discussion and answering questions. Overall, the tone of the crowd was civil, though skeptical of anything Richard said.

The neighbors' primary concerns are familiar:

Some "those people" suspicions, which Richard Koenig addressed with description of typical residents (have jobs, often single parents or older individuals, average residency tenure 7-8 years, no felony convictions, asked to leave if norms violated, etc.).

Storm water management – Residents were skeptical that the situation would be improved by detention system, considering increased impervious surface

Buffering – lights from the parking lot, lights from headlights from the parking lot shining into their bedrooms, etc.

Too dense – a couple of people asking for reduction in units

Long-term maintenance/appearance of the facility – Richard explained how they budget for long term repair/replacement, but resident asking question did not seem convinced.

Parking – not enough/too much – they intend 1 space for 1 bedroom units, 1.5 spaces for every 2- and 3-bedroom unit. Some thought that was too much pavement, others thought that wasn't enough for residents + guests. Richard explained that several tenants elsewhere don't all have cars, which then led to concerns about...

Not the right location – not served by transit, too far to walk anywhere, introducing some kind of transportation assistance would be harmful to neighborhood traffic. If transportation assistance is provided, then the problem becomes...

Supportive services – Richard said that they do not provide supportive services, which some took as an indicator of "those people" in residence. But for those who need supportive services, it is too far to walk, not near anything, etc.

There were no obvious objections to the design or appearance of the buildings as shown. HODC's other properties in Highland Park, Deerfield, Buffalo Grove, and Palatine were cited as representative of what they run their facilities.

There were a couple of questions about why they would want to annex to the Village. There were no obvious concerns about water or sewer, beyond enabling the development.

HODC intends to submit their annexation, rezoning and PUD applications to the Village in the next month or two. They intend to host another neighborhood meeting after the engineering plans are completed, possibly within the next 2-3 weeks.

Let me know if you have any questions.

Thanks,

Ray

Ray Keller, ICMA-CM, AICP
Village Manager
Village of Lake Zurich
(847) 540-1693
Ray.Keller@LakeZurich.org

Follow-up Community Meeting Regarding a proposed redevelopment of 22843 Lakewood Lane, Lake Zurich

As a follow-up to the January meeting in the snowstorm, HODC will provide updates and address previous questions regarding the proposal to build new apartments on the former Midlothian Manor site.



WHEN:
MONDAY MARCH 6, 2023
7:00-8:00 P.M.

WHERE:
HOPE COLLECTIVE
23153 W MILLER RD, LAKE ZURICH

WHO:
Richard Koenig, Executive Director
Housing Opportunity Development Corp
847-564-2900
rkoenig@hodc.org
www.hodc.org



From: [Sarosh Saher](#)
To: [Ray Keller](#); [Mike Brown](#); [Roy Witherow](#); [Kyle Kordell](#); [Tom Poynton](#)
Subject: Midlothian Manor Redevelopment - March 6, 2023 Meeting #2 recap
Date: Tuesday, March 7, 2023 2:46:00 PM
Attachments: [FAQ.pdf](#)

Good afternoon - I attended the 2nd meeting conducted by HODC held at Hope Collective Church on Miller Road. There were about 25 residents that attended consisting of a mix of immediate neighbors in opposition to the project and other neighbors who supported the project. Richard Koenig and a staff member were also present as were Hope Collective Pastor Dave Mudd and Executive Director Terrance Wallace.

Richard had prepared an FAQ (attached) that was developed from questions asked from the previous meeting on January 28.

He began by re-introducing the project and describing its essential features. He then opened it up to questions, most of which centered around vetting of potential residents, Richard's involvement in the project, and procedures and rules of the facility's residents. There were also questions about the process, once the application was submitted to the village for annexation and zoning.

Questions were asked on the following issues. Responses to each question were provided by Richard Koenig.

- *Rent scale offered at the facility*
The attached FAQ contains that information.
- *Is this Section 8 housing*
No this will be a privately owned, developed and managed facility
- *Stormwater detention on site*
Detention will be added to the property. This will require some trees to be taken down, but in the end will be a benefit to the adjacent properties. There will be landscape added around the parking lot and the perimeter of the property. A new fence will be installed along the west lot line.
- *Process for annexation and rezoning*
Currently the property is zoned within unincorporated Lake County. HODC will be asking the village to annex the property and rezone it with a multiple-family residential zoning. They are requesting connection to village utilities. They will go through the hearing process with the Plan Commission and final approval by the Village Board.
- *HODC's own staff residing on the property*
They will take referrals for persons willing to work and live on the premises, as long as they meet the income requirements. However, they will not specifically assign or require staff to move onto the property as this is a smaller facility. Their larger facilities typically have onsite staff.

- *Current residents of LZ only to live there*
LZ residents will be considered. But HODC will not prioritize people only from LZ to live there. They cannot restrict where their applicants come from.
- *Is there list of families that will live there*
Currently there is no list. Applications will be accepted 3 months prior to completion of the project and a waitlist will be prepared – there are usually more applicants than availability.
- *Comparison of this facility with “Hearts Place” in Arlington Heights*
Hearts Place is different in that it is a “supportive living” facility funded by the Housing Authority of Cook County – to accommodate people with physical or mental disability. The LZ facility is not proposed for that type of living arrangement.
There were additional questions about that facility related to discharging of firearms on the premises, drug use, aggravated sexual assault, threatening behavior, psychosis, how many police calls. Richard said besides the discharge of a fire arm on one occasion, he was not aware of any of the other issues having occurred at Hearts Place.
- *Eviction of anyone who commits these offences*
They can be evicted through the court system.
- *Resident vetting process*
The tenant selection process includes background checks and credit checks. Every household member is reviewed and rechecked/recertified on an annual basis.
- *Cost of construction and any concerns/hang-ups during construction such as loss of funding, material cost increases*
This is an “all or nothing” project. Funding is obtained from IHDA. IHDA will provide all required funding for the project. There will also be contingencies and reserves put in place before the project begins.
- *Does Richard have any other jobs or relationships with similar projects, contractors, material suppliers, etc? What else does he do (this question was asked repeatedly by one person)*
Richard is a full-time employee with HODC. He is their paid Executive Director.
- *Anticipated submission date for the application?*
30-60 days.
- *Residents access to local amenities, how will they get to these*
Most residents will have their own cars. Will be able to access downtown (Main Street), schools, shopping, etc.
- *Maximum occupancy limit per unit, will families be allowed*
2 persons per bedroom. There will be a mix of 1-, 2- and 3br units. HODC doesn't have a definition of a family – so it could be families (parents and kids), or room-mates within the same

household. All adult persons will be reviewed individually for eligibility.

- *Rents raised annually*
2-3% increase on an annual basis
- *Development to blend into the community. How many of HODC's multiple-family developments are adjacent to single-family homes*
Skokie and Highland Park are examples. Richard get back with more specifics.
- *Why is this not senior housing. Neighbors were told by the county that the property was going to be senior housing. Why is HODC not proposing senior housing*
HODC not the County, rather a private developer, buying the property from the county. They are proposing a different project.
- *Comments by D95 – Dr. Kelly Gallt and Dr. Lauren McArdle from D95 were also present. Dr. McArdle stated that D95 has seen an increase in homeless and refugee families in the area. The district is required to accept them in the schools. This is an excellent opportunity to accommodate these families. They are already here. This project will give them stable housing.*
- *Bus service for the kids*
D95 responded that service for the kids will be provided.
- *Successes of HODC's other facilities*
Most residents tend to stay for a longer time – average of 7 years. HODC successfully manages around 450 residential units in the Chicago area.
- *Environmental sustainability*
The project will use certain sustainable materials and methods of construction, similar to the LEED green building initiative.
- *Sidewalks*
If the village requires a sidewalk connection, the development will provide one.

Mr. Terrance Wallace, Executive Director closed the meeting with his opinions and experiences with similar project and stated that this is something that will benefit the community.

Meeting ended at 8:20pm. Please let me know if you have any further questions.

Thanks.
Sarosh

Sarosh B. Saher, AICP

Community Development Director | Village of Lake Zurich | 505 Telser Road, Lake Zurich, IL 60047

sarosh.saher@lakezurich.org | Direct: 847-540-1754

Engage with Lake Zurich at LakeZurich.org/Connect

From: Ray Keller <Ray.Keller@lakezurich.org>

Sent: Monday, January 30, 2023 10:34 AM

To: Sarosh Saher <Sarosh.Saher@lakezurich.org>; Mike Brown <mike.brown@lakezurich.org>; Roy Witherow <Roy.Witherow@lakezurich.org>; Kyle Kordell <Kyle.Kordell@lakezurich.org>; Tom Poynton <tom.poynton@lakezurich.org>

Subject: Midlothian Manor Redevelopment - neighborhood meeting recap

Good morning,

I attended the HODC's neighborhood meeting at the Hope Collective church on Saturday afternoon. There were about 40 people there, a good mix of nearby neighbors and individuals who were there to support the initiative. Hope Collective Pastor Dave Mudd and Executive Director Terrance Wallace were also in attendance. Richard Koenig did a good job facilitating the discussion and answering questions. Overall, the tone of the crowd was civil, though skeptical of anything Richard said.

The neighbors' primary concerns are familiar:

Some "those people" suspicions, which Richard Koenig addressed with description of typical residents (have jobs, often single parents or older individuals, average residency tenure 7-8 years, no felony convictions, asked to leave if norms violated, etc.).

Storm water management – Residents were skeptical that the situation would be improved by detention system, considering increased impervious surface

Buffering – lights from the parking lot, lights from headlights from the parking lot shining into their bedrooms, etc.

Too dense – a couple of people asking for reduction in units

Long-term maintenance/appearance of the facility – Richard explained how they budget for long term repair/replacement, but resident asking question did not seem convinced.

Parking – not enough/too much – they intend 1 space for 1 bedroom units, 1.5 spaces for every 2- and 3-bedroom unit. Some thought that was too much pavement, others thought that wasn't enough for residents + guests. Richard explained that several tenants elsewhere don't all have cars, which then led to concerns about...

Not the right location – not served by transit, too far to walk anywhere, introducing some kind of transportation assistance would be harmful to neighborhood traffic. If transportation assistance is provided, then the problem becomes...

Supportive services – Richard said that they do not provide supportive services, which some took as

an indicator of “those people” in residence. But for those who need supportive services, it is too far to walk, not near anything, etc.

There were no obvious objections to the design or appearance of the buildings as shown. HODC’s other properties in Highland Park, Deerfield, Buffalo Grove, and Palatine were cited as representative of what they run their facilities.

There were a couple of questions about why they would want to annex to the Village. There were no obvious concerns about water or sewer, beyond enabling the development.

HODC intends to submit their annexation, rezoning and PUD applications to the Village in the next month or two. They intend to host another neighborhood meeting after the engineering plans are completed, possibly within the next 2-3 weeks.

Let me know if you have any questions.

Thanks,

Ray

Ray Keller, ICMA-CM, AICP
Village Manager
Village of Lake Zurich
(847) 540-1693
Ray.Keller@LakeZurich.org



At the Heart of Community

PUBLIC WORKS DEPARTMENT

505 Telsler Road
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June 12, 2023

Mr. Sarosh Saher
Director of Community Development
Village of Lake Zurich
505 Telsler Road
Lake Zurich, Illinois 60047

**PRELIMINARY ENGINEERING REVIEW #1 – NOT APPROVED
PRELIMINARY UTILITY REVIEW #1 – NOT APPROVED**

DEVELOPMENT: 22843 Lakewood Lane
Midlothian Manor
Lake Zurich, IL 60047

ITEMS RECEIVED: 1) Full Application including Preliminary Engineering dated
11/22/21
2) Stormwater Report Narrative and Calculations
3) Traffic Impact Study by Kimley Horn dated October 2022

On behalf of the Village of Lake Zurich, Manhard Consulting has completed a Preliminary Engineering review of the above referenced material for conformance with the Village ordinances and general accepted engineering practices. We reserve the right to generate additional comments on future submittals. The comments below are preliminary in nature. A detailed review will be provided with the final engineering plan submittal. By copy of this letter, we request that the Developer address all comments in a response letter and submit the appropriate revisions for further review.

General

- 1) We request that the Applicant address all comments in a response letter and submit the appropriate revisions for further review and final approval by the Village.
- 2) The developer is required to provide verification and/or submit documentation of approval or sign off letters from all agencies other than the Village of Lake Zurich that exercise jurisdiction over this development (for example IDOT, IEPA, SMC, Lake County Health Department). Please submit a copy of all approvals received to-date and list any approvals pending in the response letter.
- 3) It is the property owner's responsibility to ensure compliance with the 2010 ADA standards for Accessible Design and the Illinois Accessibility Code and subsequent amendments.
- 4) An AutoTurn exhibit should be provided to confirm maneuverability of fire and garbage trucks on the site. The Fire Department should confirm that the AutoTurn movements are adequate for their operations.
- 5) Include specifications for indemnification of the Village and liability insurance requirements for the developer as found in the Village Code §7-7-8 and §7-7-9. Insurance certificates

naming both the Village of Lake Zurich and Manhard Consulting as additional insureds will be required.

- 6) Lakewood Lane is unincorporated Elmhurst Township. The Village reserves the right to request existing infrastructure such as pavement, culverts, etc. be upgraded in order to be considered for annexation into the Village. The ultimate jurisdiction of the roadway may also impact comments related to stormwater and other site improvements.

Estimate of Probable Cost

- 7) An Engineer's Opinion of Probable Cost (EOPC) shall be submitted for the proposed site improvements. A Letter of Credit for in the amount of the proposed improvements will be required.

Existing Conditions Sheet 2 of 9

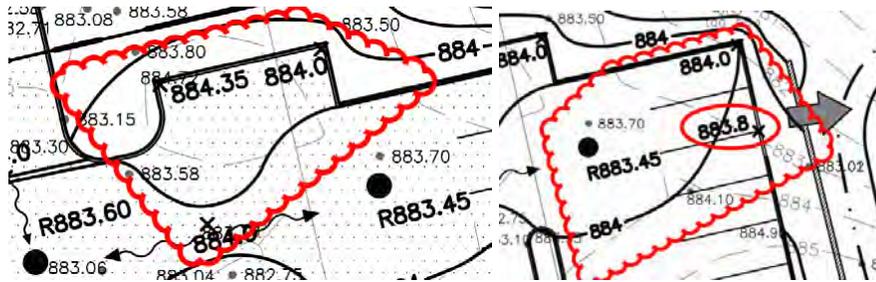
- 8) Utilities to be disconnected shall be done so at their respective main lines by mechanical methods approved by the Village of Lake Zurich.
- 9) The sizes of the existing utilities to be disconnected shall be shown and verified in the field. Credits for utility connections may apply.
- 10) Septic tank and appurtenances removal shall be permitted by the County Health Department.

Geometric Plan Sheet 3 of 9

- 11) Please submit pavement cross sections with structural numbers meeting the Lake Zurich commercial parking lot development ordinance section 10-6-20.
- 12) Please include information on a trash enclosure if applicable. Heavy duty pavement should extend to all areas that the garbage truck is anticipated to drive over. This should be confirmed by the autoturn exhibit.
- 13) Public sidewalk should be constructed along the lot frontages in accordance with Village Ordinance 10-6-14. The sidewalk should meet Public Right-of-Way Access Guidelines, which can be found at <https://www.access-board.gov/provag/>. The Building Department should be contacted to determine if the applicant can provide a fee-in-lieu for areas without an existing sidewalk network or if there are site conditions that need to be considered.

Grading Plan Sheet 4 of 9

- 14) It appears fill may be required to achieve the FF or proposed grade in various areas around the site. Suitable fill shall be placed in layers no greater than one foot loose before compaction. Compaction equipment shall be suitable for the material used as fill. An on-site soil scientist shall confirm the fill has been sufficiently compacted in lifts and a report sent to the Village of Lake Zurich. This report should verify that the building pad meets the bearing capacity requirements of the proposed foundation and other structural components of the project including pavement and curb.
- 15) Parking lot pavement should be designed to drain at minimum 1%. 0.5% should be considered the absolute minimum. Please revise grades or contours at the following locations clouded:



- 16) A Retaining wall is proposed between the parking lot/building and the detention pond. The top of wall and bottom of wall shall be called out in the plans. Retaining walls greater than 24" shall be designed and stamped by a Structural Engineer Licensed in the state of Illinois. Please include a cross section of the proposed wall.
- 17) Slopes near the detention area scale 1V:3H. This is maximum allowable, and slopes shall not exceed 1V:3H.
- 18) Grades of all excavated detention areas shall be included in the as built for capacity verification.
- 19) If gullies or rills form in the loose soil of the basin slopes, the displaced soil shall be removed from the bottom of the basin and the gullies/rills filled and reseeded.
- 20) There appears to be a typo in the proposed top of wall elevation 804.23.

Soil Erosion Control Plan Sheet 5 of 9

- 21) Please include concrete washouts.
- 22) Update Sequence note B which refers to Old Hicks Road access route.
- 23) Please provide a seed list consisting of native detention basin plant mixes for the detention basin area.
- 24) Per Ordinance 10-6-18 Landscaping, For nonresidential development, all seeded or sodded areas shall have a minimum twelve inches (12") of topsoil.
- 25) The applicant shall include a storm water management plan for the short and long-term maintenance of the basin. This should include a maintenance and monitoring program for the first 3-5 years of establishment in which invasive species are removed from the native plantings. Once native plants cover 75% of the basins with no bare areas greater than 2' the basin can be considered established. The Village will not release the estimated amount for the basin plantings from the Letter of Credit until establishments requirements are met. Annual maintenance thereafter should include invasive removals, clean up of trash and debris, and removing sediment and plant material to maintain proposed basin bottom elevation. More details can be found at <https://www.epa.gov/npdes>.

Utility Plan Sheet 6 of 9

Water Service

- 26) Public works water department shall confirm that the water main on Lakewood is acceptable to tap onto. There is water main available on Midlothian across the street as well.
- 27) It is preferred to make connection with a pressure connection. It appears a storm sewer line that is capped to the northeast is in close proximity to the proposed tapping location. Please clarify what is proposed for method of connection.
- 28) No pipe material or size for the water service is indicated. Village does allow C900 PVC for water pipe material. Tracer must be installed with C900 with accessible wire connecting housing included near hydrants.
- 29) WSFU calculations shall confirm the water service size.

- 30) Provide crossing table for all utility crossings showing separation and material requirements are met. Storm sewer crossings over the water service shall maintain a vertical clearance of 18". The storm sewer should be constructed of water main quality pipe for 10' either side of the water service crossing.
- 31) The water service shall require a full diameter flush, pressure testing per Village Requirements (100 PSI for 1 hour with no pressure loss), and chlorination. Village shall approve of the flushing method as no hydrant is shown on the service line.
- 32) The pressure connection valve shall only be operated by the Village of Lake Zurich. Requests to operate the valve shall be made minimum 48 hours in advance of the work.
- 33) Connection fees will be determined by domestic service size requirement. This size should be determined by WSFU calculations.
- 34) RPZ backflow preventers are required to be tested and certified upon installation and annually thereafter with a copy of each test result provided to the Utilities division of Public Works.
- 35) RPZ Backflow prevention will be required on both the domestic and fire suppression sides of the water service.
- 36) Each RPZ backflow preventor shall have its own appropriately sized drain.
- 37) All RPZ's shall be certified annually and results remitted to Public Works.
- 38) Prior to occupancy, plumbing contractor to provide written survey to the Village of actual or potential cross-connections to the potable water system if discovered on-site during or after building construction. Additional backflow protection may be required.
- 39) Water meter requires a 1/2" conduit within 18" of the meter that terminates flush on an exterior wall (36" above finished grade) for the remote meter reader wire.
- 40) A plumbing sheet showing the sanitary and water service riser diagram shall be included with the architectural plans.
- 41) Village shall be present for all connections or crossings of existing water, storm, or sanitary mains.
- 42) The fire department shall approve of the fire department connections.
- 43) It should be understood that the water service is the maintenance responsibility of the property owner from the pressure connection valve to the building.

Sanitary Service

- 44) Applicant to submit plans to Lake County Public Works for determination of applicable sanitary sewer treatment connection fee.
- 45) A sanitary monitoring manhole shall be installed located less than 10' from the building.
- 46) Sanitary inverts shall be included on future submittals. 1% slopes shall be achieved for 6" sanitary sewers.
- 47) 6" sanitary services shall be tied into the main utilizing wye connection per exhibit no 14.
- 48) Depending on the depth of the sanitary sewer connection, the casing pipe may need to extend past the water main.
- 49) It should be understood that the sanitary service is the maintenance responsibility of the property owner from the service connection at the main to the building.

Stormwater

- 50) PVC pipe is proposed for all storm sewer. PVC under pavement shall be minimum SDR 26.
- 51) Based on surveyed invert notes, the 18" storm sewer crossing on Lakewood Lane appears to have either a sediment dam or pipe settlement as the top of water in the structure should be equal to the FES invert of 872.46. This should be investigated by the applicant prior to connecting to the manhole.
- 52) The condition of the existing manhole should be verified by the Village of Lake Zurich as usable. If verified adequate, the connection should be cored and booted.
- 53) As the final engineering progresses, the applicant shall ensure that there are no adverse impacts to the downstream properties, as there have been documented flooding concerns identified downstream. No response is required at this time.

- 54) A Hydro-Brake (or approved equivalent) should be used in place of the small restrictors to maintain the theoretical restrictor sizes while allowing opportunity for maintenance.
- 55) The proposed Detention Basin Detail shown on Sheet 4 of the engineering plans has some conflicting elevations with the proposed stormwater modeling.
- 56) The stormwater management has two models for the proposed basin. It should be clarified why two are included.
- 57) During final engineering, please provide electronic copies of the model for review.
- 58) It is understood that additional information will be provided during final engineering. Per Sections 400 and 401 of the WDO, please submit the following documents as part of the final engineering submittal:
 - a. A completed Watershed Development Permit application signed by the applicant or applicant's agent, and when required, a Professional Engineer and Certified Wetland Specialist. (400.01)
 - b. A site drainage plan which depicts buffer areas, existing or proposed septic systems and wells. (400.04)
 - c. Enhance cross-section views for the stormwater management system to show the elevations of lowest floor or lowest adjacent grade for structures shall be included on the development plan as applicable. Refer to 506.03, §706 Building Protection Requirements.
 - d. A section in the hydrologic and hydraulic analysis report describing how the runoff volume reduction requirements (provide a hierarchy as described in Section 503 Runoff Volume Reduction (RVR)) are incorporated into the development site plan. The section shall include the rationale for the selection of measures. The section shall also provide supporting calculations for meeting the runoff volume reduction requirements, as outlined in Appendix O. (401.06) Please be cognizant that all credits achieved in the detention basins must be equaled in other measures on the site.
 - e. A maintenance plan for the ongoing maintenance of all stormwater management system components, including wetlands, is required prior to plan approval. (401.09)
 - f. A copy of the Natural Resources Inventory (NRI) for development that is required to obtain a NRI performed by the McHenry-Lake County Soil and Water Conservation District pursuant to state statute [70 ILCS 405/22.02a]. (401.13)
 - g. A Notice of Intent (NOI) to the IEPA to comply with the NPDES Permit. (401.14)
 - h. A copy of the consultation application to the Illinois Department of Natural Resources that is required to comply with the consultation process of the Illinois Endangered Species Protection Act [520 ILCS 10/11] and the Illinois Natural Areas Preservation Act [525 ILCS 30/17]. (401.16)
 - i. The applicant shall submit a subsurface drainage inventory. The inventory shall include locations of existing farm and storm drainage tiles by means of slit trenching and other appropriate methods performed by a qualified subsurface drainage consultant. All existing drain tile lines damaged during the investigation shall be repaired to their previous working status.
 - j. Calculations to show the detention facilities are designed to dewater in no greater than 96 hours per Article 503.02.
 - k. An exhibit that illustrates the tributary area to the detention basin and the area of unrestricted flow.
 - l. Overland flow paths and storm sewer calculations (inlet capacity, ponding depth, storm sewer sizing, etc) that show conformance with Sections 506.01 and 506.03 at time of final engineering, but it should be considered to ensure that there will not be an impact to the F/F elevation of the building.
 - m. Per Article 507, the emergency overflow structures should be sized for the critical duration base flood inflow of the upstream tributary area, which per the submitted models would be the 100-year 1 hour event.

- n. Confirmation of compliance with Article, 507.02A, which requires all structures in parcels containing or adjoining the facility shall have a lowest adjacent grade a minimum of one (1) foot above the design high water elevation within the emergency overflow structure.
 - o. Water quality treatment should meet the requirements in Section 504, including hydrocarbon removal per Section 504.04 for new parking lots with greater than 25 spaces. Calculations should be provided by the manufacturer of the water quality unit verifying removal standards are met. Additional information should be provided to illustrate the pollutant removal potential for the rock trench.
- 59) It should be confirmed that the proposed detention basin meets the IDOT basin setback requirements.
- 60) Please verify that no wetlands exist on the site.

Details and Standards Plan Sheet 7-9 of 9

- 61) Please include Lake Zurich detail sheets crossing out details that are not applicable. This should include the usage of the restrictor manhole structure detail.

If you should have any questions, please do not hesitate to contact me.

Yours truly,
MANHARD CONSULTING



Kevin Lill
Project Engineer

P:\201.001 Village of Lake Zurich\Permits\1194 Route 22 Self Storage\Preliminary Engineering Review 1_1194 Route 22 Self Storage_2023.06.02.docx

Landscaping

- Requirement for canopy trees is a minimum of 3" in caliper.
- The landscape code designation on the plan does not match the legend.
 - Update the legend to include the proper tag, size, and quantity of each plant material.
 - Include in the legend or on the site plan, the number of plant units and what type of material is being used to achieve the plant unit calculations.
- Plant Unit breakdown per lot line.
 - North Lot Line (394.52') – 6 Plant Units are required
 - East Lot Line (554.26') – 16.5 Plant Units are required
 - South Lot Line (128.32') – 2 Plant Units are required
 - West Lot Line (285.21') – 4 Plant Units are required

Traffic Study

The corresponding road network will continue to operate at a level of service D. There will be no significant changes to the road network with the proposed improvements. Staff agrees with the recommendation and conclusion by the traffic consultant to continue maintaining the current road design.





At the Heart of Community

FIRE DEPARTMENT
Fire Prevention Bureau

1075 N. Old McHenry Road
Lake Zurich, Illinois 60047
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(847) 540-5073
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April 25, 2023

To: Tim Verbeke
Village of Lake Zurich
505 Telsler Road
Lake Zurich, Illinois 60047

Re: PR23-066
Midlothian Manor
22843 Lakewood Lane
Lake Zurich, IL 60047

Dear Tim,

Thank you for providing the submittal. After reviewing the packet, I am providing the following comments:

1. The new building will require a complete fire sprinkler system.
2. The new building will require a new fire alarm system.
3. The new building will require a minimum 6" inch incoming water service line. This line shall serve fire protection and domestic use.
4. The entry shall be at least 24 feet in width.
5. Provide an aerial ladder turning template.
6. The building shall be supplied with a sprinkler riser room. The room and door shall face into the main parking lot.
7. There shall be a fire hydrant within 150' feet of the F.D.C.
8. Please provide the proposed square foot size of the building.

If there are any questions, please contact my office.

Sincerely,

Bob Kleinheinz
Bob Kleinheinz
Fire Prevention Specialist-CFO
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