

Traffic and Parking

Proposed Haymarket DuPage

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Luay Aboona, PE, PTOE

Principal



Luay Aboona, PE, PTOE

- Founding Principal of Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.)
- Bachelor of Science in Civil Engineering
University of Southampton
England
- Master of Science in Structural Engineering
Northwestern University
Evanston
- Professional Engineer in State of Illinois (PE)
- Registered Professional Traffic Operations Engineer (PTOE)
- Over 30 years of experience in Traffic and Transportation Engineering

Traffic and Parking Study Objectives

- Examine existing traffic conditions to establish a base condition
- Assess the impact the proposed Haymarket DuPage development will have on traffic activity in the area under projected conditions
- Assess the adequacy of the access system that will serve the proposed Haymarket DuPage
- Assess the adequacy of the parking supply

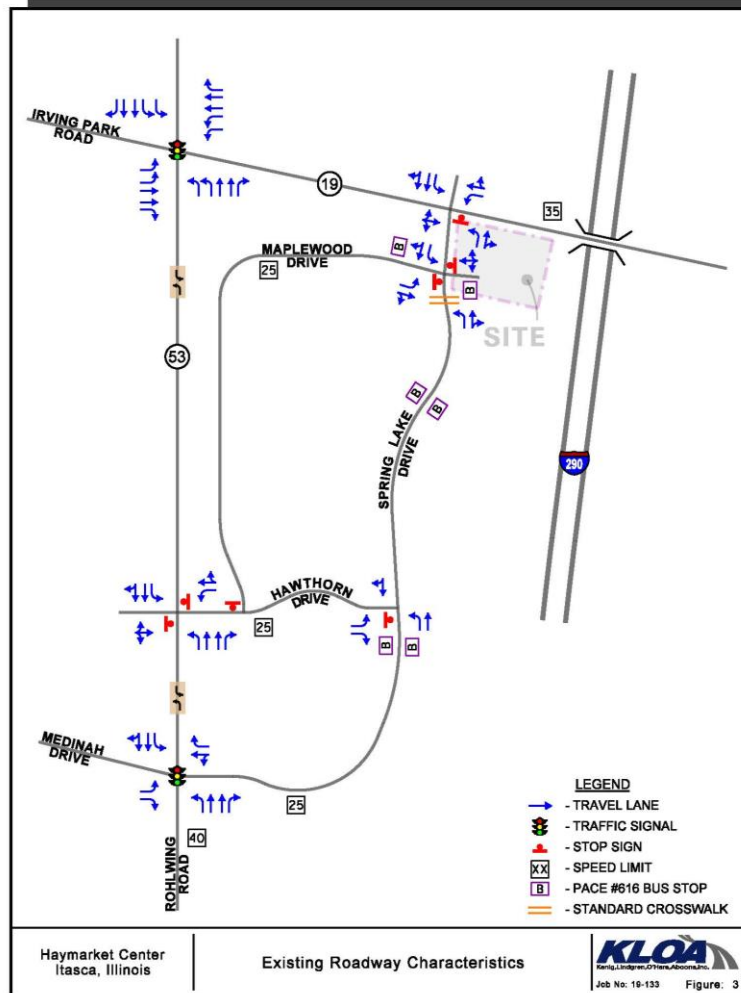
Site Characteristics

- The site is located adjacent to Spring Lakes Business Park
- Site is the former Holiday Inn Hotel
- Major roadways that provide access to the site are Irving Park Road (IL 19), Rohlwing Road (IL 53), and Spring Lake Drive
- The site provides 384 parking spaces

Site Location



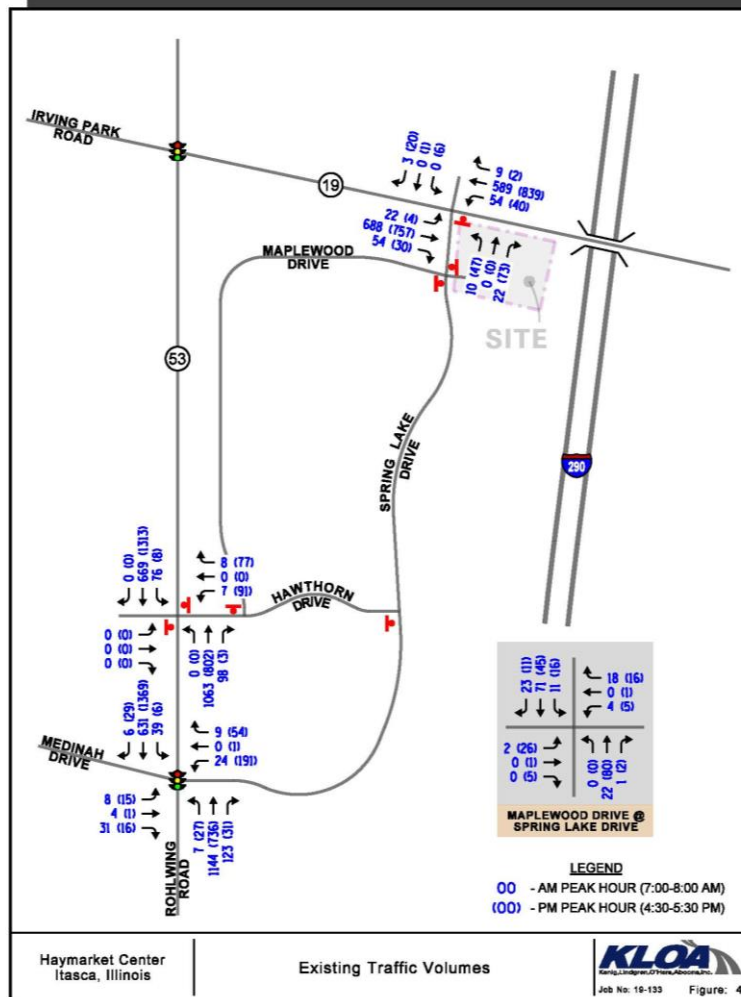
Existing Roadway Characteristics



Existing Traffic Volumes

- Vehicle, pedestrian, and bicycle counts conducted on Wednesday, May 29, 2019 during the peak periods of 7:00 A.M. to 9:00 A.M. and 4:00 P.M. to 6:00 P.M. at the following four intersections:
 - ❖ Rohlwing Road with Spring Lake Drive
 - ❖ Spring Lake Drive with Irving Park Road
 - ❖ Spring Lake Drive with Maplewood Drive/Site Access
 - ❖ Rohlwing Road with Hawthorn Drive
- Weekday morning peak hour is generally from 7:00 A.M. to 8:00 A.M.
- Weekday evening peak hour is generally from 4:30 P.M. to 5:30 P.M.

Existing Peak Hour Traffic Volumes



Haymarket DuPage Traffic Characteristics

The proposed facility will provide the following:

- 240 beds comprised of 96 treatment beds and 144 recovery home beds
- 163 full-time employees plus nine contract food service workers over three shifts
- First shift will be from 7:00 A.M. to 3:00 P.M.; Second shift will be from 3:00 P.M. to 11:00 P.M.; Third shift will be from 11:00 P.M. to 7:00 A.M.
- Facility will also accommodate 48 outpatient people daily who will be arriving from offsite
- Facility will provide van/auto transportation to doctors' appointments, pick up medical prescriptions, etc.

Estimated Site Traffic Generation

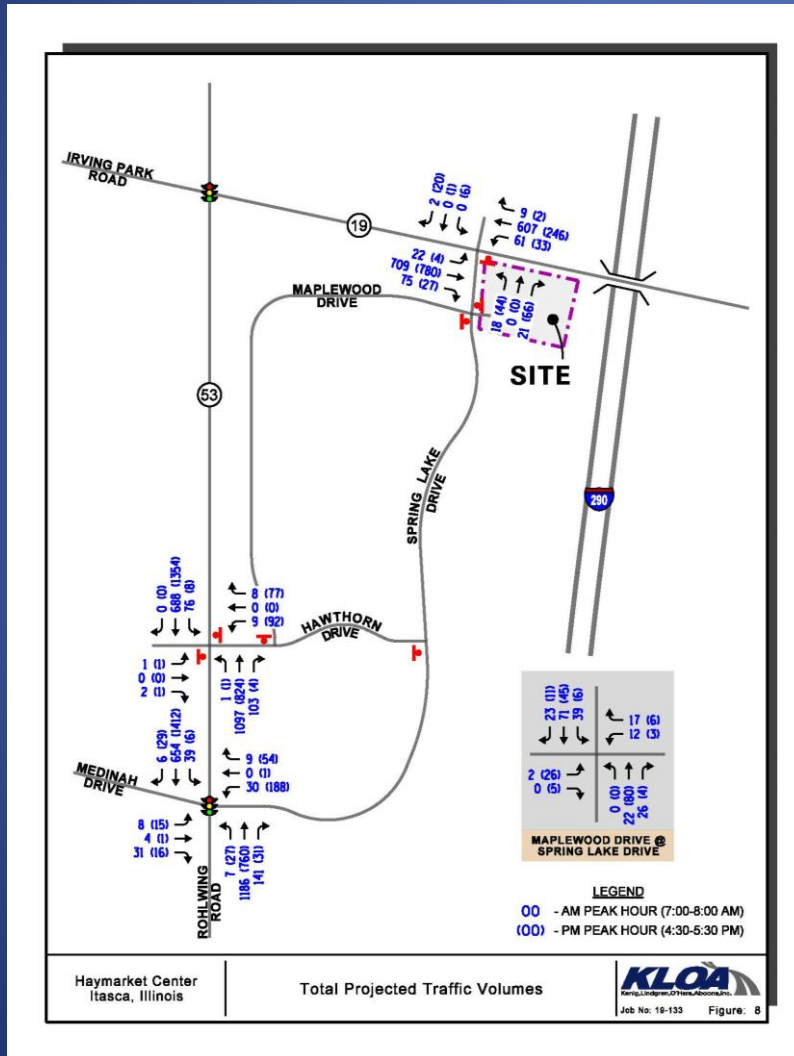
| Type/Size | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Weekday Daily (Two-Way) | | Saturday Daily (Two-Way) | |
|---------------|---------------------------|-----------|---------------------------|----------|-------------------------|------------|--------------------------|------------|
| | In | Out | In | Out | In | Out | In | Out |
| Assessment | -- | -- | 1 | 1 | 10 | 10 | 10 | 10 |
| Outpatient | -- | -- | 5 | 5 | 48 | 48 | 48 | 48 |
| Recovery Home | 7 | -- | 2 | 1 | 13 | 13 | 13 | 13 |
| Employees | 58 | 29 | -- | -- | 117 | 117 | 117 | 117 |
| Visitors | -- | -- | 2 | 2 | 0 | 0 | 24 | 24 |
| Vendors | -- | -- | -- | -- | 2 | 2 | 2 | 2 |
| Total | 65 | 29 | 10 | 9 | 197 | 197 | 221 | 221 |

Comparison of Haymarket DuPage to the Former Holiday Inn Hotel

| Type/Size | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Weekday Daily (Two-Way) | | Saturday Daily (Two-Way) | |
|--|---------------------------|-----------|---------------------------|------------|-------------------------|-------------|--------------------------|-------------|
| | In | Out | In | Out | In | Out | In | Out |
| Haymarket DuPage | 65 | 29 | 10 | 9 | 197 | 197 | 221 | 221 |
| Former Hotel ¹ (161 rooms) | <u>44</u> | <u>31</u> | <u>48</u> | <u>47</u> | <u>695</u> | <u>695</u> | <u>627</u> | <u>627</u> |
| Difference | +21 | -2 | -38 | -38 | -498 | -498 | -406 | -406 |

1 – Based on trip generation rates published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*, 10th Edition

Projected Traffic Conditions



Traffic projected to Year 2026 conditions

- Development-generated traffic
- Regional traffic growth ~ 3 percent

Traffic Capacity Analysis

Capacity Analysis conducted for weekday morning and weekday evening peak hours for:

- Existing Traffic Volumes
- Projected Year 2026 Traffic Volumes – Haymarket DuPage development traffic plus regional growth

Traffic Analysis Findings

- The proposed development will have a low traffic impact on the surrounding roadway network.
- The signalized access off IL 53 and the two unsignalized access points off both IL 53 and IL 19 that serve the Spring Lakes Business Park, which includes the proposed development, will continue to operate at acceptable levels of service during peak hours and no roadway or traffic control improvements are recommended at these intersections in conjunction with the proposed development.
- The existing full access drive off Spring Lake Drive opposite Maplewood Drive that serves the site will continue to be adequate to accommodate the projected traffic estimated to be generated by the proposed redevelopment.
- When compared with the previous hotel use on site, the proposed facility will result in an overall reduction in trip generation.

Parking Evaluation

- The site currently provides 384 parking spaces
- The facility also proposes installation of three bicycle racks to each hold seven bicycles
- For evaluation purposes, Village of Itasca and ITE parking ratios were applied to principal uses within the facility:
 - ❖ Lodging, Rooming, and Boarding Houses – 240 beds
 - ❖ Medical Office – 12,788 square feet
 - ❖ Health Care/Clinic – 61 employees (peak number at any given time)

| ITE LUC | Land Use | Size | ITE Peak Parking Demand | Village Requirement |
|---|----------------|---------------------------|-------------------------|---------------------|
| Business Hotel (311) | Lodging | 240 beds ¹ | 178 | 241 |
| Medical Office (720) | Medical Office | 12,788 s.f. | 41 | 77 |
| Clinic (630) | Health Center | 61 employees ² | 51 | 67 |
| Total Parking Demand | | | 270 spaces | 385 Spaces |
| LUC – Land Use Code | | | | |
| 1 – It is estimated that approximately 227 patients will not have cars. However, for analysis purposes, no reduction was applied to account for this. | | | | |
| 2 - Peak number of employees at any given time (61 employees) | | | | |

Parking Findings

- Parking demand as calculated using ITE rates can be accommodated by the existing 384 parking spaces.
- This calculated parking demand is very conservative, since it assumes that each individual land use peaks at the same time and that all patients drive.
- Given that the facility will be providing bicycle racks with 21 bicycle spaces, it will result in compliance with Village code requirements for off-street parking.