Hallandale City Center
501 N. Dixie Highway
Hallandale Beach, Florida

Traffic Study

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INTRODUCTION

A new mixed-use (residential, retail, and office) development is planned to be located on the west side of N. Dixie Highway generally between Foster Road (NW 5th Street) and NW 7th Street in Hallandale Beach, Broward County, Florida. The location of this project site is illustrated in Figure 1 on the following page.

KBP Consulting, Inc. has been retained by Claudia Peñas to prepare a traffic study in connection with this proposed development. This study addresses the vehicular traffic volumes expected to be generated by the proposed uses and the projected turning movement volumes at the project driveways on N. Dixie Highway, NW 1st Avenue, NW 2nd Avenue, and on NW 6th Street.

This traffic study is divided into four (4) sections, as listed below:

1. Inventory
2. Trip Generation
3. Trip Distribution and Driveway Assignment
4. Summary & Conclusions
FIGURE 1
Hallandale City Center
Hallandale Beach, Florida

Project Location Map
EXISTING LAND USE AND ACCESS

The subject site consists of a total area of approximately 3.73 acres and contains 13 parcels. Of these parcels of land, 12 are vacant and one (1) contains a former auto body shop. (This auto body shop, Signature Auto Body, recently relocated four blocks to the south on N. Dixie Highway.) There are numerous former driveway locations serving the overall site.

PROPOSED LAND USES AND ACCESS

The subject site will be redeveloped with three (3) multi-story mixed-use buildings. Building A (a two-story building) will be located on the north side of Foster Road (NW 5th Street) between NW 1st Avenue and NW 2nd Avenue. This building will consist of 22 residential dwelling units. Vehicular access to this building will be provided by one (1) full access driveway on NW 1st Avenue and one (1) full access driveway on NW 2nd Avenue.

Building B (a two-story building) will be located on the north side of NW 6th Street between N. Dixie Highway and NW 1st Avenue. This building will consist of 22 residential dwelling units. Vehicular access to this building will be provided by one (1) right-in / right-out only driveway on N. Dixie Highway and one (1) full access driveway on NW 1st Avenue.

Building C (a three-story building) will be located on the west side of N. Dixie Highway between Foster Road (NW 5th Street) and NW 6th Street. This building will consist of 45 residential dwelling units, 16,563 square feet of retail space, and 17,280 square feet of office space. Vehicular access to this building will be provided by one (1) full access driveway on NW 1st Avenue and one (1) full access driveway on NW 6th Street. Appendix A contains the preliminary site plan for the proposed Hallandale City Center development.
**Roadway System**

N. Dixie Highway is a four-lane, one-way (southbound) arterial roadway. The corresponding northbound lanes serving this corridor are provided on the east side of the FEC Railroad tracks. This roadway (NE 1st Avenue) provides two (2) northbound lanes. The remaining roadways surrounding the site (Foster Road / NW 5th Street, NW 6th Street, NW 1st Avenue, and NW 2nd Avenue) are all two-lane, two-way local roadways.
A trip generation analysis has been conducted for the proposed development at this site. The analysis was performed using the trip generation rates and equations published in the Institute of Transportation Engineer’s ITE *Trip Generation Manual (10th Edition)*. The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to the ITE report, the most appropriate land use categories and corresponding rates / equations for the existing and proposed development are as follows:

**Multifamily Housing (Low-Rise) – ITE Land Use #220**
- Weekday: \( T = 7.32 \times X \)
  \( T = \text{number of trips and } X = \text{number of dwelling units} \)
- AM Peak Hour: \( T = 0.46 \times X \) (23% in / 77% out)
- PM Peak Hour: \( T = 0.56 \times X \) (63% in / 37% out)

**Multifamily Housing (Mid-Rise) – ITE Land Use #221**
- Weekday: \( T = 5.44 \times X \)
  \( T = \text{number of trips and } X = \text{number of dwelling units} \)
- AM Peak Hour: \( T = 0.36 \times X \) (26% in / 74% out)
- PM Peak Hour: \( T = 0.44 \times X \) (61% in / 39% out)

**Retail (Shopping Center) – ITE Land Use #820**
- Weekday: \( T = 37.75 \times X \)
  \( T = \text{number of trips and } X = 1,000 \text{ square feet of gross leasable area} \)
- AM Peak Hour: \( T = 0.94 \times X \) (62% in / 38% out)
- PM Peak Hour: \( T = 3.81 \times X \) (48% in / 52% out)

**General Office Building – ITE Land Use #710**
- Weekday: \( T = 9.74 \times X \)
  \( T = \text{number of trips and } X = 1,000 \text{ square feet of gross floor area} \)
- AM Peak Hour: \( T = 1.16 \times X \) (86% in / 14% out)
- PM Peak Hour: \( T = 1.15 \times X \) (16% in / 84% out)
Utilizing the previously listed trip generation rates from the referenced ITE document, a trip generation analysis was undertaken for the proposed development. The results of this effort are documented in Table 1 below.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Size</th>
<th>Daily Trips</th>
<th>AM Peak Hour Trips</th>
<th>PM Peak Hour Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Building A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multifamily Housing (Low-Rise)</td>
<td>22 DU</td>
<td>161</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>161</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Building B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multifamily Housing (Low-Rise)</td>
<td>22 DU</td>
<td>161</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>161</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Building C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multifamily Housing (Mid-Rise)</td>
<td>45 DU</td>
<td>245</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Specialty Retail</td>
<td>16,563 SF</td>
<td>625</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>General Office</td>
<td>17,280 SF</td>
<td>168</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td>870</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1,192</td>
<td>18</td>
<td>34</td>
</tr>
</tbody>
</table>

Compiled by: KBP Consulting, Inc. (February 2019).
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition).

As indicated in Table 1, the proposed project is anticipated to generate 1,192 daily vehicle trips, 52 AM peak hour vehicle trips (18 inbound and 34 outbound) and 107 vehicle trips (58 inbound and 49 outbound) during the typical afternoon peak hour.
Based upon the driveway locations and configuration as well as the surrounding roadway network, the projected driveway assignment has been developed. Figures 2 through 4 on the following pages present the resulting AM and PM peak hour driveway volumes for each of the proposed buildings. Based upon the projected low driveway volumes anticipated during the AM and PM peak hours, exclusive turn lanes are not required / warranted.
Project Driveway Volumes
Building A

Hallandale City Center
Hallandale Beach, Florida

LEGEND
4 AM Peak Hour Volume
(2) PM Peak Hour Volume
Project Driveway Volumes
Building B

LEGEND
4 AM Peak Hour Volume
(2) PM Peak Hour Volume

FIGURE 3
Hallandale City Center
Hallandale Beach, Florida
Project Driveway Volumes
Building C

LEGEND

4  AM Peak Hour Volume
(2)  PM Peak Hour Volume

FIGURE 4
Hallandale City Center
Hallandale Beach, Florida
SUMMARY & CONCLUSIONS

A new mixed-use (residential, retail, and office) development is planned to be located on the west side of N. Dixie Highway generally between NW 5th Street (Foster Road) and NW 7th Street in Hallandale Beach, Broward County, Florida. The subject site will be redeveloped with three (3) multi-story mixed-use buildings. The total number of residential dwelling units will be 89. There will be 16,563 square feet of retail space and 17,280 square feet of office space. Vehicular access to these buildings will be provided on N. Dixie Highway, NW 1st Avenue, NW 2nd Avenue and NW 6th Street.

The Hallandale City Center development is anticipated to generate 1,192 daily vehicle trips, 52 AM peak hour vehicle trips (18 inbound and 34 outbound) and 107 vehicle trips (58 inbound and 49 outbound) during the typical afternoon peak hour.

Based upon the projected low driveway volumes anticipated during the AM and PM peak hours, turn lanes are not required and further detailed traffic analyses are not warranted.
Appendix A

Hallandale City Center

Hallandale Beach, Florida

Preliminary Site Plan
SITE CALCULATIONS

LOT A

LOT B

LOT C

TOTAL RESIDENTIAL

TOTAL OFFICE

TOTAL REQUIRED SITE PARKING

REQUISITED ACCORDING

LOTS

UNIT/ACRES

ZONING

PROPOSED

W/REV

RESIDENTIAL USE

OCCUPANCY

WIDTH

MINIMUM

SETBACKS

PERCENT

1ST

2ND

SIDE

BUILDING

MINIMUM

MAXIMUM

MAX. GROSS

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