2050 Hammondville Road Pompano Beach, Florida

TRAFFIC STATEMENT

prepared for: Dunay, Miskel & Backman, LLP

KBP CONSULTING, INC.

January 2023

2050 Hammondville Road

Pompano Beach, Florida

Traffic Statement

January 2023

Prepared for:

Dunay, Miskel & Backman, LLP

Prepared by:

KBP Consulting, Inc.

APPROVED BY:



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KBP CONSULTING, INC. 8400 N. UNIVERSITY DRIVE, SUITE 309 TAMARAC, FLORIDA 33321 PH: 954-560-7103 KARL B. PETERSON, P.E. NO. 49897

TABLE OF CONTENTS

INTRODUCTION	.1
INVENTORY	.3
Existing Land Use and Access	.3
Proposed Land Use and Access	.3
Roadway System and Transit Service	.3
TRIP GENERATION	.4
TRIP DISTRIBUTION AND DRIVEWAY ASSIGNMENT	.6
SUMMARY & CONCLUSIONS	.8

LIST OF FIGURES

FIGURE 1 – Project Location Map	2
FIGURE 2 – Driveway Traffic Assignment	7

LIST OF TABLES

TABLE 1 – Trip Generation Summary .	
-------------------------------------	--

2050 Hammondville Road is a proposed multifamily residential development to be located in the southeast quadrant of the intersection at Hammondville Road (Dr. MLK Boulevard) and S. Powerline Road (State Road 845) in Pompano Beach, Broward County, Florida. More specifically the Broward County Folio Numbers for the subject site are 4842 34 00 0270 and 4842 34 00 0271. The location of this project site is illustrated in Figure 1 on the following page.

KBP Consulting, Inc. has been retained by Dunay, Miskel & Backman, LLP to prepare a traffic statement in connection with this proposed development. This study addresses the vehicular traffic volumes expected to be generated by the proposed land use and the projected turning movement volumes at the project driveways along Hammondville Road.

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

- 1. Inventory
- 2. Trip Generation
- 3. Trip Distribution and Driveway Assignment
- 4. Summary & Conclusions



Project Location Map

KBP

CONSULTING, INC.

FIGURE 1 2050 Hammondville Road Pompano Beach, Florida

Existing Land Use and Access

The subject site has a land area of approximately 3.765 acres (164,009 square feet). There is an existing 1,308 square foot convenience store on this site. Vehicular access to the site is currently provided by one (1) right-turn in / right-turn out only driveway on Hammondville Road and by one (1) right-turn in / right-turn out only driveway on S. Powerline Road.

Proposed Land Use and Access

The proposed development will consist of four (4) eight-story buildings with a total of 261 residential dwelling units. Vehicular access to the site will be provided by one (1) right-turn in / right-turn out only driveway and one (1) right-turn out only driveway both on Hammondville Road. Appendix A contains the site plan and the project data.

Roadway System and Transit Service

Within the immediate project study area, Hammondville Road is a four-lane divided, countymaintained arterial roadway oriented in the northwest-southeast direction and the posted speed limit is 35 miles per hour (mph). S. Powerline Road is a six-lane divided; state-maintained principal arterial roadway oriented in the north-south direction and the posted speed limit is 45 mph. Broward County Transit (BCT) provides bus service along both corridors. Powerline Road is served by Route 14 which provides service between the Broward Central Terminal in Fort Lauderdale and the Deerfield Mall at Hillsboro Boulevard. Hammondville Road is served by Route 60 which provides service between the Broward Central Terminal and the State Road 7 / US 441 corridor. A trip generation analysis has been conducted for the existing convenience store and the proposed 2050 Hammondville Road residential development. The analysis was performed using the trip generation rates and equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (11th 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 for the existing and proposed development are as follows:

MULTIFAMILY HOUSING (MID-RISE) (ITE LAND USE #221)

Weekday:	T = 4.77 (X) - 46.46
where $T = number$	er of trips and $X =$ number of dwelling units

- □ AM Peak Hour: T = 0.44 (X) 11.61 (23% in / 77% out)
- **D** PM Peak Hour: T = 0.39 (X) + 0.34 (61% in / 39% out)

CONVENIENCE STORE (ITE LAND USE #851)

Weekday:	T = 762.28 (X)
where $T = n$	umber of trips and $X = 1,000$ square feet of gross floor area

AM Peak Hour:	T = 62.54 (X)	(50% in / 50% out)

D PM Peak Hour: T = 49.11 (X) (51% in / 49% out)

Utilizing the above-listed trip generation rates and equations from the referenced ITE document, a trip generation analysis was undertaken for the existing and proposed development. The results of this effort are documented in Table 1 on the following page and the trip generation data from the referenced ITE publication is presented in Appendix B.

Table 1 2050 Hammondville Road Trip Generation Analysis Pompano Beach, Florida								
		Daily	AM I	Peak Hour	Trips	PM P	eak Hour	Trips
Land Use	Size	Trips	In	Out	Total	In	Out	Total
Existing								
Convenience Store	1,308 SF	997	41	41	82	33	31	64
Sub-Total (Existing)	1,308 SF	997	41	41	82	33	31	64
Proposed								
Multifamily Housing (Mid-Rise)	261 DU	1,199	24	79	103	62	40	102
Sub-Total (Proposed)	261 DU	1,199	24	79	103	62	40	102
Difference (Proposed - Existing)		202	(17)	38	21	29	9	38

Compiled by: KBP Consulting, Inc. (January 2023). Source: ITE Trip Generation Manual (11th Edition).

As indicated in Table 1 above, the proposed project is anticipated to generate 1,199 daily vehicle trips, 103 AM peak hour vehicle trips (24 inbound and 79 outbound) and 102 vehicle trips (62 inbound and 40 outbound) during the typical afternoon peak hour. When considering the existing convenience store on this site, this represents an increase of 202 daily vehicle trips, an increase of 21 AM peak hour vehicle trips, and an increase of 38 PM peak hour vehicle trips.

The trip distribution for the proposed residential building was developed based upon knowledge of the study area, examination of the surrounding roadway network characteristics, review of current traffic volumes, and existing land use patterns. (Due to access limitations of the site, all traffic will enter the site from the northwest and exit the site toward the southeast.) Figure 2 on the following page presents the AM and PM peak hour driveway volumes associated with the proposed development.



FIGURE 2 2050 Hammondville Road Pompano Beach, Florida

Project Driveway Volumes



2050 Hammondville Road is a proposed multifamily residential development to be located in the southeast quadrant of the intersection at Hammondville Road (Dr. MLK Boulevard) and S. Powerline Road (State Road 845) in Pompano Beach, Broward County, Florida. The subject site has a land area of approximately 3.765 acres (164,009 square feet). There is an existing 1,308 square foot convenience store on this site.

The proposed development will consist of four (4) eight-story buildings with a total of 261 residential dwelling units. Vehicular access to the site will be provided by one (1) right-turn in / right-turn out only driveway and one (1) right-turn out only driveway both on Hammondville Road.

The trip generation indicates that the proposed project is anticipated to generate 1,199 daily vehicle trips, 103 AM peak hour vehicle trips (24 inbound and 79 outbound) and 102 vehicle trips (62 inbound and 40 outbound) during the typical afternoon peak hour. When considering the existing convenience store on this site, this represents an increase of 202 daily vehicle trips, an increase of 21 AM peak hour vehicle trips, and an increase of 38 PM peak hour vehicle trips.

Appendix A

2050 Hammondville Road – Pompano Beach Conceptual Site Plan



Appendix B

2050 Hammondville Road – Pompano Beach ITE Trip Generation Data

Land Use: 221 Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), offcampus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 11

Avg. Num. of Dwelling Units: 201

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51





Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09





Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08





Land Use: 851 Convenience Store

Description

A convenience store is a small retail business that sells grocery and other everyday items that a person may need or want as a matter of convenience. Convenience stores are typically located along major thoroughfares to optimize motorist convenience. Extended hours of operation (with many open 24 hours, 7 days a week) further support the convenience of the store. A convenience store is also commonly called a convenience market.

The product mix typically includes pre-packaged grocery items, beverages, dairy products, snack foods, confectionary, tobacco products, over-the-counter drugs, and toiletries. A convenience store may sell alcohol, often limited to beer and wine.

Coffee and pre-made sandwiches are also commonly sold at a convenience store. Made-to-order food orders are sometimes offered. Some stores offer limited seating.

Convenience store/gas station (Land Use 945) is a related use.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Arizona, California, New Jersey, New York, Ontario, Canada, Oregon, Pennsylvania, Texas, and Virginia.

Source Numbers

168, 253, 282, 542, 550, 862, 863, 882, 931, 955, 975



Convenience Store (851)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 8

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
762.28	325.78 - 1438.00	333.89



Convenience Store (851)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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: 39

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
62.54	12.97 - 138.91	35.04





Convenience Store (851)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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: 39

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
49.11	15.90 - 98.18	20.84



