



July 24, 2023

Mr. John Lee, Chair
Walpole Zoning Board of Appeals
135 School Street
Walpole, MA 02081

RE: Proposed Multi-Family Development
55 Summer Street, Walpole, MA

Dear Chair Lee,

Bayside Engineering has prepared this letter to summarize the reduction in traffic generation associated with a modification in the permitted multi-family residential development at 55 Summer Street in Walpole, MA. In summary, the project with the proposed modifications to the permit will generate approximately 15 percent fewer trips than the currently permitted project and incidentally will generate 34 percent fewer trips than the project as originally proposed. Specifically, the proposed change in the development since the permit was issued consists of the removal of the single-family and duplex homes, and the addition of a like number of multifamily units. The planned access into and out of the development is identical to the plan originally approved. The change in the unit composition is summarized below in table 1.

**TABLE 1
DWELLING UNIT COMPOSITION COMPARISON**

	Multifamily (ITE LUC 221)	Townhouses (ITE LUC 215)	Single-Family Homes (ITE LUC 210)	Total	Trip Generation
As Approved Permit	160	70	38	268	1,556
As Modified Permit	216	52	0	268	1,330
<i>Percent Change</i>	35%	-26%	-100%	0%	-15%

Original Site Traffic Study

A Traffic Impact and Access Study (TIAS) was submitted dated January 6,2020 based on trip-generation data published by the ITE *Trip Generation* manual¹. In preparation for the report,

¹*Trip Generation*, Tenth Edition; Institute of Transportation Engineers; Washington, DC; 2017.

traffic counts were taken prior to the Covid outbreak on days when schools were open in September of 2019.

Approved Site Traffic Generation

As Approved Permit- The approved development consists of 160 apartment units, 52 townhouse units, 18 duplex units (considered townhouse units in traffic report) and 38 single family homes. Trip generation data for Land Use Codes (LUC) 221 – Multifamily Housing (Mid-Rise), LUC 215 – Single-Family Attached Housing and LUC 210 – Single-Family Detached Housing were reviewed. The trip generation for the Approved project based on the ITE *Trip Generation* manual² is summarized in Table 2.

On a typical weekday, the Approved project is expected to generate 1,556 daily vehicle trips. During the weekday morning peak hour, 117 vehicle trips (35 vehicles entering and 101 vehicles exiting) are expected. During the weekday evening peak hour, 176 vehicle trips (110 vehicles entering and 66 vehicles exiting) are expected.

**TABLE 2
 APPROVED TRIP-GENERATION SUMMARY**

	Apartment Trips ^a	Townhouse Trips ^b	Single- Family Home Trips ^c	Total Trips
<u>Average Weekday Daily Traffic</u>	716	482	358	1,556
<i>Weekday Morning Peak Hour:</i>				
Entering	14	10	7	31
<u>Exiting</u>	<u>45</u>	<u>21</u>	<u>20</u>	<u>86</u>
Total	59	31	27	117
<i>Weekday Evening Peak Hour:</i>				
Entering	38	22	23	83
<u>Exiting</u>	<u>25</u>	<u>16</u>	<u>13</u>	<u>54</u>
Total	63	38	36	137

^aBased on ITE LUC 221 – Multifamily Housing (Mid-Rise); 160 units.

^bBased on ITE LUC 215 – Single-Family Attached Housing; 70 units.

^cBased on ITE LUC 210 – Single-Family Detached Housing; 38 units.

²*Trip Generation*, Eleventh Edition; Institute of Transportation Engineers; Washington, DC; 2021.

Modified Site Traffic Generation

As Modified Permit-The development is proposed to be modified to consist of 216 apartment units and 52 townhouse units. Trip generation data for Land Use Codes (LUC) 221 – Multifamily Housing (Mid-Rise) and LUC 215 – Single-Family Attached Housing were again reviewed. The trip generation for the approved project is summarized in Table 3.

On a typical weekday, the Modified proposal would expect to generate 1,330 daily vehicle trips. During the weekday morning peak hour, 104 vehicle trips (26 vehicles entering and 78 vehicles exiting) are expected. During the weekday evening peak hour, 112 vehicle trips (67 vehicles entering and 45 vehicles exiting) are expected.

**TABLE 3
 MODIFIED TRIP-GENERATION SUMMARY**

	Apartment <u>Trips^a</u>	Townhouse <u>Trips^b</u>	<u>Total Trips</u>
<u>Average Weekday Daily Traffic</u>	984	346	1,330
<i>Weekday Morning Peak Hour:</i>			
Entering	19	7	26
<u>Exiting</u>	<u>64</u>	<u>14</u>	<u>78</u>
Total	83	31	104
<i>Weekday Evening Peak Hour:</i>			
Entering	52	15	67
<u>Exiting</u>	<u>33</u>	<u>12</u>	<u>45</u>
Total	85	27	112

^aBased on ITE LUC 221 – Multifamily Housing (Mid-Rise); 216 units.

^bBased on ITE LUC 215 – Single-Family Attached Housing; 52 units.

TABLE 4
APPROVED vs. MODIFIED TRIP-GENERATION COMPARISON

	Approved Proposal Trips ^a	Modified Proposal Trips ^b	Net Difference	Percent Difference
<u>Average Weekday Daily Traffic</u>	1,556	1,330	(226)	(14.5)
<i>Weekday Morning Peak Hour:</i>				
Entering	31	26	(5)	(16.1)
<u>Exiting</u>	<u>86</u>	<u>78</u>	<u>(8)</u>	<u>(9.3)</u>
Total	117	104	(13)	(11.1)
<i>Weekday Evening Peak Hour:</i>				
Entering	83	67	(16)	(19.3)
<u>Exiting</u>	<u>54</u>	<u>45</u>	<u>(9)</u>	<u>(16.7)</u>
Total	137	112	(25)	(18.3)

^aFrom Table 2.

^bFrom Table 3.

As shown in Table 4, compared to the approved project, the modified project will generate 226 fewer daily trips.. During the weekday morning peak hour, there will be 13 fewer vehicle trips (5 fewer vehicles entering and 8 fewer vehicles exiting). During the weekday evening peak hour, there will be 25 fewer vehicle trips (16 fewer vehicles entering and 9 fewer vehicles exiting).

Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

BAYSIDE ENGINEERING, INC.

Kenneth P. Cram, P.E.
 Director, Traffic Engineering

cc: D. Hale
 S. Reardon