



March 11, 2015

Ms. Bonnie Gard
Planning & Zoning Administrator
200 S. Hamilton Road
Gahanna, Ohio 43230

Subject: Vista Plaza/Fresh Thyme Market – Trip Generation Comparison

Dear Ms. Gard,

We have prepared a comparative analysis of trip generation for planned modifications to the Vista Plaza that includes changes from the current retail uses to a revised layout to accommodate Fresh Thyme Market as a new user on the site. Vista Plaza is located on the west side of Hamilton Road on the north side of Vista Plaza Drive. The current Vista Plaza layout includes an 'L'-shaped storefront that houses various retailers and one outlot that houses the current Dunkin Donuts restaurant on the southeast corner of the site, which will remain after reconfiguring the Plaza. This letter serves to document the expected change in trip generation for the site as a result of the planned modifications to retail space and users.

Planned site access will remain the same along Hamilton Road in terms of number of driveways but there is a recent median opening that allows northbound left turns into the far north drive there. Along Vista Drive, modifications to the Plaza retail square footage also result in the removal of the middle access drive on the south edge of the site. The consolidation from three driveways to two should better control traffic along Vista Drive, resulting in more efficient traffic flow there. In the current and redeveloped conditions, the existing Dunkin Donuts outparcel will remain with no changes to its access within the site. Existing Vista Plaza has a total of 41,537 square feet of retail floor space in the L-shaped layout. A portion of that space will be replaced by a specialty grocery store that will be situated on the west side of the property, leaving the current north side portion of retail space to remain. When the site is redeveloped, the specialty grocer will replace enough of the current retail space to cause a slight reduction in leasable space, leaving the new total retail space at 41,300 square feet. Current and proposed site plans are attached for reference.

A comparison of expected trip generation totals was completed to illustrate the effect of site redevelopment on site traffic levels that could be introduced to the surrounding street network. Since the Dunkin Donuts site remains as is, it was not included in any trip generation calculations or comparisons. Peak hour trip ends for the Vista Plaza retail space were calculated using data and

methodology contained in Trip Generation, 9th Edition (Institute of Transportation Engineers, 2012). Daily, morning and afternoon peak hour traffic volumes were estimated using trip generation rates published for ITE land use code 820, Shopping Center (Retail). As illustrated in **Table 1** below, the current Vista Plaza retail space is predicted to generate 3,836 daily trip ends, with 91 trips in the AM Peak hour (52 entering, 39 exiting) and 333 trip ends in the PM Peak hour (163 entering, 170 exiting). These totals combine newly-generated trips that are added to the adjacent street with trips that currently originate on the adjacent street as ‘pass-by’ traffic that is already driving by the site.

Table 1: Existing Retail Space - Trip Generation Calculations

Land Use	Square Feet or Units	ITE Code	Time Period	ITE Formula	Total Trips	Trips Entering	Trips Exiting
Shopping Center Existing Vista Plaza	41,537 sf	820	ADT	$\ln(T)=0.65\ln(x)+5.83$	3,836	1,918	1,918
			AM Peak	$\ln(T)=0.61\ln(x)+2.24$	91	See Below	
			PM Peak	$\ln(T)=0.67\ln(x)+3.31$	333	See Below	
			60%	AM Primary Trips	55	34	21
			40%	AM Pass-By Trips	36	18	18
			50%	PM Primary Trips	165	79	86
			50%	PM Pass-By Trips	168	84	84

Site traffic generated by the redeveloped Vista Plaza retail space, includes the Fresh Thyme Market space which was analyzed as Shopping Center space rather than ITE land use #850: Supermarket, the only other land use category that seemed appropriate for this space. The description of a supermarket in the ITE manual suggests a free-standing store and includes other ancillary items related to automobile supplies, bakeries, books/magazines, dry cleaning, photo centers, pharmacies and floral arrangements, which are not representative of the unique nature of Fresh Thyme Market. The ITE land use description for Supermarket is attached for reference. Expected trip generation totals for the redeveloped Plaza are illustrated in **Table 2** below:

Table 2: Redeveloped Retail Space - Trip Generation Calculations

Land Use	Square Feet or Units	ITE Code	Time Period	ITE Formula	Total Trips	Trips Entering	Trips Exiting
Shopping Center Proposed Vista Plaza	41,300 sf	820	ADT	$\ln(T)=0.65\ln(x)+5.83$	3,822	1,911	1,911
			AM Peak	$\ln(T)=0.61\ln(x)+2.24$	91	See Below	
			PM Peak	$\ln(T)=0.67\ln(x)+3.31$	331	See Below	
			60%	AM Primary Trips	55	34	21
			40%	AM Pass-By Trips	36	18	18
			50%	PM Primary Trips	165	79	86
			50%	PM Pass-By Trips	166	83	83

The redeveloped Vista Plaza site is projected to generate 3,822 daily trip ends, 91 AM Peak trip ends and 331 PM Peak trip ends with the very slight reduction in square footage of retail space for the Plaza. These totals reflect almost no change to the newly generated trips or the pass-by traffic attracted to the site.

Since the total square footage of Vista Plaza square footage is planned to be slightly lower, the trip ends generated by the modified site is predicted to be slightly lower, as expected. Consequently, the planned modifications are predicted to have no new increase in traffic over what the current square footage of retail is expected to generate. The average PM Peak volume is expected to drop imperceptibly (2 trip ends) and the AM Peak is predicted to remain the same compared to the current Plaza layout.

In summary, this comparison indicates that the predicted change in traffic resulting from the modification to Vista Plaza retail space will be slight in the PM Peak period, remaining nearly unchanged, as will daily and AM Peak period traffic levels. An added benefit of the planned redevelopment is the reduction in number of access points along Vista Drive, which should streamline site access and result in more efficient traffic flow on Vista Plaza. If you have questions or comments during your review, please contact me directly at (614) 775-4650.

Sincerely,

A handwritten signature in blue ink that reads "Douglas A. Bender". The signature is fluid and cursive, with the first name being the most prominent.

Douglas A. Bender, PE, PTOE
Senior Traffic Engineer

Cc: Charlie Fraas, Casto (w/att)

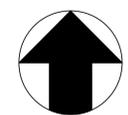
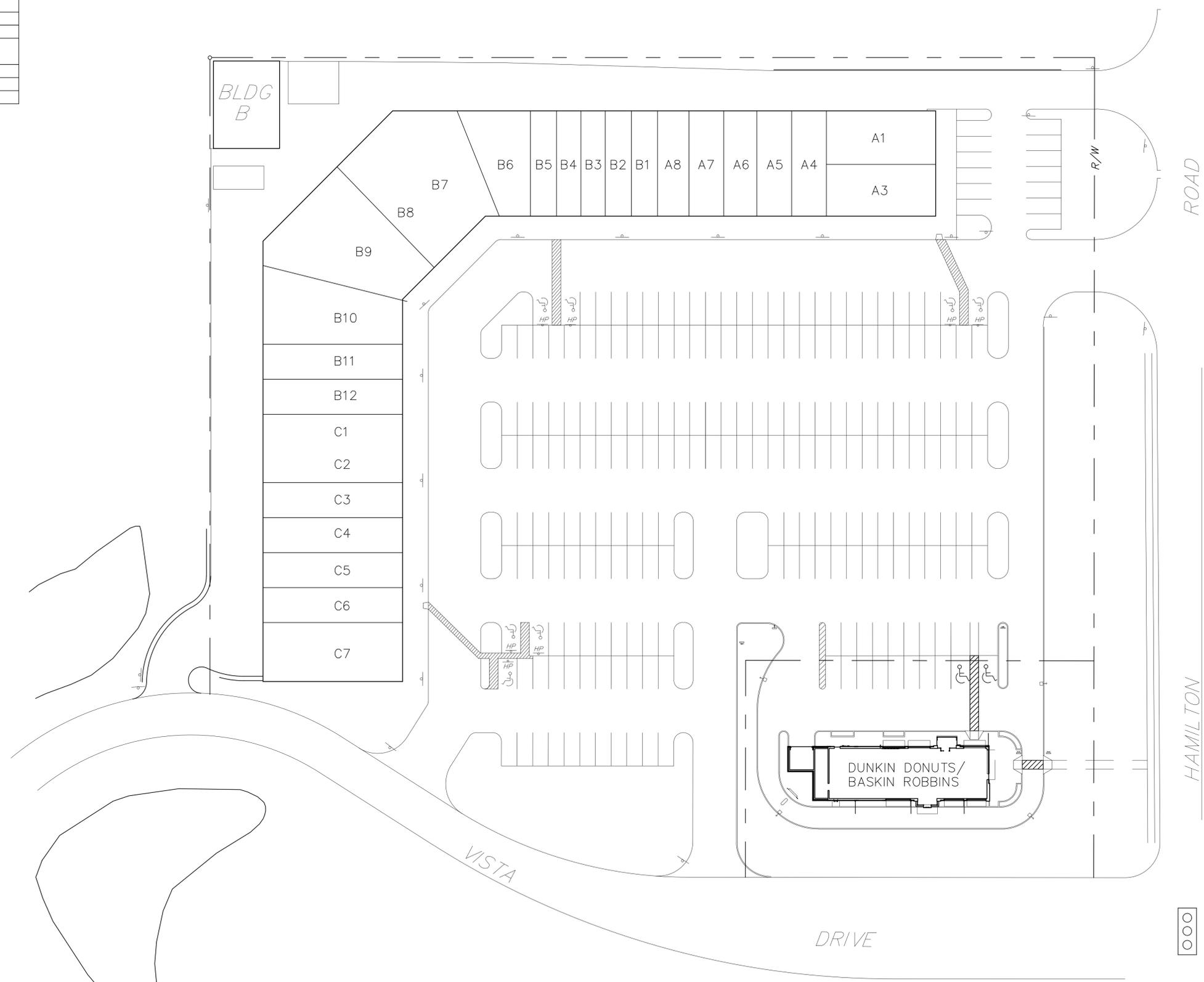
Attachment – Site plans

No.	SUITE	ADDRESS	SQ. FT.
A1	1300	1177 N HAMILTON ROAD	1,950
A3	1280	1173 " "	1,950
A4	1270	1169 " "	1,200
A5	1260	1167 " "	1,200
A6	1250	1165 " "	1,200
A7	1240	1163 " "	1,200
A8	1230	1161 " "	1,200
B1	1220	1159 " "	900
B2	1210	1157 " "	900
B3	1200	1155 " "	900
B4	1190	1153 " "	900
B5	1180	1151 " "	900
B6	1160	1147 " "	1,865
B7	1140	1143 " "	4,430
B8		1141 " "	
B9	1100	1137 " "	4,008
B10	1110	1133 " "	2,434
B11	1090	1131 " "	1,600

No.	SUITE	ADDRESS	SQ. FT.
B12	1080	1129 N HAMILTON ROAD	1,600
C1	1070	1127 " "	3,200
C2	1060	1125 " "	
C3	1050	1123 " "	1,600
C4	1040	1121 " "	1,600
C5	1030	1119 " "	1,600
C6	1020	1117 " "	1,200
C7	1010	1115 " "	3,200
OUTLOT 1	0400	1111 " "	2,925



250 Civic Center Drive, Suite 500
 Columbus, Ohio 43215
 614.228.5331
 castoinfo.com



NORTH

SCALE: 1" = 30'-0"

REVISIONS

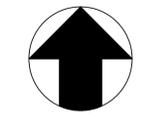
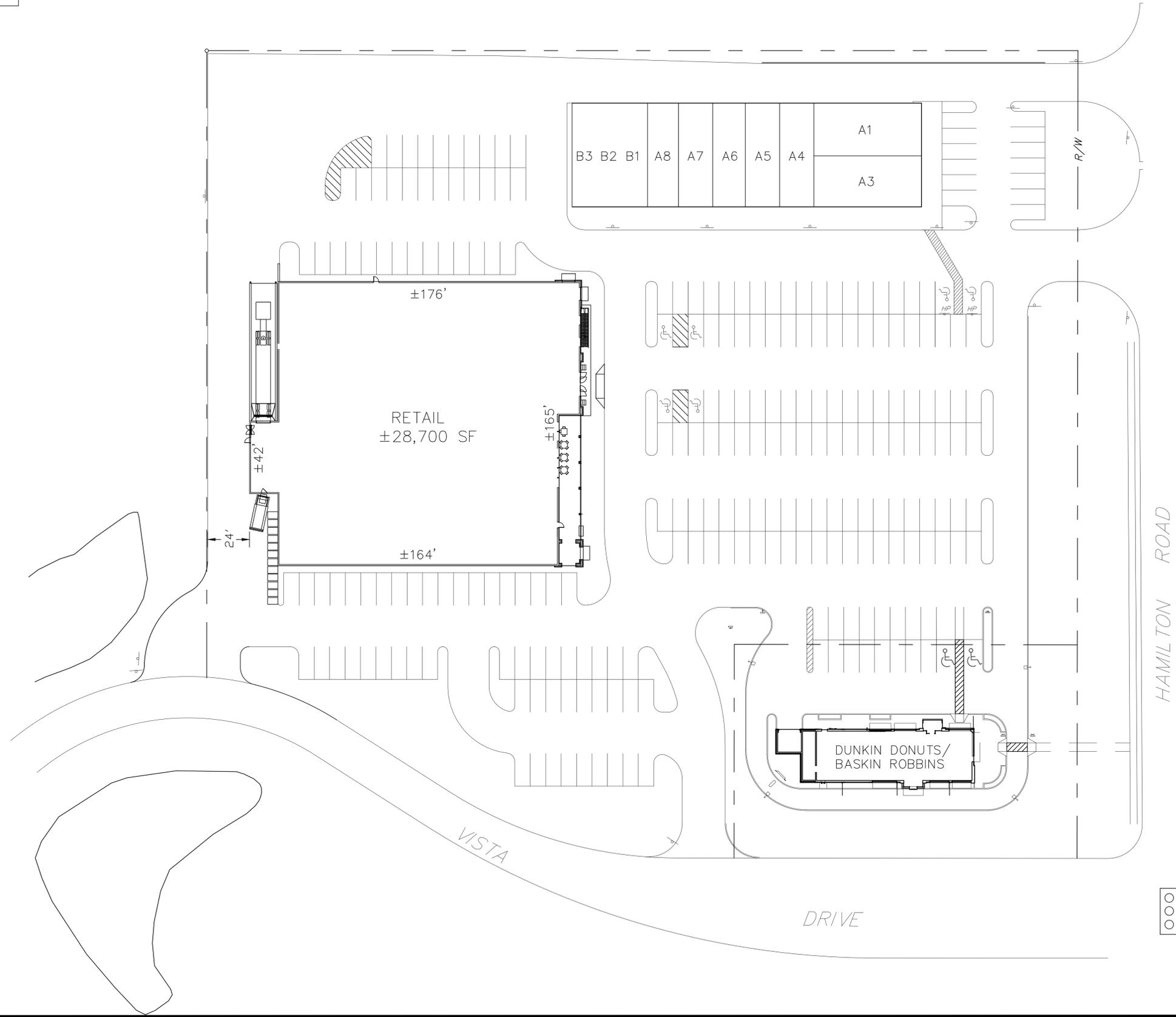
No.	DATE
37	11-4-11
38	12-7-11
39	3-5-12
40	8-3-12
41	9-14-12
42	10-29-12
43	3-8-13
44	1-20-15

VISTA PLAZA

No.	SUITE	ADDRESS	SQ. FT.
A1	1300	1177 N HAMILTON ROAD	1,950
A3	1280	" "	1,950
A4	1270	1169 " "	1,200
A5	1260	1167 " "	1,200
A6	1250	1165 " "	1,200
A7	1240	1163 " "	1,200
A8	1230	1161 " "	1,200
B1	1220	1159 " "	900
B2	1210	1157 " "	900
B3	1200	1155 " "	900
OUTLOT 1	0400	1111 " "	2,925



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NORTH
 SCALE: 1" = 30'-0"

REVISIONS	
No.	DATE
01	12-8-14

VISTA PLAZA

Land Use: 850 Supermarket

Description

Supermarkets are free-standing retail stores selling a complete assortment of food, food preparation and wrapping materials, and household cleaning items. Supermarkets may also contain the following products and services: ATMs, automobile supplies, bakeries, books and magazines, dry cleaning, floral arrangements, greeting cards, limited-service banks, photo centers, pharmacies and video rental areas. Some facilities may be open 24 hours a day. Discount supermarket (Land Use 854) is a related use.

Additional Data

Caution should be used when applying daily trip generation rates for supermarkets, as the database contains a mixture of facilities with varying hours of operation. Future data submissions should specify hours of operation of a site.

Specialized Land Use Data

One study provided data on a supermarket in Oregon that also carried clothing, footwear, bedding, furniture, jewelry, beauty products, electronics, toys, lumber and garden supplies. The secondary products offered at this supermarket varied from the other stores in this land use; therefore, the information collected for this facility is presented in the following table and was excluded from the data plots. The weekday morning and afternoon peak hours of the generator at this site were between 8:45 a.m. and 9:45 a.m. and between 4:45 p.m. and 5:45 p.m., respectively. The Saturday and Sunday peak hours of the generator were between 3:00 p.m. and 4:00 p.m. and between 12:45 p.m. and 1:45 p.m., respectively.

<u>Independent Variable</u>	<u>Trip Generation Rate</u>	<u>Size of Independent Variable</u>	<u>Number of Studies</u>	<u>Directional Distribution</u>
1,000 Square Feet Gross Floor Area				
Weekday A.M. Peak Hour of Generator	4.21	78	1	Not available
Weekday P.M. Peak Hour of Generator	10.13	78	1	Not available
Saturday Peak Hour of Generator	10.91	78	1	Not available
Sunday Peak Hour of Generator	9.83	78	1	Not available

Source: 746

The sites were surveyed between the 1960s and the 2000s throughout the United States.

Source Numbers

2, 4, 5, 72, 98, 203, 213, 251, 273, 305, 359, 365, 438, 442, 447, 448, 514, 520, 552, 577, 610, 716, 746