



**CITY OF CAMBRIDGE**  
**Traffic, Parking and Transportation**  
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## MEMORANDUM

**To:** Cambridge Planning Board  
**From:** Sue Clippinger, Director *Sue Clippinger*  
**Date:** January 3, 2012  
**Re:** Residential project at 22&27 Cottage Park Avenue

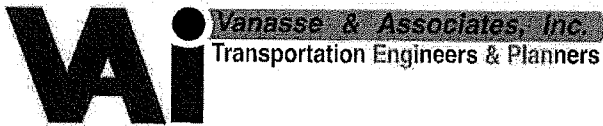
The Cambridge Traffic, Parking and Transportation Department has reviewed the Planning Board application for 22-27 Cottage Park Avenue. The project proposes the redevelopment of the existing 35,058 sf commercial building into 16 residential condominium units, three off-street parking spaces adjacent to the building at 22 Cottage Park Avenue, and 23 off-street spaces in a parking lot located across the street at 27 Cottage Park Avenue, resulting in 25 parking spaces (1.6 parking spaces per unit). The project proposes 8 bicycle parking spaces in the lower level of the building and 8 bicycle parking spaces outside by the main entrance. We have the following comments on this project:

1. We do not support 25 parking spaces for 16 residential units because a residential parking ratio of 1.6 spaces per unit is higher than anything we have seen and the proponents own parking analysis showed that it will be more parking than needed. We believe the project should meet current zoning of 1 space per unit. If the Proponent wants to provide more than 1 space per unit, we do not recommend more than 1.1 per unit.
2. We do not support the proposed vertical wall hanging bike racks in the basement of the building because it does not meet the city's bike parking guidelines. Vertical racks do not accommodate all types of bikes, bikes can fall and be damaged and could cause injury; they are less functional and convenient than locking a bike to a rack with both wheels on the ground. Instead of providing too much auto parking spaces and inadequate bike parking, we recommend the proponent provide at least 16 bike parking spaces that meet city guidelines. For example, a bike shed in the surface parking lot at 27 Cottage Park Avenue would be a great amenity and convenience to residents compared to having to maneuver their bikes and hang them on a wall in the lower level of the residential building. We would be happy to work with the proponent on a design.
3. The Proponent has committed, and we support the following transportation demand management (TDM) measures to reduce the number of vehicle trips generated by the project:
  - a. Make available public transportation schedules, by posting in a centralized location for residents, including the proximity of the Davis Square Station.
  - b. Post information and coordinate with MassRides and the Charles River Transportation Management Association (CRTMA) to identify car/vanpool resources that may be available to residents.
  - c. Investigate joining the CRTMA.
  - d. Post information on available pedestrian and bicycle facilities' in the vicinity of the project site.

We also recommend the Proponent provide an MBTA Bike Charlie Card, with the value of a combined bus/subway pass to each adult member of a new household upon move in to incentivize new households to use public transportation.

Attached is the Parking Study by Vanasse & Associates, dated November 17, 2011.

CC: Adam Shulman, TPT; Susanne Rasmussen, Stephanie Groll, Cara Seiderman, CDD; Mark Resnick, Trustee of Cottage Park Realty; Alissa Devlin, The Beantown Companies Inc.; Lori Shattuck, Vanasse & Associates.



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November 17, 2011

Ms. Susan Clippinger  
Department of Traffic, Parking, and Transportation  
City of Cambridge  
344 Broadway  
Cambridge, MA 02139

Re: Residential Development  
22 & 27 Cottage Park Avenue  
Cambridge, Massachusetts

Dear Sue:

Vanasse & Associates, Inc. (VAI) has conducted a parking study for the proposed residential condominium development to be located at 22 & 27 Cottage Park Avenue in the North Cambridge section of Cambridge, Massachusetts. The project site is located on the east and west side of Cottage Park Avenue at the southern end of the roadway. The site location in relation to the local roadway network is depicted in Figure 1. A preliminary site plan for the development prepared by the project architect, O'Sullivan Architects, Inc. is also attached.

The project site consists of the redevelopment of the existing 35,058 square foot (sf), four-story, commercial building to include sixteen (16) residential condominium units located on the east side of Cottage Park Avenue. Access to the site will be provided via Cottage Park Avenue, with off-street parking for 3 vehicles located adjacent to the building and parking for 22 vehicles accommodated in a parking lot located on the west side of Cottage Park Avenue, resulting in a total of 25 off-street parking spaces for residents and guests. An additional 3 on-street parking spaces will be created with the redevelopment of the site due to the reduced width of the existing curb-cut along the west side of Cottage Park Avenue. Parking for bicycles will be accommodated on-site by way of 16 bicycle rack spaces, of which 8 spaces will be located adjacent to the entrance of the building and 8 bicycle rack spaces will be located inside the building.

#### **Alternative Transportation Options**

The project site is located approximately 3/4-miles from the MBTA Davis Square Red Line Station located at the intersection of College Avenue, Elm Street and Holland Street in Somerville. Davis Square Station serves as a stop for six MBTA bus routes and the Red Line rapid rail transit line. Four additional bus routes stop within 1/2-mile of the project site on Massachusetts Avenue or Rindge Avenue: Routes 77, 79, 83 and 350. A bus shelter is provided on the south side of Massachusetts Avenue between Columbus Avenue and Magoun Street.

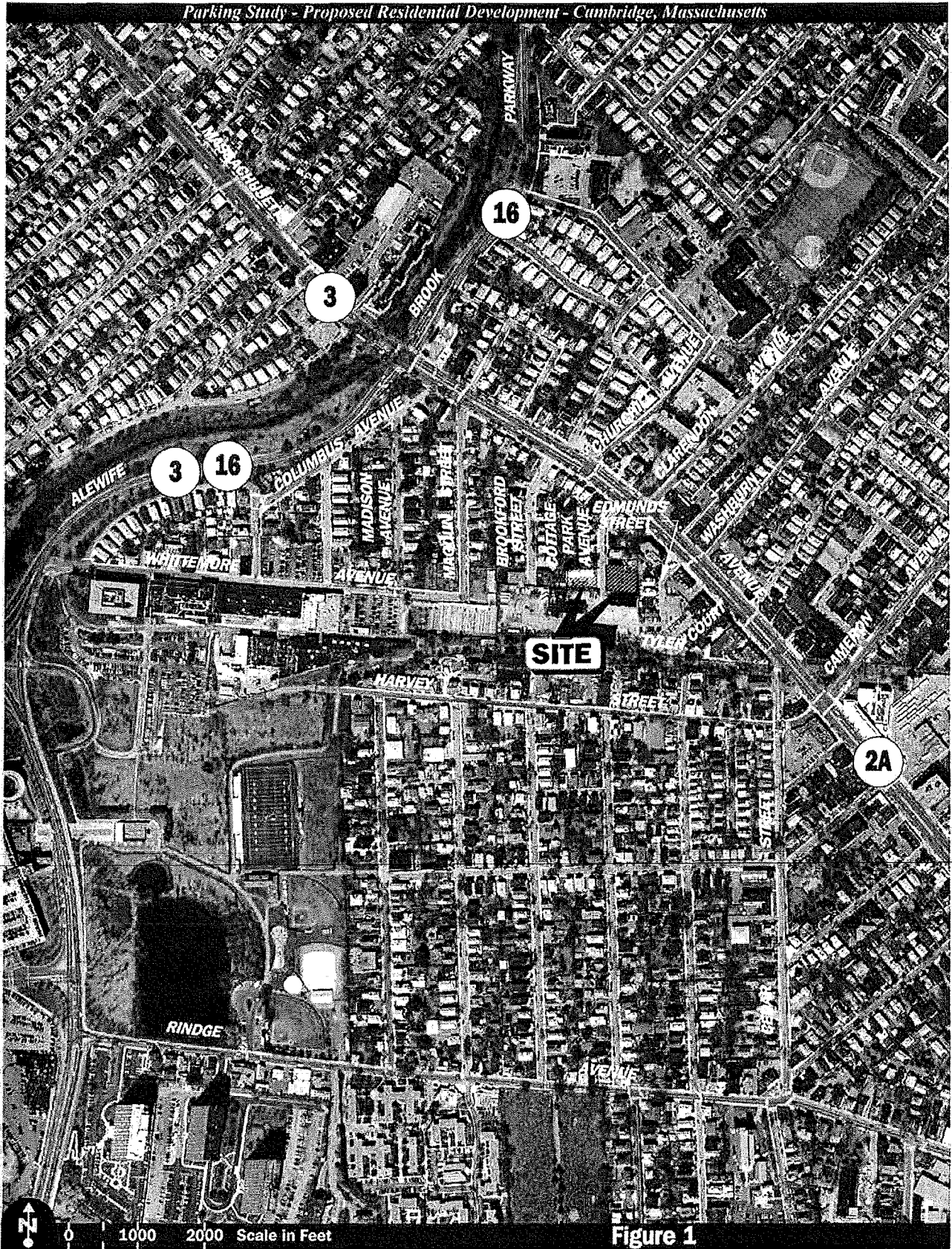


Figure 1



Vanasse & Associates, Inc.

Site Location Map

In addition to nearby public transportation, car-sharing services are also available in close proximity to the site. A figure depicting the distance and locations of alternative transportation options is provided as Figure 2.

### **Proposed Site Traffic**

Traffic volumes expected to be generated by the proposed project were determined by using trip generation statistics published by the Institute of Transportation Engineers (ITE)<sup>1</sup> for LUC 220, Apartment, with the independent variable of dwelling units equal to 16 (16 units).

Modal split data from the 2000 Census was obtained for the census tract for the site. The modal split assumptions for the project are approximately 51.4 percent drive-alone automobile trips; 5.9 percent rideshare automobile trips; 30.2 percent transit; 6.1 percent pedestrian; 5.0 percent bicycle; and 1.4 percent "other" trips, which may include working at home. Table 1 summarizes the project trip generation by travel mode, using the modal split data from the 2000 Census.

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<sup>1</sup>*Trip Generation*, Eighth Edition; Institute of Transportation Engineers; Washington, DC; 2008.



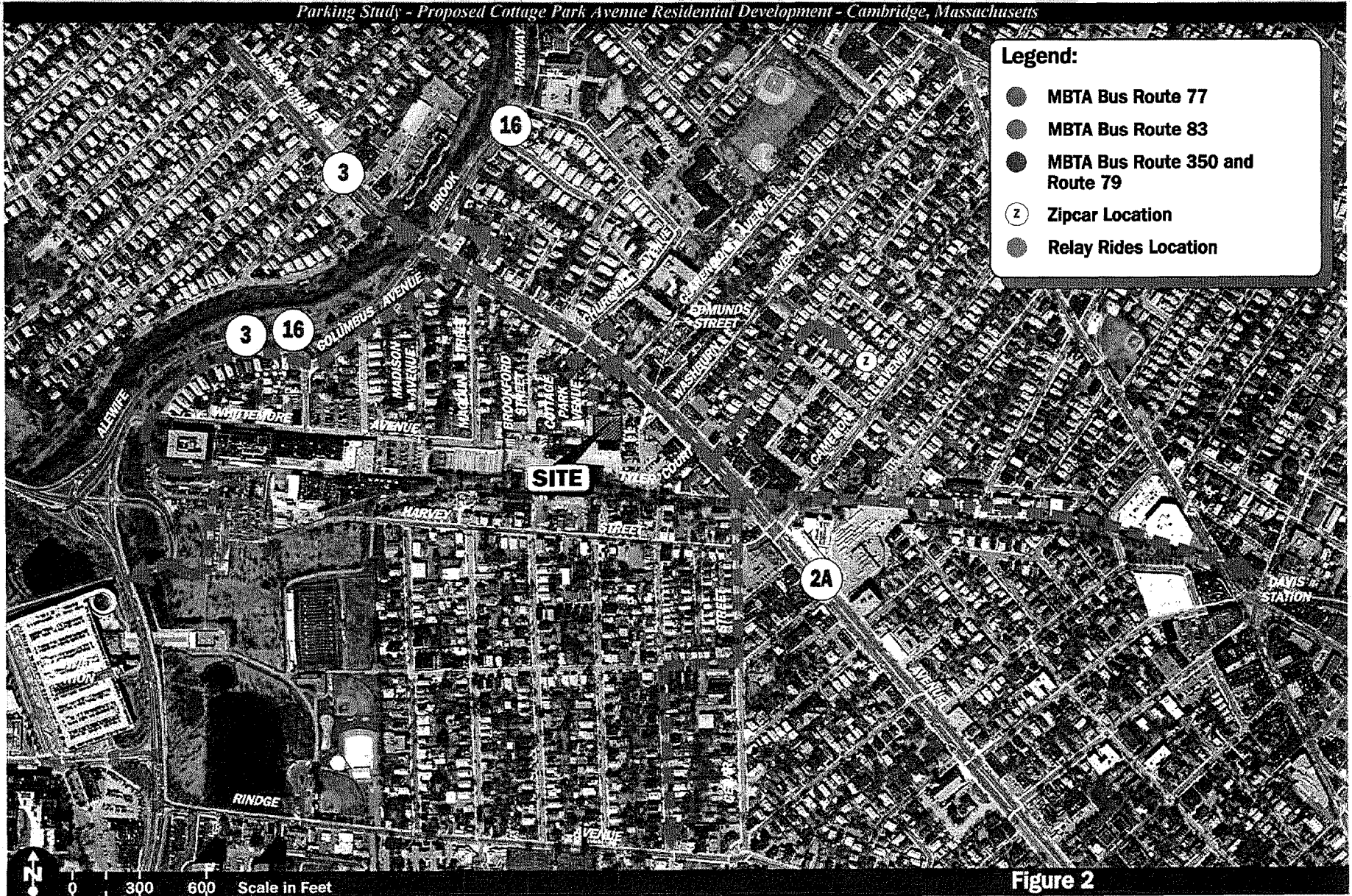


Figure 2

Alternative Transportation Options

**Table 1**  
**TRIP GENERATION SUMMARY**

Time Period/Direction	ITE Vehicle Trips		Person Trips <sup>a</sup>						Automobile Trips
	Residential <sup>b</sup>	Total <sup>c</sup>	Drive Alone Trips <sup>d</sup>	Ridesharing Trips <sup>e</sup>	Transit Trips <sup>f</sup>	Pedestrian Trips <sup>g</sup>	Bicycle Trips <sup>h</sup>	Other Trips <sup>i</sup>	Proposed Automobile Trips <sup>j</sup>
<i>Average Weekday Daily:</i>									
Entering	46	50	26	3	15	3	3	0	25
Exiting	46	50	26	3	15	3	3	0	25
Total	92	100	52	6	30	6	6	0	50
<i>Weekday Morning Peak Hour:</i>									
Entering	1	1	1	0	0	0	0	0	1
Exiting	6	7	3	1	2	1	0	0	3
Total	7	8	4	1	2	1	0	0	4
<i>Weekday Evening Peak Hour:</i>									
Entering	5	6	3	0	2	1	0	0	3
Exiting	3	3	2	0	1	0	0	0	2
Total	8	9	5	0	3	1	0	0	5

<sup>a</sup>Mode splits based on 2000 U.S. Census Data and Statistics for Census Tract 3550 published by the CTPS and reanalyzed by the Cambridge Community Development Department; 2005.

<sup>b</sup>Based on ITE LUC 230, Residential Condominium/Townhouse; 16 units.

<sup>c</sup>Multiply ITE vehicle trips by vehicle occupancy ratio of 1.08 persons/vehicle per national census data.

<sup>d</sup>Assume 51.4 percent of total person trips.

<sup>e</sup>Assume 5.9 percent of total person trips.

<sup>f</sup>Assume 30.2 percent of total person trips.

<sup>g</sup>Assume 6.1 percent of total person trips.

<sup>h</sup>Assume 5.0 percent of total person trips.

<sup>i</sup>Includes working at home, assume 1.4 percent of total person trips.

<sup>j</sup>Drive-alone plus rideshare person trips divided by vehicle occupancy ratio of 1.15 persons per vehicle per local census data.

**Parking Analysis**

A parking analysis was conducted to determine future parking demand based upon US Census data for the tract the project is located in, as well as data provided by the City of Cambridge Department of Traffic, Parking, and Transportation. The project parking demand is summarized in Table 2.

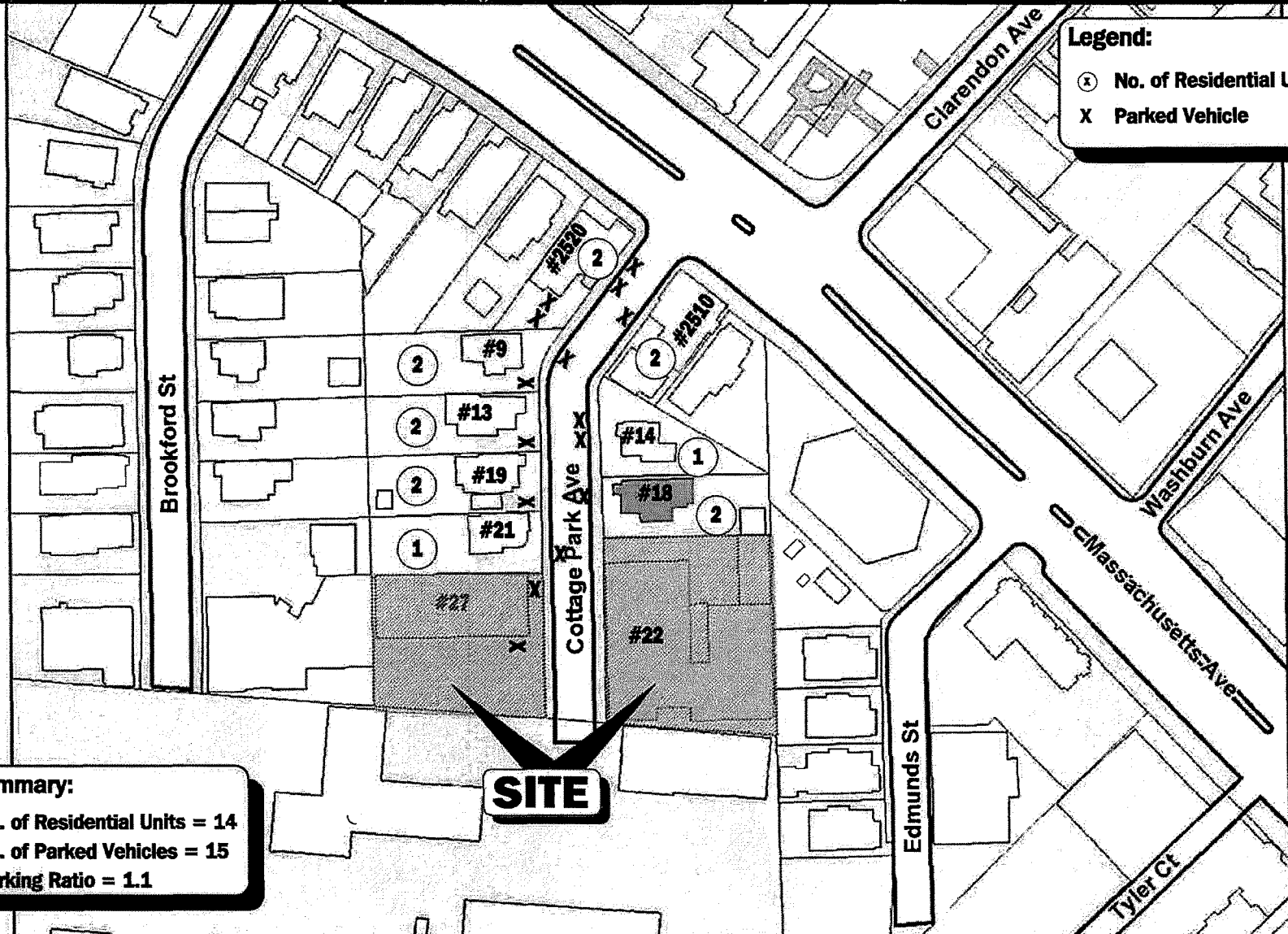
**Table 2  
 PROJECT PARKING DEMAND**

Source/Type of Use	Vehicles per Household		No. of Condominium Units		Parking Demand (spaces)
<i>2000 Census Data for Tract 3550</i>					
Condominium	1.42	x	16	=	23
<i>2000 Census</i>					
Affordable	0.86	x	2	=	2
Market	1.31	x	14	=	<u>16</u>
Total				=	18
<i>CDD Survey</i>					
Affordable	0.57	x	2	=	2
Market	0.90	x	14	=	<u>11</u>
Total				=	13
<i>American Community Survey 2000</i>					
2 Bedrooms	1.02	x	12	=	13
3 Bedrooms	1.24	x	4	=	<u>5</u>
Total				=	18
<i>American Community Survey 2006-2008</i>					
2 Bedrooms	0.92	x	12	=	11
3 Bedrooms	1.14	x	4	=	<u>5</u>
Total				=	16

As can be seen in Table 2, the project parking demand is estimated to range from 13 to 23 spaces, with parking rates ranging from 0.81 to 1.42 spaces per unit. Parking for residents and guests of the proposed development will be accommodated on site with approximately 25 spaces provided, which is a parking rate of 1.56 spaces per unit.

As requested by the City, a parking inventory was conducted on Cottage Park Avenue to determine the existing parking demand in the area. The parking inventory was conducted on Thursday, November 10, 2011 at 4:00 AM, when residential parking demand is at its peak. The results of the parking inventory are depicted on Figure 3. As shown on Figure 3, there are 14 residential units that park





**Summary:**  
No. of Residential Units = 14  
No. of Parked Vehicles = 15  
Parking Ratio = 1.1

Not To Scale

Figure 3  
Cottage Park Avenue Parking





on Cottage Park Avenue and 15 vehicles were observed to be parked along Cottage Park Avenue (including both on-street and off-street), which results in a parking rate of 1.1 spaces per unit. It should be noted that not all of the units along Cottage Park Avenue are owner-occupied. The parking rate for rental units is typically lower.

### **Project Mitigation**

The project proponent has committed to a mitigation program designed to minimize the effect of the proposed project on area transportation facilities that includes bicyclist improvements, Transportation Demand Management (TDM) strategies, and parking.

### **Bicyclist Improvements**

Based on zoning requirements for bicycle parking for multifamily residences (one bicycle space for each two dwelling units), a total of 8 bicycle parking spaces is required. To encourage bicycle use, the project will provide an additional 8 bicycle spaces for a total of 16 bicycle spaces.

### **Transportation Demand Management**

The following measures will be implemented as a part of the proposed project and by the property management team in an effort to reduce the number of vehicle trips generated by the project:

- In order to encourage the use of public transportation, the property management team will make available public transportation schedules, which will be posted in a centralized location for residents. The proximity of the Davis Square Station will be emphasized in promotional materials for the site.
- In order to encourage car/vanpooling, the property management team will coordinate with MassRIDES and the Charles River Transportation Management Association (CRTMA) to identify car/vanpool resources that may be available to residents. This information will be posted in a centralized location.
- The property management team will investigate joining the CRTMA. The CRTMA could provide a ridematching program among residents of the project and employers of the area.
- The property management team will provide information on available pedestrian and bicycle facilities in the vicinity of the project site. This information will be posted in a centralized location.

The project proponent will investigate the implementation of these traffic reduction strategies and will work with the City and the CRTMA, and area businesses to implement such programs.

### **Parking**

Parking for residents and guests of the proposed development will be accommodated on site with approximately 25 spaces provided. These are intended solely for the use of residents and guests.

Ms. Susan Clippinger  
November 17, 2011  
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Therefore, the project will provide parking at a rate of 1.56 spaces per unit. A parking fee will be charged at market rate for any tenant requesting more than one parking space.

**Conclusion**

Overall, the project proponent is committed to the implementation of the above project mitigation strategies to reduce the overall project impact. The project proposes to provide parking for residents and guests at a rate of 1.56 spaces per unit, with a parking fee charged at market rate for any tenant requesting more than one parking space.

Please feel free to contact me should you have any questions.

Sincerely,

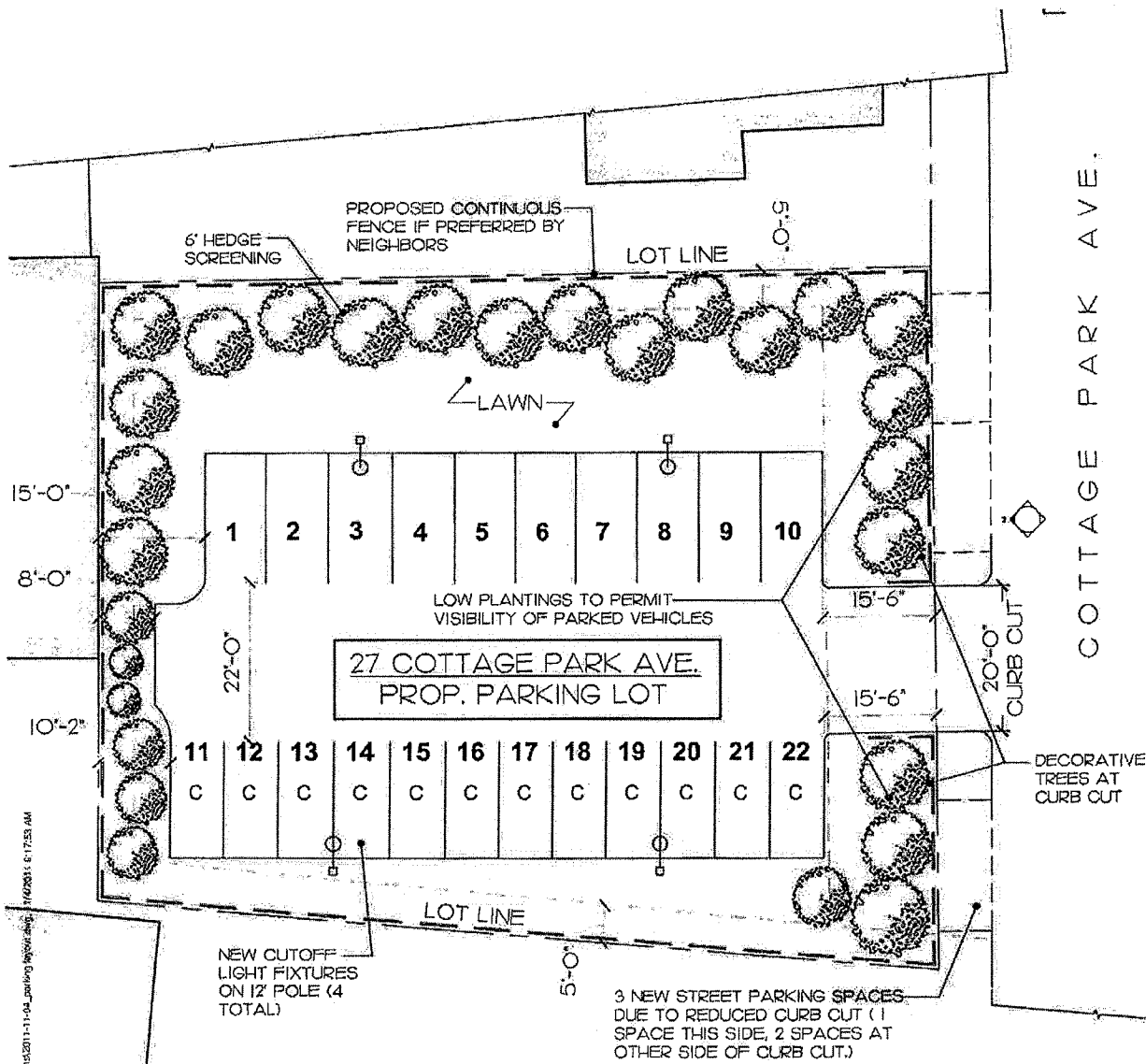
VANASSE & ASSOCIATES, INC.



Lori A. Shattuck  
Senior Transportation Engineer

**Attachments**

cc: A. Shulman – Cambridge TPT  
A. Devlin – The Beantown Companies  
FGH, File



K:\Shared\22 Cottage Park Ave Cambridge\Perking Layout\2011-11-14\_Parking Layout.dwg 11/4/2011 6:17:23 AM

1

**PARKING SCHEME W/O QUONSET HUT - 22 SPACES**

Scale: 1" = 20'

**27 Cottage Park Ave.**  
**Cambridge, MA**  
 11/04/2011

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