


**CITY OF CAMBRIDGE**  
**Traffic, Parking and Transportation**  
344 Broadway  
Cambridge, Massachusetts 02139

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## MEMORANDUM

**To:** Cambridge Planning Board  
**From:** Monica R. Lamboy, Interim Director   
**Date:** November 26, 2014  
**Re:** 88 Ames Street Development (PB# 294)

The Traffic, Parking & Transportation (TP&T) Department has reviewed the Transportation Impact Study for the Ames Street Residential Project, located at 88 Ames Street, prepared by BP Cambridge Center Residential LLC, an affiliate of Boston Properties. The proposed Project will be constructed on a parcel in front of the existing Cambridge Center East Parking Garage in Kendall Square. It will replace and relocate the existing loading dock/service area and parking garage entrance with a 216,000 square foot, 22-floor building, containing 280 housing units and 16,000 square feet of retail/restaurant space.

The proposed Project would be allocated 140 existing parking spaces at the Cambridge Center East Garage (0.50 spaces per unit). The Project also proposes 334 bicycle parking spaces, including 38 short-term bicycle spaces and 296 long term bicycle spaces.

TPT certified the TIS as complete and reliable on July 7, 2014. The Project will generate a total of:  
848 daily vehicle trips including, 48 AM and 76 PM peak hour vehicle trips,  
998 daily transit trips (57 AM/90 PM peak hour transit trips),  
880 daily pedestrian trips (48 AM/80 PM peak hour pedestrian trips) and  
308 daily bicycle trips (18 AM/28 PM peak hour bicycle trips).

The Project's TIS, like all Traffic Impact Studies, evaluated a Future 5-year Build scenario Condition which takes into account other area development projects and a general background traffic growth rate. The TIS accounted for 13 other development projects in various stages of development, including; The Broad Institute Expansion (recently completed), Courthouse Redevelopment, BioGen's 17 Cambridge Center (recently completed), 300 Mass. Ave., Novartis at 181 Mass. Ave., 650 Main Street Office/R&D, North Point, 23 East Street (Maple Leaf building), Education First (EF), 159 First Street and Bent Street Development, 22 Water Street, and Alexandria Center.

The full TIS summary is attached.

1. There are three outstanding issues, and we are recommending that the Planning Board require the Applicant to continue to work on these issues before the Board reaches a decision.

## 88 Ames Street Residential Project

- a. TPT does not support the request to vary from the City's bike parking zoning requirements, particularly for bike racks to be separated by 30 inches instead of 36 inches as is required by zoning regulations.
- b. The Project has not demonstrated that there will be adequate sightlines for vehicles and pedestrians at two locations: A.) Vehicles exiting Pioneer Way onto Ames Street, and B. Vehicles exiting the East Garage onto Pioneer Way. New drawings were provided on November 25th, and TPT is in the process of reviewing the proposed sightlines.
- c. To encourage residents to use transit, the City recommends each adult member of a household (up to 2) be offered a Charlie Card valued at the cost of a bus/subway pass (currently set at \$75, subject to fare increases) sold at 50% subsidy for 12 consecutive months, to establish the habit of using mass transit. The Applicant does not agree with providing this condition.

### 2. Planning Board Exceedences

The Planning Board Criteria evaluates the Project's vehicle trip generation, impact to intersection level of service and increase in vehicle queuing, increase in traffic volume on residential streets, bicycle and pedestrian conditions. The Planning Board Criteria were established by the Planning Board to determine if a project will have any potential adverse transportation impacts. Exceeding one or more criteria is indicative of a potential adverse impact on the City's transportation network. The Planning Board will consider mitigation efforts and their effectiveness, to reduce a Project's traffic impact.

The Project's TIS resulted in no Planning Board criteria being exceeded. It should be noted that this does not mean the Project will not add new trips (all Projects create new trips). But rather it means none of the Planning Board Criteria thresholds were exceeded.

The Planning Board Criteria is a tool to help detect and gauge a projects potential adverse transportation impacts in relation to the merits of the Project and proposed mitigation. The Proposed Ames Street Residential Project will generate new trips but not enough to exceed any Planning Board criteria. For example, the intersection of Broadway/Galileo Galilei Way will change from LOS E to F in the morning peak hour, but because roadway volumes will increase by 0.4% it did not trigger the criteria, which is an increase in 7% of roadway volume.

In the future, the Broadway at Third Street intersection will continue to experience a Level of Service grade F. The intersection will also have a new roadway connection allowing vehicles (including buses) to travel from Third Street to Main Street.

### 3. Site Plan

The project will have a positive impact on the street by relocating the existing loading/service area fronting Ames Street with new retail/restaurant uses, enhanced by new streetscape, open space and landscaping elements that will improve pedestrian comfort, interest, and experiences at this location.

The existing East Garage loading dock and vehicular entrance will be relocated to Pioneer Way, a new private street, open to the public, to serve dual purposes of access/egress for the relocated loading dock, vehicle egress only for monthly parking pass holders in the East Garage, bicyclists and pedestrian circulation. Vehicle access to the East Garage will be consolidated on Broadway.

TPT offers the following comments on the proposed site plan and circulation plan:

- No trucks may stop to load/unload on Ames Street. All loading must occur at the loading dock.

- As stated above, the Project must have adequate sightlines for vehicles exiting Pioneer Way onto Ames Street and vehicles exiting the parking garage onto Pioneer Way. TPT is in the process of reviewing the Applicants drawings.
- The loading dock and Pioneer Way must be actively controlled and managed to operate with minimal conflicts between trucks, pedestrians, bicyclists and vehicles exiting the East Garage. We recommend that prior to the issuance of a Building Permit or as approved by the City, the Proponent should provide a detailed loading dock/Pioneer Way management plan to TP&T and CDD for approval.
- Because the loading dock cannot accommodate tractor trailers, we recommend they not be permitted for deliveries.
- Final design details for Pioneer Way, including pavement material and vertical elements, such as bollards, shall be approved by the City as part of the Building Permit process.

As part of the City's Ames Street Disposition, the Proponent will be required to design and reconstruct Ames Street as directed and approved by the City, including sidewalks, landscaping, and a new two-way protected bicycle facility (i.e. cycle track) on the east side of Ames Street between Broadway and Main Street. The approximately 11 foot two-way cycle track will be protected by a 3-foot striped buffer and a 7 foot parking lane. Ames Street will include 11-foot travel lanes and a 7-foot parking lane along the west side. The improvements to Ames Street should be completed prior to the issuance of the Project's Certificate of Occupancy or as approved by the City.

#### **Auto Parking**

The Project proposes to allocate 140 spaces in the Cambridge Center East Garage to meet the Project's parking needs and minimum zoning parking requirement for the MXD District (0.5 spaces per unit). The TIS included a thorough parking analysis. Based on that analysis, we believe the Garage will have sufficient parking to meet the Project's need.

The Project is estimated to need approximately 78 spaces during the daytime and 140 spaces overnight. The 844 space Cambridge Center East Garage, which is a commercial parking garage, has a peak occupancy of 79% during the day (176 unused spaces) and 8% overnight (775 unused spaces), based on weekly counts conducted in May 2013. Even though a portion of the Garage will be demolished through the construction of the Project (reduced from 844 spaces to approximately 804 spaces), the garage will still have enough parking to accommodate the Project's daytime and nighttime parking needs. The Applicant acknowledges the loss of the 40 parking spaces in the East Garage.

In addition, the Kendall Square Urban Renewal area contains three shared parking garages for employees, residents and visitors totaling 2,748 spaces. For the three Garages, the total average peak daytime use is 78% and 9% for overnight resulting in approximately 602 unused spaces during the day and 2,513 unused spaces overnight.

#### **4. Transit Impacts**

The Project's impact on transit, including the Red Line capacity, was reviewed in the TIS. The Project will generate 57 new transit trips during the morning peak hour and 90 transit trips during the evening peak hour, including 25 AM peak hour Red Line trips and 47 PM peak hour Red Line trips. The remainder of transit trips will use buses. The Project's peak hour red line riders, if evenly distributed throughout the hour and by inbound and outbound direction, will add about 1 rider per train per direction during peak hours. In reality, TP&T believes the Project's new Red Line riders will not be so evenly spaced out during the peak hour. It is

also important to note that the transit analysis does not take into account trains irregularity of arrivals through the peak hour. Passenger may not be able to get on the first train that arrives, due to crowding.

Red Line capacity at Kendall Square, especially during peak hours is a City and regional concern. It was one of the issues discussed in the Kendall Square - Central Square (K2C2) Plan. The K2C2 Plan acknowledged that there are high congestion levels during the "peak of the peak" meaning that individual train cars may be full for short intervals. It also found that anticipated growth in the region outside of Cambridge will contribute more significantly to Red Line congestion than will growth within Cambridge. As more people use transit (which the City wants) and more regional growth, train cars will be full for longer intervals unless Red Line capacity is increased or alternative transit options are put in place.

We recommend the Proponent contribute \$50,000 to the City toward work on improving transit conditions in Kendall Square by funding on-call consulting and technical assistance to the City, on projects such as MassDot's Kendall Square Mobility Task Force or other transit initiatives in Kendall Square focused on recommendations or improvements to train and bus services.

#### **5. Transportation Demand Management (TDM) Measures**

TPT recommends that the Project be required to implement the following TDM measures to encourage residents and retail employees to choose preferred modes of transportation including transit, bicycling and walking over single occupancy vehicles.

##### **For Residents:**

- a. Continue to make available at least ten publicly available carshare parking spaces in the Cambridge Center East Garage for a vehicle-sharing company. As demand dictates additional carshare vehicles should be added over time.
- b. Each adult member of each household (up to 2) upon move-in will be offered a Charlie Card valued at the cost of a bus/subway pass (currently set at \$75, subject to fare increases) sold at 50% subsidy for 12 consecutive months, to establish the habit of using mass transit.
- c. Provide air pumps and other bike tools, such as a "fix-it" stand in the bicycle storage areas.
- d. Join the Charles River Transportation Management Association (TMA).
- e. Provide free EZRide Shuttle sticker to each adult member of each household each year.
- f. Parking should be charged separately from the residential rent, in order to remind tenants how much they pay for parking. The Permittee shall provide the summary of on-site parking fees to the TP&T. The Permittee or any subsequent owner shall provide written update to TP&T whenever the fees are changed.
- g. Either install a real-time multimodal transportation display screen to help people decide which mode to choose for each trip (transit, carshare vehicle, Hubway bike share, etc), or establish a transportation information center located in an area that is central, visible, convenient, and equally accessible to all residents and visitors. The center will feature information on:
  - Available pedestrian and bicycle facilities in the vicinity of the Project site
  - MBTA maps, schedules, and fares
  - Area shuttle map and schedule, if one exists
  - "Getting Around in Cambridge" map and other CitySmart materials (available at the Cambridge Community Development office)
  - Location of bicycle parking
  - Hubway regional bikeshare system
  - Carsharing

- Ride-matching
  - Other pertinent transportation information
- h. Designate a transportation coordinator (TC) for the site to manage the TDM program. The TC will also oversee the marketing and promotion of transportation options to all residents at the site in a variety of ways:
- Posting information in a prominent location in the building and on the Project's website, social media, and property newsletters.
  - Responding to individual requests for information in person and via phone and email.
  - Performing annual transportation surveys.
- i. The TC will compile and distribute up-to-date information explaining all transportation options to all new residents as part of their New Resident Packet. The packets will contain information on both the range of options available and any building manager programs to support the use of these options and will include:
- Available pedestrian and bicycle facilities in the vicinity of the Project site
  - MBTA maps, schedules, and fares
  - Area shuttle map and schedule, if one exists
  - "Getting Around in Cambridge" map and other CitySmart materials (available at the Cambridge Community Development office)
  - Location of bicycle parking
  - Hubway regional bikeshare system
  - Carsharing
  - Ride-matching
  - Other pertinent transportation information
- j. The TC will be on-site during a minimum of 2 hours per week and will be available during other times to residents via email and telephone. Email and phone information for the TC will be posted in the transportation information center.
- k. The TC will participate in any TC trainings offered by the City of Cambridge or local TMA.

For Retail employees:

- a. 50% subsidy of MBTA monthly passes to full-time.
- b. Hubway membership (minimum Gold Level) for employees that become Hubway members.
- c. Corporate membership paid by the employer at a local carshare company to allow employees to use a carshare vehicle for work-related trips during the day instead of needing to drive private vehicles to work.
- d. Membership in the the Charles River TMA, to benefit from its emergency ride home and ride-matching programs.

For Retail patrons:

- a. Mount a real-time transportation information screen in in a permanent and central location to show arrival times and availability for nearby buses, trains, shuttles, Hubway bikes, and carshare vehicles, etc.
- b. Do not offer parking to retail customers, or charge customers market-rate fees (no validation offsets)
- c. Home delivery service for non-automobile patrons, if type of retail involves purchasing goods.

Monitoring Program:

## 88 Ames Street Residential Project

The Project should include survey information for residents and retail uses in a form approved by the City. The information will provide monitoring of the residents mode shares, auto ownership and use, and retail employees and patron mode shares, number of parking access cards issued for which locations and user type, peak daytime and nighttime utilization of vehicle and bicycle parking spaces by location and user type, resident and retail employee mode splits, and auto/bicycle ownership. Data should be collected through resident and retail employee surveys/questionnaires, and through observed and mechanical counts.

All surveys and counts shall be designed and conducted in a manner approved by CDD and approved before issuance of the first Certificate of Occupancy. Monitoring and surveying shall begin when the occupancy of the Project has reached ninety percent (90%) or within one year of the date of the first Certificate of Occupancy, whichever is sooner. If the Certificate of Occupancy is issued between September 1<sup>st</sup> and February 29<sup>th</sup>, the monitoring should take place during the months of September or October and be reported to the City no later than November 30. If the Certificate of Occupancy is issued between March 1<sup>st</sup> and August 31<sup>st</sup>, monitoring should take place during the months of April or May and be reported to the City no later than June 30. Reports should also be included and combined with the annual Urban Renewal Transportation Monitoring reports.

Cc: Brian Murphy, Susanne Rasmussen, Stuart Dash, Liza Paden, Cara Seiderman, Stephanie Groll, CDD; Adam Shulman, TPT; Ben Lavery, Boston Properties Cambridge Center Residential LLC.

**Planning Board Permit Number:** \_\_\_\_\_

**Project Name:** Ames Street Residences

**Total Data Entries = 119**

**Total Number of Criteria Exceedences = 0**

a. Project Vehicle Trip Generation

Time Period	Build	Exceeds Criterion
Weekday Daily	848	N
AM Peak	48	N
PM Peak	76	N

b. Level of Service (VLOS) at Signalized Intersections

Intersection	AM Peak Hour			PM Peak Hour		
	Existing	Build	Exceeds Criterion?	Existing	Build	Exceeds Criterion?
Broadway / Galileo Galilei Way	E	F	N	E	E	N
Main Street / Vassar Street / Galileo Galilei Way	C	C	N	C	C	N
Main Street / Ames Street	C	C	N	C	C	N
Broadway / Ames Street	C	C	N	D	D	N
Broadway / Third Street	E	E	N	E	E	N

c. Traffic on Residential Streets

There are no Residential Streets in the study area

d. Lane Queue (for signalized intersections critical lane)

Intersection	Approach	AM Peak Hour			PM Peak Hour		
		Existing	Build	Exceeds Criterion?	Existing	Build	Exceeds Criterion?
Broadway / Galileo Galilei Way (Signalized)	EBL	4	4	N	5	5	N
	EBT	6	6	N	7	7	N
	WBL	4	4	N	6	6	N
	WBT	6	6	N	8	8	N
	NBL	2	2	N	4	4	N
	NBT	3	3	N	7	7	N
	SBL	4	4	N	3	3	N
	SBT	11	11	N	7	7	N
Main Street / Galileo Galilei Way (Signalized)	SBR	6	7	N	5	5	N
	EBL	2	2	N	6	6	N
	EBT	4	4	N	4	5	N
	WBL	2	3	N	2	2	N
	WBT	5	4	N	3	3	N
	NBT	4	4	N	7	7	N
	SBL	1	1	N	1	1	N
	SBT	5	6	N	8	8	N
Main Street / Ames Street (Signalized)	SBR	4	5	N	6	6	N
	EBT	6	6	N	8	9	N
	WBT	2	2	N	2	3	N
	NBT	6	6	N	6	6	N
	SBT	2	2	N	5	4	N
Broadway / Ames Street (Signalized)	SBR	3	3	N	4	3	N
	EBT	7	3	N	8	8	N
	WBL	3	2	N	3	3	N
	WBT	12	11	N	15	15	N
	NBL	3	3	N	3	4	N
Broadway / Third Street (Signalized)	NBR	1	1	N	1	1	N
	EBL	6	6	N	7	7	N
	EBT	2	2	N	7	8	N
	WBT	15	15	N	8	9	N
	SBL	4	n/a	N	12	n/a	N
	SBT	n/a	5	N	n/a	14	N
SBR	4	3	N	4	3	N	



e. Pedestrian and Bicycle Facilities

Signalized Intersections

Intersection	Crosswalk	AM Peak Hour			PM Peak Hour		
		Existing	Build	Exceed Criterion?	Existing	Build	Exceeds Criterion?
Galileo Galilei Way at Broadway	East	D	D	N	D	D	N
	West	D	D	N	D	D	N
	North	D	D	N	D	D	N
	South	D	D	N	D	D	N
Vassar Street at Main Street	East	C	C	N	C	C	N
	West	C	C	N	C	C	N
	North	C	C	N	B	B	N
	South	C	C	N	B	B	N
Ames Street at Main Street	East	D	D	N	D	D	N
	West	D	D	N	D	D	N
	North	C	C	N	C	C	N
	South	C	C	N	C	C	N
Ames Street at Broadway	East	D	D	N	D	D	N
	West	D	D	N	D	D	N
	South	C	C	N	C	C	N
Third Street at Broadway	East	D	D	N	D	D	N
	West	D	D	N	D	D	N
	North	C	C	N	C	C	N

Sidewalk and Bicycle Facilities

Adjacent Street	Link (between)	Sidewalks or Walkways Present?	Exceeds Criteria?	Bicycle Facilities or Right of Ways Present?	Exceeds Criteria?
Ames Street	Main Street and Broadway	Y	N	Y	N
Broadway	Ames Street and Third Street	Y	N	Y	N

**CITY OF CAMBRIDGE**  
**Special Permit Transportation Impact Study (TIS)**

Planning Board Permit Number: \_\_\_\_\_

**PROJECT NAME:** Ames Street Residences  
 Address: 77 Ames Street, Cambridge MA  
 Owner/Developer Name: BP Cambridge Center Residential, LLC  
 Contact Person: David Stewart  
 Contact Address: 800 Boylston Street, Suite 1900, Boston, MA 02199  
 Contact Phone: (617) 236-3407

**SIZE:**  
 ITE sq. ft.: 280 residential rental units and 16,000 square feet retail  
 Zoning sq. ft.: N/A  
 Land Use Type: Residential and Retail

**PARKING:**  
 Existing Parking Spaces: 844 Use: Parking Garage  
 New Parking Spaces: 840 Use: Parking Garage  
 Net Increase Parking Spaces (-40)  
 Date of Parking Registration Approval: N/A

**TRIP GENERATION:**

	Daily	AM Peak Hour	PM Peak Hour
Total Trips	3,122	176	282
Vehicle	848	48	76
Transit	998	57	90
Pedestrian	880	48	80
Bicycle	308	18	28
Other	88	5	8

**MODE SPLIT (PERSON TRIPS):** RESIDENTIAL & (RETAIL)  
 Vehicle: 32.0% (31.0%) Bicycle: 10.0% (8.0%)  
 Transit: 30.0% (30.0%) Pedestrian: 25.0% (29.0%)  
 Other: 3.0% (2.0%)

**TRANSPORTATION CONSULTANT:**

Company Name: Vanasse Hangen Brustlin, Inc.  
 Contact Name: Sean M. Manning, P.E., PTOE  
 Phone: 617.728.7777

Date of Building Permit Approval: \_\_\_\_\_