



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

www.cambridgema.gov/traffic

Susan E. Clippinger, Director
Brad Gerratt, Deputy Director

Phone: (617) 349-4700
Fax: (617) 349-4747

MEMORANDUM

To: Cambridge Planning Board
From: Susan Clippinger, Director TP&A
Date: July 29, 2014
Re: 40 Thorndike Street - Edward J. Sullivan Courthouse Redevelopment Project.

The proposed Sullivan Courthouse Redevelopment Project located at 40 Thorndike Street by LMP GP Holdings LLC/Leggat McCall Properties LLC reduced the size of their project from 460,000 sf office/lab to 420,000 sf.

The Proponent provided a memo dated July 18, 2014 from Vanasse & Associates, Inc. that revised the Project's Vehicle Trip Generation. It showed a reduction of 160 daily vehicle trips, 19 morning peak hour vehicle trips, and 20 evening peak hour vehicle trips. The result is the Project went from exceeding all 3 Planning Board Vehicle Trip Generation Criteria (daily, morning and evening) to only exceeding the daily and evening peak hour vehicle trip thresholds. Morning peak hour trips were reduced from 253 to 234. We certify these revisions.

For Level of Service, Traffic on Residential Streets, Lane Queue and Pedestrian and Bicycle Facilities, the Proponent continues to use the original 460,000 sf project.

The updated Planning Board Special Permit Criteria Performance Summary Sheets are attached.

The Proposed parking for the Project continues to be 512 spaces, including 92 spaces on-site and 420 spaces off-site.

Garage utilization.

The closing of the Courthouse at 40 Thorndike followed by the recession greatly reduced the use of the City's First Street Garage. This garage was built to primarily serve the employees and visitors to the various Court buildings in the area (some of which remain) and the new developments around the Lechmere Canal, specifically the Davenport Building, and 1 and 10 Canal Park. In the last few years we have been able to increase use of the garage, bringing in revenue to the City. In addition to the new monthly parkers, some of the increase was creating by providing parking for the sheriff's department employees (now gone), parking for the Cambridge Health Alliance, parking for some Police department operations, an area to store the City's bike racks prior to installation and winter storage for bike corrals.

Some of these uses can be relocated, although we would never end the program of free parking for residents during a snow emergency.

As I wrote to the City Manager in October 2013, the department remains prepared to provide parking to the Courthouse Development pending completion of the disposition process as legally required. About 75% of garage use is by monthly parkers. We have capped the number of active monthly access cards we will accommodate at this time. We will be evaluating the market rates for parking in the area to make sure the City garage rates stay competitive and we are not inadvertently providing a financial incentive for people commuting to the area to drive rather than taking transit, bicycling or walking.

CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Summary Sheet

Planning Board Permit Number: _____

Project Name: Courthouse Redevelopment

Address: 40 Thorndike Street

Owner/Developer Name: LMP GP Holdings LLC/Leggat McCall Properties, LLC.

Contact Person: Robert M. Dickey

Contact Address: 10 Post Office Square

Boston, MA 02109

Contact Phone: 617-422-7027

ITE sq. ft.: 460,000*

Zoning sq. ft.: 460,000

Land Use Type: Office R&D Space / Retail Space / Residential Space

*Reflects 40,000 sf reduction – update reflects changed trip generation only.

Existing Parking Spaces: 40 - Registered Use: Employee

New Parking Spaces: 92* Use: Employee/Residential

Date of Parking Registration Approval: _____

*420 additional parking spaces to be leased at the city-owned First Street Garage.

Trip Generation:	Daily	AM Peak Hour	PM Peak Hour
Total Trips	4,320	483	521
Vehicle	2,066	234	250
Transit	1,716	204	211
Pedestrian	452	36	50
Bicycle	238	26	28

Mode Split (person trips): Vehicle: 45/39^a/49 %

Transit: 25/24^a/40 %

(Retail/Residential/R&D use) Pedestrian: 24/22^a/6 %

Bicycle: 6/4^a/5 %

^aResidential 11% work, home, other.

Transportation Consultant: Vanasse & Associates, Inc.

Contact Name: F. Giles Ham, P.E.

Phone: 978-474-8800

Date of Building Permit Approval: _____



CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Planning Board Permit Number: _____

Project Name: Courthouse Redevelopment

Total Data Entries = 431

Total Number of Criteria Exceedences = 18

1. Project Vehicle Trip Generation

Weekday = 2,066 AM Peak Hour = 234 PM Peak Hour = 250 Meets Criteria? [Y/N] N/N

Note: Reflects change from original 460 KSF to 420 KSF Office/R&D.

2. Level of Service (LOS)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
Third Street at O'Brien Highway	F	F (1.1%)	Y	D	D	Y
Third Street at Cambridge Street	B	C	Y	D	D	Y
Third Street at Thorndike Street	D	D	Y	C	C	Y
Third Street at Spring Street	F	F (0%)	Y	C	C	Y
Third Street at Binney Street	E	E	Y	D	D	Y
Second Street at Cambridge Street	A	A	Y	A	B	Y
Second Street at Thorndike Street	B	B	Y	B	B	Y
Second Street at Spring Street	B	B	Y	B	B	Y
First Street at Cambridge Street	D	D	Y	D	D	Y
First Street at Thorndike Street	B	B	Y	B	C	Y
First Street at Spring Street	A	A	Y	A	A	Y
First Street at Charles Street and Cambridgeside Place	B	B	Y	B	B	Y
First Street at Binney Street	C	C	Y	C	C	Y
O'Brien Highway at Cambridge Street and East Street	C	C	Y	C	C	Y
Cambridgeside Place at Land Boulevard	C	C	Y	B	B	Y
Binney Street at Land Boulevard	C	C	Y	B	B	Y
O'Brien Highway at Land Boulevard and Charlestown Avenue	F	F (1.7%)	Y	F	F (1.7%)	Y

CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Planning Board Criteria Performance Summary

2. Level of Service (LOS) (Continued)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
Third Street at Charles Street	B	B	Y	B	B	Y
Binney Street at Second Street	B	B	Y	C	C	Y
Third Street at Broadway	C	C	Y	C	C	Y

Note: Based upon original project at 460 KSF Office/R&D.

3. Traffic on Residential Streets

Street Segment	A.M. Peak Hour			P.M. Peak Hour		
	Existing Volume	With Project	Meets Criteria?	Existing Volume	With Project	Meets Criteria?
Third Street, O'Brien Highway to Gore Street (Amount of residential = 1/2 or more)	835	851	Y	1,475	1,493	Y
Third Street, Gore Street to Otis Street (Amount of residential = 1/2 or more)	832	847	Y	893	897	Y
Third Street, Otis Street to Spring Street (Amount of residential = 1/2 or more)	994	994	Y	875	875	Y
Third Street, Spring Street to Charles Street (Amount of residential = 1/2 or more)	752	758	Y	818	821	Y
Third Street, Charles Street to Rogers Street (Amount of residential = <1/3)	763	768	Y	896	898	Y
Third Street, Rogers Street to Linksey Way (Amount of residential = >1/3 but <1/2)	797	802	Y	886	888	Y
Third Street, Linksey Way to Broadway (Amount of residential = <1/3)	822	847	Y	988	1,005	Y
O'Brien Highway, Winter Street to Gore Street (Amount of residential = <1/3)	1,952	1,966	Y	2,144	2,155	Y
O'Brien Highway, Gore Street to Land Boulevard (Amount of residential = <1/3)	1,886	1,887	Y	1,797	1,804	Y
Cambridge Street, Third Street to First Street (Amount of residential = <1/3)	594	624	Y	597	626	Y
Thorndike Street, Third Street to First Street (Amount of residential = <1/3)	100	115	Y	60	64	Y

CITY OF CAMBRIDGE
Special Permit Transportation Impact Study (TIS)

Planning Board Criteria Performance Summary

3. Traffic on Residential Streets (Continued)

Street Segment	A.M. Peak Hour			P.M. Peak Hour		
	Existing Volume	With Project	Meets Criteria?	Existing Volume	With Project	Meets Criteria?
Charles Street, Fifth Street to Second Street (Amount of residential = 1/2 or more)	124	130	Y	181	183	Y
Second Street, Gore Street to Otis Street (Amount of residential = 1/2 or more)	211	226	Y	152	158	Y
Second Street, Otis Street to Spring Street (Amount of residential = <1/3)	171	193	Y	196	210	Y
Second Street, Spring Street to Charles Street (Amount of residential = 1/2 or more)	143	160	Y	143	160	Y

Note: Based upon original project at 460 KSF Office/R&D.

4. Lane Queue

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
<i>Charles Street at First Street</i>	5						
Charles Street EB LT		1	1	Y	3	3	Y
Charles Street EB TH/RT		1	1	Y	3	3	Y
Charles Street WB LT/TH/RT		2	3	Y	3	3	Y
First Street NB LT/TH/RT		3	4	Y	4	4	Y
First Street SB LT/TH/RT	2	2	Y	2	3	Y	
<i>Cambridge Street at First Street</i>	6						
Cambridge Street EB LT		--	--	--	--	--	--
Cambridge Street EB TH/RT		7	8	Y	8	8	Y
Cambridge Street WB LT		4	4	Y	1	1	Y
Cambridge Street WB TH		3	3	Y	2	2	Y
First Street NB LT		1	1	Y	4	5	Y
First Street NB TH		--	--	--	--	--	--
First Street NB RT		2	2	Y	9	11	Y
MBTA Drive SB LT/TH/RT	0	0	Y	1	1	Y	
<i>Thorndike Street at First Street</i>	3						
Thorndike Street EB LT/RT		2	2	Y	3	5	Y
First Street NB TH		1	1	Y	3	6	Y
First Street SB TH	2	3	Y	1	2	Y	

4. Lane Queue (continued)

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
<i>Binney Street at Third Street</i>	9						
Binney Street EB LT		2	2	Y	8	8	Y
Binney Street EB TH		2	3	Y	5	5	Y
Binney Street EB TH/RT		2	3	Y	5	5	Y
Binney Street WB LT		5	5	Y	2	3	Y
Binney Street WB TH		3	3	Y	3	4	Y
Binney Street WB TH/RT		3	3	Y	3	4	Y
Third Street NB LT/TH		4	4	Y	9	9	Y
Third Street NB RT		2	3	Y	4	4	Y
Third Street SB LT/TH/RT	16	16	Y	5	5	Y	
<i>Cambridge Street at Third Street</i>	5						
Cambridge Street EB LT/TH/RT		7	7	Y	6	6	Y
Cambridge Street WB LT/TH/RT		1	1	Y	3	3	Y
Third Street NB LT/TH/RT		2	2	Y	16	16	Y
Third Street SB LT		1	1	Y	1	1	Y
Third Street SB TH/RT	16	16	Y	8	8	Y	
<i>O'Brien Highway at Third Street</i>	3						
O'Brien Highway EB TH/RT		23	23	Y	8	9	Y
O'Brien Highway WB LT/TH		2	2	Y	10	10	Y
Third Street NB LT		1	1	Y	6	6	Y
Third Street NB LT/RT	--	--	--	--	--	--	
<i>Binney Street at First Street</i>	7						
Binney Street EB LT		3	3	Y	6	7	Y
Binney Street EB TH		3	3	Y	3	3	Y
Binney Street EB TH/RT		3	3	Y	3	3	Y
Binney Street WB LT		5	6	Y	3	3	Y
Binney Street WB TH/RT		5	6	Y	3	3	Y
First Street NB LT/TH/RT		1	1	Y	1	1	Y
First Street SB LT/TH		4	5	Y	6	8	Y
First Street SB RT	--	--	--	--	--	--	

4. Lane Queue (continued)

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
<i>O'Brien Highway at East Street/Cambridge Street</i>	13						
O'Brien Highway EB LT		2	2	Y	1	1	Y
O'Brien Highway EB TH		11	11	Y	5	5	Y
O'Brien Highway EB TH		11	11	Y	5	5	Y
O'Brien Highway EB TH		11	11	Y	5	5	Y
O'Brien Highway EB RT		11	11	Y	5	5	Y
O'Brien Highway WB LT		5	5	Y	1	1	Y
O'Brien Highway WB LT		5	5	Y	2	2	Y
O'Brien Highway WB TH		4	4	Y	9	9	Y
O'Brien Highway WB TH/RT		4	4	Y	9	9	Y
East Street SB LT/TH/RT		2	2	Y	6	7	Y
Cambridge Street NB LT		1	1	Y	6	7	Y
Cambridge Street NB RT		3	3	Y	1	1	Y
Cambridge Street NB RT		3	3	Y	1	1	Y
<i>Land Boulevard at Binney Street</i>	9						
Binney Street EB LT		2	2	Y	3	3	Y
Binney Street EB LT/RT		2	2	Y	3	3	Y
Land Boulevard NB LT		8	9	Y	5	5	Y
Land Boulevard NB TH		1	1	Y	2	2	Y
Land Boulevard NB TH		1	1	Y	2	2	Y
Land Boulevard NB TH		1	1	Y	2	2	Y
Land Boulevard SB TH		9	9	Y	8	8	Y
Land Boulevard SB TH		9	9	Y	8	8	Y
Land Boulevard SB RT		0	0	Y	0	0	Y
<i>Charles Street at Third Street</i>	4						
Charles Street EB LT/TH/RT		1	1	Y	1	1	Y
Charles Street WB LT/TH/RT		0	0	Y	1	1	Y
Third Street NB LT/TH/RT		1	1	Y	5	5	Y
Third Street SB LT/TH/RT		4	4	Y	1	1	Y
<i>Binney Street at Second Street</i>	6						
Binney Street EB LT		2	2	Y	4	4	Y
Binney Street EB TH/RT		2	2	Y	2	2	Y
Binney Street WB LT		2	2	Y	1	1	Y
Binney Street WB TH/RT		4	4	Y	3	3	Y
Third Street NB LT/TH/RT		1	1	Y	4	4	Y
Third Street SB LT/TH/RT		1	1	Y	2	2	Y
<i>Third Street at Broadway</i>	5						
Broadway EB LT		6	6	Y	6	6	Y
Broadway EB TH		3	3	Y	6	6	Y
Broadway WB TH/RT		9	9	Y	6	6	Y
Third Street SB LT		2	2	Y	10	11	Y
Third Street SB RT		1	1	Y	1	1	Y

4. Lane Queue (continued)

Intersection	No. of Lanes Analyzed	A.M. Peak Hour			P.M. Peak Hour		
		Existing	With Project	Meets Criteria?	Existing	With Project	Meets Criteria?
<i>Land Boulevard at Cambridgeside Place</i>	12						
Cambridgeside Place EB LT		2	2	Y	4	4	Y
Cambridgeside Place EB LT		2	2	Y	4	4	Y
Cambridgeside Place EB RT		0	0	Y	0	0	Y
Hotel Driveway WB LT/TH/RT		1	1	Y	1	1	Y
Land Boulevard NB LT		4	4	Y	2	2	Y
Land Boulevard NB TH		3	2	Y	8	8	Y
Land Boulevard NB TH		3	2	Y	8	8	Y
Land Boulevard NB TH/RT		3	2	Y	2	2	Y
Land Boulevard SB LT		1	1	Y	1	1	Y
Land Boulevard SB TH		10	10	Y	1	1	Y
Land Boulevard SB TH		10	10	Y	1	1	Y
Land Boulevard SB TH/RT		10	10	Y	1	1	Y
<i>Land Boulevard at O'Brien Highway</i>	15						
O'Brien Highway EB LT		4	5	Y	13	16	Y
O'Brien Highway EB TH		11	11	Y	7	7	Y
O'Brien Highway EB TH		11	11	Y	7	7	Y
O'Brien Highway EB TH		11	11	Y	7	7	Y
O'Brien Highway EB RT		11	11	Y	5	5	Y
O'Brien Highway WB LT		8	8	Y	8	8	Y
O'Brien Highway WB TH		7	7	Y	8	8	Y
O'Brien Highway WB TH		7	7	Y	8	8	Y
O'Brien Highway WB RT		4	4	Y	7	7	Y
Charlestown Avenue SB LT/TH		27	31	Y	20	20	Y
Charlestown Avenue SB TH/RT		27	31	Y	20	20	Y
Land Boulevard SB LT		3	3	Y	12	12	Y
Land Boulevard SB TH		6	6	Y	16	16	Y
Land Boulevard NB TH		6	6	Y	16	16	Y
Land Boulevard NB RT		3	3	Y	10	10	Y

Note: Based upon original project at 460 KSF Office/R&D.

5. Pedestrian and Bicycle Facilities (Pedestrian LOS)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing PLOS	With Project	Meets Criteria?	Existing PLOS	With Project	Meets Criteria?
<i>Third Street at O'Brien Highway</i>						
Crossing O'Brien Highway (East)	B	B	Y	B	B	Y
Crossing O'Brien Highway (West)	B	B	NA ^a	B	B	NA
Crossing Third Street (North)	D	D	NA	D	D	NA
Crossing Third Street (South)	D	D	Y	D	D	Y
<i>Third Street at Cambridge Street</i>						
Crossing Cambridge Street (East)	B	B	Y	B	B	Y
Crossing Cambridge Street (West)	B	B	Y	B	B	Y
Crossing Third Street (North)	B	B	Y	B	B	Y
Crossing Third Street (South)	B	B	Y	B	B	Y
<i>Third Street at Thorndike Street</i>						
Crossing Thorndike Street (East)	A	A	Y	A	A	Y
Crossing Thorndike Street (West)	A	A	Y	A	A	Y
Crossing Third Street (North)	F	F	N	F	F	N
Crossing Third Street (South)	F	F	N	F	F	N

5. Pedestrian and Bicycle Facilities (Pedestrian LOS) (continued)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing PLOS	With Project	Meets Criteria?	Existing PLOS	With Project	Meets Criteria?
Third Street at Spring Street						
Crossing Spring Street (East)	A	A	Y	A	A	Y
Crossing Spring Street (West)	A	A	Y	A	A	Y
Crossing Third Street (North)	F	F	N	F	F	N
Crossing Third Street (South)	F	F	N	F	F	N
Third Street at Binney Street						
Crossing Binney Street (East)	B	B	Y	B	B	Y
Crossing Binney Street (West)	B	B	Y	B	B	Y
Crossing Third Street (North)	B	B	Y	B	B	Y
Crossing Third Street (South)	B	B	Y	B	B	Y
Second Street at Cambridge Street						
Crossing Cambridge Street (East)	B	B	Y	B	B	Y
Crossing Cambridge Street (West)	B	B	Y	B	B	Y
Crossing Second Street (North)	B	B	Y	B	B	Y
Crossing Second Street (South)	B	B	Y	B	B	Y
Second Street at Thorndike Street						
Crossing Thorndike Street (East)	A	A	Y	A	A	Y
Crossing Thorndike Street (West)	A	A	Y	A	A	Y
Crossing Second Street (North)	B	B	Y	B	B	Y
Crossing Second Street (South)	B	B	Y	B	B	Y
Second Street at Spring Street						
Crossing Spring Street (East)	A	A	Y	A	A	Y
Crossing Spring Street (West)	A	A	Y	A	A	Y
Crossing Second Street (North)	A	B	N	A	B	N
Crossing Second Street (South)	A	A	Y	A	B	N
First Street at Cambridge Street						
Crossing Cambridge Street (East)	D	D	Y	D	D	Y
Crossing Cambridge Street (West)	D	D	Y	D	D	Y
Crossing First Street (North)	D	D	Y	D	D	Y
Crossing First Street (South)	D	D	Y	D	D	Y
First Street at Thorndike Street						
Crossing Thorndike Street (West)	B	B	Y	B	B	Y
Crossing First Street (North)	C	C	Y	C	C	Y
Crossing First Street (South)	C	C	Y	C	C	Y

5. Pedestrian and Bicycle Facilities (Pedestrian LOS) (continued)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing PLOS	With Project	Meets Criteria?	Existing PLOS	With Project	Meets Criteria?
First Street at Spring Street						
Crossing Thorndike Street (West)	B	C	N	A	A	Y
Crossing First Street (North)	F	F	NA	F	F	NA
Crossing First Street (South)	E	F	NA	F	F	NA
First Street at Charles Street and Cambridgeside Place						
Crossing Charles Street (East)	D	D	Y	D	D	Y
Crossing Charles Street (West)	D	D	Y	D	D	Y
Crossing Cambridgeside Place (North)	D	D	Y	D	D	Y
Crossing Cambridgeside Place (South)	D	D	Y	D	D	Y
First Street at Binney Street						
Crossing Charles Street (East)	C	C	Y	C	C	Y
Crossing Charles Street (West)	C	C	Y	C	C	Y
Crossing Cambridgeside Place (North)	D	D	Y	D	D	Y
Crossing Cambridgeside Place (South)	D	D	Y	D	D	Y
O'Brien Highway at Cambridge Street and East Street						
Crossing O'Brien Highway (East)	D	D	Y	D	D	Y
Crossing O'Brien Highway (West)	D	D	Y	D	D	Y
Crossing Cambridge Street (North)	D	D	NA	D	D	NA
Crossing East Street (South)	D	D	Y	D	D	Y
Cambridgeside Place at Land Boulevard						
Crossing Cambridgeside Place (East)	D	D	Y	D	D	Y
Crossing Cambridgeside Place (West)	D	D	Y	D	D	Y
Crossing Land Boulevard (North)	D	D	Y	D	D	Y
Crossing Land Boulevard (South)	D	D	Y	D	D	Y
Binney Street at Land Boulevard						
Crossing Binney Street (East)	D	D	Y	D	D	Y
Crossing Binney Street (West)	D	D	Y	D	D	Y
Crossing Land Boulevard (North)	D	D	Y	D	D	Y
Crossing Land Boulevard (South)	D	D	Y	D	D	Y
O'Brien Highway at Land Boulevard and Charlestown Avenue						
Crossing O'Brien Highway (East)	E	E	N	E	E	N
Crossing O'Brien Highway (West)	E	E	N	E	E	N
Crossing Land Boulevard (North)	D	D	Y	D	D	Y
Crossing Charlestown Avenue (South)	D	D	Y	D	D	Y
Third Street at Charles Street						
Crossing Charles Street (East)	C	C	Y	C	C	Y
Crossing Charles Street (West)	C	C	Y	C	C	Y
Crossing Third Street (North)	C	C	Y	C	C	Y
Crossing Third Street (South)	C	C	Y	C	C	Y
Binney Street at Second Street						
Crossing Binney Street (East)	D	D	Y	D	D	Y
Crossing Binney Street (West)	D	D	Y	D	D	Y
Crossing Second Street (North)	A	A	Y	A	A	Y
Crossing Second Street (South)	A	A	Y	A	A	Y

5. Pedestrian and Bicycle Facilities (Pedestrian LOS) (continued)

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	Existing PLOS	With Project	Meets Criteria?	Existing PLOS	With Project	Meets Criteria?
Third Street at Broadway						
Crossing Third Street (South)	C	C	Y	C	C	Y
Crossing Broadway (East)	D	D	Y	D	D	Y
Crossing Broadway (West)	D	D	Y	D	D	Y

*NA = Not applicable; no crosswalk at this location.

Note: Based upon original project at 460 KSF Office/R&D.

6. Pedestrian and Bicycle Facilities (Safe Pedestrian and Bicycle Facilities)

Adjacent Street or Public Right-of-Way	Sidewalks or Walkways Present?	Meets Criteria?	Bicycle Facilities or Right-of-Ways Present?	Meets Criteria?
Thorndike Street	Y	Y	Y	Y
Spring Street	Y	Y	Y	Y
Second Street	Y	Y	Y	Y
Third Street	Y	Y	Y	Y

Note: Based upon original project at 460 KSF Office/R&D.

MEMORANDUM

TO: Ms. Susan E. Clippinger
Mr. Adam Shulman
Traffic, Parking & Transportation
City of Cambridge
344 Broadway
Cambridge, MA 02139

FROM: F. Giles Ham, P.E. *FGH*
Vanasse & Associates, Inc.
10 New England Business Center Drive
Suite 314
Andover, MA 01810
(978) 474-8800

DATE: July 18, 2014

RE: 6435 – Cambridge Courthouse

SUBJECT: Reduction from 460,000 sf to 420,000 sf R&D/Office Space

As a result of revisions made Leggat McCall Properties to reduce the R&D/office space by 40,000 sf from 460,000 sf to 420,000 sf, Vanasse & Associates, Inc. (VAI) has revised the vehicle trip generation projections and updated the Special Permit Criteria. Overall, the 40,000 sf reduction in R&D/office space (8.7% reduction) will reduce the overall traffic generation and reduce the traffic on neighboring streets. The revised analysis is presented below.

Trip Generation

Using the same methodology presented in the original Transportation Impact Study, the trip generation estimates were update as shown on the attached summary spreadsheets. Specific traffic reductions are shown in Table 1.

Table 1
TRIP GENERATION SUMMARY

	Trip Generation		
	With 460,000 sf	With 420,000 sf	Reduction
Weekday Daily	2,226	2,066	-160
Weekday Morning Peak Hour	253	234	-19
Weekday Evening Peak hour	270	250	-20

As shown, the reduction will result in 160 less daily trips and between 19 and 20 peak hour trips.

Special Permit Criteria

The resulting trip generation as it relates to the Special Permit Criteria 1 – Project Vehicle Trip Generation is presented in Table 2.

Table 2
SPECIAL PERMIT CRITERIA 1
PROJECT VEHICLE-TRIP GENERATION

Time Period	Threshold	Trip Generation		Special Permit Criteria	
		420,000 sf	460,000 sf	Exceeds Indicator? 460,000 sf	Exceeds Indicator? 420,000 sf
Weekday Daily	2,000	2,066	2,226	Yes	Yes
Weekday Morning Peak Hour	240	234	253	Yes	No
Weekday Evening Peak Hour	240	250	270	Yes	Yes

As shown, the weekday morning peak hour trip generation is now below the Special Permit Criteria of 240 vehicle trips, assuming 420,000 sf R&D/office space. In addition, the Daily Trip Generation only exceeds the criteria by 66 trips and the weekday evening peak hour criteria is only exceeded by 10 trips.

The project's impact is measured against 5 criteria. Based upon the Project Review Special Permit Criteria Analysis, there are a total of 431 indicators which were reviewed. Of the 431 project indicators reviewed, a total of 18 were exceeded. Twelve of these exceed the City's pedestrian delay criteria under existing conditions, with or without the project. Four indicators related to pedestrian delay at unsignalized intersections crossing is exceeded by the project, but the crossings remain at LOS C or better with the project. The remaining two indicators are related to trip generation for the project as shown above. None of the 40 indicators related to vehicular traffic were exceeded, including levels of service, lane queues and traffic on residential streets. Attached please find the updated TIS Summary Sheets. Overall, the reduction of 40,000 sf will reduce the project's impact, as measured by the Special Permit Criteria, including less impact on traffic, levels of service, residential streets, queues and pedestrian and bicycle facilities.

cc: R. Dickey – Leggat McCall Properties LLC



MEMORANDUM

TO: Ms. Susan E. Clippinger
Mr. Adam Shulman
Traffic, Parking & Transportation
City of Cambridge
344 Broadway
Cambridge, MA 02139

FROM: F. Giles Ham, P.E. *FGH*
Vanasse & Associates, Inc.
10 New England Business Center Drive
Suite 314
Andover, MA 01810
(978) 474-8800

DATE: July 18, 2014 **RE:** 6435 – Cambridge Courthouse

SUBJECT: Reduction from 460,000 sf to 420,000 sf R&D/Office Space

As a result of commitment by Leggat McCall Properties to reduce the R&D/office space by 40,000 sf from 460,000 sf to 420,000 sf, Vanasse & Associates, Inc. (VAI) has revised the parking demand analysis and is presented below.

PARKING DEMAND

As required in the City guidelines, the parking analysis was updated to determine future parking demands consistent with vehicle-trip generation assumptions and modal split assumptions for project traffic. The attached table summarizes the minimum parking requirement for the project, as well as the estimated parking demand. The demand analysis is based upon the City of Cambridge requirements for the residential use, retail use, and expected employee population and the mode split assumptions.

The total parking demand is estimated to be 507 spaces, which is greater than the minimum parking requirement of 355 spaces. The parking supply will consist of 92 spaces on-site and 420 off-site for a total of 512 parking spaces. With a parking demand of 483 spaces, the supply will be effectively at full capacity as considered by Industry practices leaving only a few available spaces.

cc: R. Dickey – Leggat McCall Properties LLC



PARKING DEMAND ANALYSIS^a

ZONING			
Use	Size	Zoning Requirements	Required Spaces
Residential	±24 Units	1.0 space/unit	= 24
Office/R&D	420,000 sf	1.0 space/1,340 sf	= 314
Retail	15,000 sf	1.0 space/900 sf	= <u>17</u>
			355
ESTIMATED DEMAND			
Residential	Units	Required Spaces/Unit	Demand
	24	1.0 space per unit	= 24
Expected Employee Population ^b		Auto Access Percentage ^c	Total Spaces Required
1,050	x	0.46	= 483

^aBased on City of Cambridge methodology.

^bBased on a range of 2.0-3.0 employees/1,000 sf assume 2.5 employees/1,000 sf

^cCalculated as SOV rate (42 percent) + ½ of HOV rate (7/2 percent, rounded to 4 percent).

