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July 7, 2014

Mr. Brian Golden, Acting Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Subject: Notice of Project Change – The Brigham and Women's Hospital, Inc.

Dear Acting Director Golden:

Introduction

The Brigham and Women's Hospital, Inc. ("BWH" or the "Hospital") is pleased to submit this Notice of Project Change ("NPC") pursuant to Article 80A-6 of the Boston Zoning Code ("Code"). Contemporaneously with the submission of this NPC, BWH is also submitting an Institutional Master Plan Notification Form in compliance with Article 80D to amend its Institutional Master Plan in regard to the Brigham Building for the Future, which is part of the Massachusetts Mental Health Center ("MMHC") Project (the "Project"), and asks that these documents be reviewed together.

BWH, a founding member of Partners HealthCare System Inc., is a Harvard-affiliated, non-profit, teaching hospital located in the Longwood Medical and Academic Area ("LMA"). BWH has an international reputation for the quality of its medical care and innovative research. In addition, its varied educational programs provide the highest quality training for medical nursing and other health professions.

This NPC is being filed in order to notify the Boston Redevelopment Authority ("BRA") of changes to the Brigham Building for the Future ("BBF")—formerly known as the Brigham and Women's Building—which was approved as part of the MMHC Project in 2010. The changes as described in the NPC are required to allow for a critically necessary modernization of BWH's Operating Room (OR) Platform, which consists of its operating rooms, patient preparation and recovery space and materials support space. In order to enable the modernization of the OR Platform, it is necessary to undertake a series of on-campus moves and create additional, replacement, office/laboratory research and research and development space to replicate doctors' offices currently adjacent to the OR Platform. In order to accommodate these replacement needs, an additional floor is proposed for the BBF.

Original Project Summary

The MMHC Project, as approved in part by virtue of the 2010 BWH IMP, included approximately 633,960 square feet ("sf") in four buildings. The MMHC Project included residential, clinical, transitional housing and crisis stabilization space, research, and office uses, including replacement space for the MMHC, parking and loading facilities. The four distinct buildings making up the MMHC Project include:

1. The Binney Street Building, which as described above, was contemplated for clinical and office use by BWH, within an interim use by DMH until such time as the DMH designated space within the BBF was available. DMH has now determined to continue to occupy the Binney Street Building rather than to relocate its operations and functions into the BBF once constructed.

2. The Partial Hospital/Fenwood Inn Building includes a 42-bed transitional shelter program for homeless, mentally ill men and women, a five bed crisis stabilization unit and partial hospital and outpatient treatment space. This project is not part of BWH's 2010 IMP as it is exempt from zoning given that it provides an essential governmental function. The Partial Hospital/Fenwood Inn Building opened in November 2011.

3. The Residential Building, which will be developed, operated, and controlled by an Affiliate of Roxbury Tenants of Harvard Association, Inc. ("RTH") and is

not part of BWH's 2010 IMP, but instead was the subject of a separate Planned Development Area ("PDA") Development Plan #76 which was approved by the BRA Board and the Zoning Commission in 2010.

4. The BBF, which will be developed, managed, and controlled by BWH, was planned to contain approximately 358,670 sf of space for research and development, clinical, and office uses by BWH and DMH. As noted above, DMH's clinical and office uses which were to be relocated from the Binney Street Building into the BBF will remain as they are now in the Binney Street Building.

The Project includes 406 parking spaces located beneath the BBF, 50 of which will be reserved for DMH use. At the time the zoning permits and approvals were obtained, none of the parking spaces located beneath the BBF were allocated to the development of the Residential Building. BWH and RTH have agreed that in the event market-rate residential condominium units are developed as part of the Residential Building, each such unit will be entitled to purchase one parking space in the new BBF garage at the then fair market value of newly constructed underground parking spaces comparable to those provided in the garage beneath the BBF.

Proposed Project Changes/Proposed Future Project

The changes to the Project are limited to changes to the BBF, consisting of:

- One additional floor, consisting of approximately 28,582 sf dedicated to offices and research and clinical laboratories, resulting in a total of approximately 383,250 SF (which is only 24,580 sf larger than the Project approved in the 2010 BWH IMP), with a lesser allocation to clinical uses than that as contemplated in the 2010 BWH IMP;

- The payment of additional Development Impact Project Plan exactions in accordance with the provisions of Article 80;

- A lower height of approximately 215 feet, which has resulted from progression in the design which is less than the 222 feet approved by virtue of the 2010 BWH IMP;

- The retention by DMH of the Binney Street Building in lieu of relocation into the BBF; and

- The possible allocation of a portion of the 346 parking spaces located beneath the BBF which have been reserved for BWH use to be purchased, by market-rate condominium unit owners within the Residential Building, subject to the terms of the underlying ground lease.

Figures showing the revised BBF project are included in Attachment A.

Project Need

As noted above, BWH requires this additional floor in order to modernize its OR Platform, a modernization which is critical in order to allow it to continue as a leading tertiary care academic medical center. Additional space is required for this modernization, primarily to enlarge the operating rooms themselves to allow for more of the types of complex cases—such as transplants and advanced imaged guided surgeries—for which BWH has gained notoriety as a national and international leader. In order to make the space available for this modernization, a series of on-campus moves will be required to make space available adjacent to the OR Platform. The end result of this process is the need for an additional floor on the BBF which will be used for offices and research and clinical laboratories which will be displaced by these moves.

Zoning

Based upon discussions with the BRA Staff and an assessment of the BBF's impacts, the modifications to the BBF described herein appear eligible for review in accordance with Section 80D-5.2(e) of the Code (Waiver of Further Review of Unchanged Plans). Waiver of further review is appropriate here given that: (i) no new Proposed Institutional Projects are planned; (ii) no changes to the Hospital's Institutional Master Plan are proposed that would result in other than de minimus changes in the use, dimensional, parking or loading elements of the Hospital's IMP given that the height of the BBF is below that which has been approved and the additional square footage when viewed in light of that authorized by virtue of the Hospital's IMP is not significant; and (iii) as demonstrated in this NPC which has been filed simultaneously with the IMPNF, there are no significantly greater

impacts from the modifications to the BBF as described in this IMPNF and corresponding NPC. In the event that, upon review of the IMPNF and other supporting documentation as filed with the BRA, the BRA determines that the modifications to the BBF described above qualify for treatment in accordance with Section 80D-5.2(e) of the Code, approval by the BRA Board alone will be sufficient to authorize the modifications to the BBF described herein as set forth in accordance with Article 80D-6 of the Code.

Environmental Impacts

Transportation

Trip generation for the proposed Project was based on Institute of Transportation Engineer's ("ITE") trip generation data with adjustments made to account for the urban characteristics of the area, including Boston Transportation Department ("BTD") mode splits as presented in the Draft PIR dated October 15, 2009. Based on ITE Trip Generation rates and BTD mode share data for the area, the additional floor of laboratory and/or Research and Development ("R&D") space in conjunction with the reduced clinical space, is expected to generate approximately 21 additional vehicle trips during the weekday morning peak hour and 18 vehicles trips during the evening peak hour. During a typical weekday, the updated BBF is expected to generate approximately 98 fewer vehicle trips over the course of the day. These reductions are a direct result of the reduced clinical component of the BBF building which generates substantially more traffic compared to office and Research and Development. Attachment B includes a memorandum providing more information about trip generation. The possible reduction in parking spaces available to the Hospital beneath the BBF in order to provide for RTH market-rate condominiums, to the extent developed, will not adversely impact traffic or trip generation.

Wind

Rowan Williams Davies & Irwin Inc. ("RWDI") has reviewed the changes to the BBF and have opined that the expected wind conditions around the BBF site, with the proposed changes, will be similar to those predicted by the wind tunnel tests for the Project in 2009. See Attachment C for more information.

Shadow

As discussed in the Draft PIR, the BBF is not subject to the LMA Interim Guidelines; however, a discussion of the Project's impacts on the Riverway and Emerald Necklace were included in the Draft PIR. The changes to the BBF create minimal new shadow on the Riverway section of the Emerald Necklace, as shown in Attachment D, beyond what was described in Section 5.4.2.1 of the Draft PIR.

Other Environmental Impacts

The changes to the BBF are anticipated to have a minimal impact on other environmental impacts typically studied under Article 80. The changes are not anticipated to increase impacts related to noise, construction and historic resources. The changes are not anticipated to result in exceedances of the National Ambient Air Quality Standards. The changes to the BBF will have a minimal impact to daylight obstruction due to the slightly larger footprint of the upper floors.

Sustainable Design

In the Draft PIR, the Proponent committed to meeting the Silver level under Leadership in Energy and Environmental Design ("LEED") rating system for New Construction. Currently, BWH is targeting LEED Gold.

Highlight's of BWH's sustainability strategy for the BBF include a cogeneration facility and approximately 31.9% source energy savings (36.8% energy-cost savings) as shown by the energy model for the construction document phase, compared to the ASHRAE 90.1-2007 Appendix G baseline.

Infrastructure

The addition will increase water demand and wastewater generation from what was presented in the Draft PIR. The additional floor, when taken into account along with slight changes in the building program mix, increases wastewater generation by 1,778 gallons per day ("gpd") and increases water demand by 1,956 gpd. These increase amount to a less than two percent increase in wastewater

generation and water demand. Attachment B includes a memorandum providing more information about infrastructure.

Please do not hesitate to contact Vincent McDermott at (617) 983-7988 or VMcDermott@partners.org should you have any questions with respect to this NPC.

BWH and its project team look forward to continuing to work with the BRA and city agencies to insure that the BBF is reflective of its name.

Sincerely,

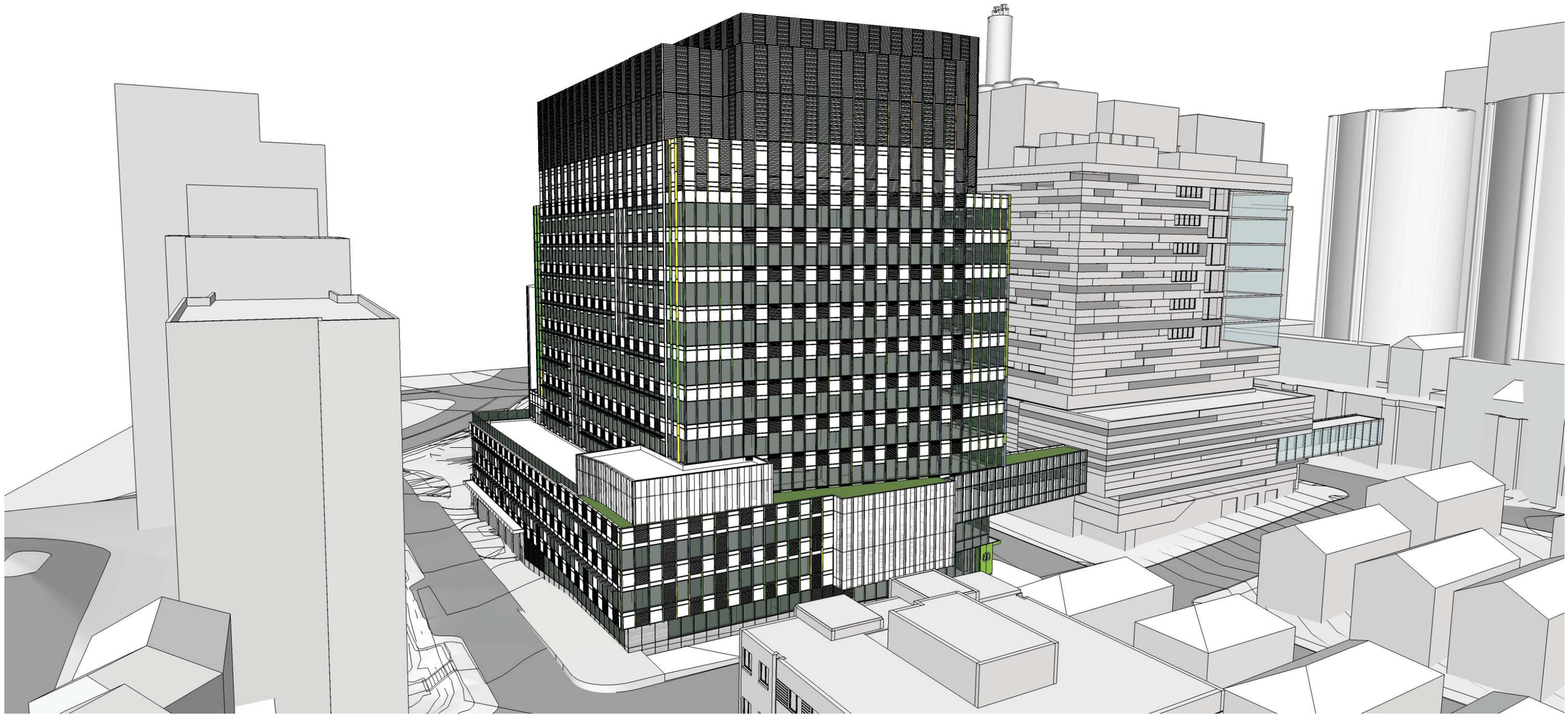
EPSILON ASSOCIATES, INC.

Cindy Schlessinger

Cindy Schlessinger
Principal

Cc: Vincent McDermott
Stephen Dempsey
Kairos Shen
Sonal Gandhi
Marybeth Hammond, Esq.

Attachment A: BBF
Attachment B: Memorandum
Attachment C: Wind
Attachment D: Shadow



03/12/14

SCALE:

PARTNERS HEALTHCARE | FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL AND MASSACHUSETTS GENERAL HOSPITAL

BWH BRIGHAM AND WOMEN'S HOSPITAL

PROPOSED ADDITIONAL FLOOR - 14'-6"

BRIGHAM BUILDING FOR THE FUTURE

BOSTON, MA

100909.00

nbbj

ONE BEACON STREET
BOSTON, MASSACHUSETTS 02108
PHONE 617 378 4800

Attachment B

Memorandum

Transportation
Land Development
Environmental
Services

Vanasse Hangen Brustlin, Inc.

99 High Street, 10th Floor
Boston, Massachusetts 02110
617 728-7777
FAX 617 728-7782

Memorandum

To: Mr. Joseph O'Farrell
Senior Project Manager
Brigham & Women's Hospital

Date: April 24, 2014

Project No.: 10568.04

From: E. Donohoe, H. Moshier - VHB

Re: Alternative Building Program
Traffic & Water/Wastewater
Assessment

OVERVIEW

Vanasse Hangen Brustlin, Inc. (VHB) has conducted an additional transportation and water/wastewater generation assessment for Brigham and Women's Hospital for the proposed changes to the Brigham Building of the Future (BBF) project that is currently under construction. The BBF building was approved by the Boston Redevelopment Authority (BRA) several years ago as part of the Massachusetts Mental Health Center Redevelopment Project (the MMHC project). The MMHC project includes four buildings: the Fenwood Inn, the Binney Street Building, BBF, and a residential building to be constructed by the Roxbury Tenants of Harvard (RTH). The Binney Street Building and Fenwood Inn are currently occupied and the RTH Residential Building is in design.

As approved, the BBF building totals approximately 358,670 square feet to be used as office, clinical, and/or research and development (R&D) space with 406 below grade parking spaces. BWH is currently investigating the feasibility of increasing the building program to include an additional floor to be used for R&D and/or laboratory space. With the addition, the building would total approximately 391,500 square feet.

Table 1 provides a summary of the approved and proposed MMHC building program including the proposed building addition. Overall the program increases the office and R&D space and reduces the amount of clinical space at the BBF building.

Table 1: MMHC Program Summary

	Draft PIR	Current Program
Office	76,520 sf	86,666 sf
Clinical Space	193,990 sf	132,348 sf
Residential/Treatment	47 beds	47 beds
Research & Development	152,960 sf	237,307 sf
Residential	165 units	165 units

Note: Building program provided by NBBJ via email, April 14, 2014.

The changes to traffic and the water/wastewater infrastructure as a result of the new building program are discussed within the following sections.

Trip Generation Estimate

Trip generation for the proposed project was based on Institute of Transportation Engineer's (ITE) trip generation data with adjustments made to account for the urban characteristics of the area, including Boston Transportation Department (BTD) mode splits as presented in the Draft PIR dated October 15, 2009. Table 1 provides a comparison of the previously approved project vehicle trips and the trips generated by the current building program.

Table 2
Vehicle Trip Generation Comparison (Adjusted Vehicle Trips)

	Draft PIR	Current Program	Change (Vehicle Trips)
AM Peak Hour Trips			
In	176	195	19
Out	73	75	2
Total	249	270	21
PM Peak Hour Trips			
In	71	72	1
Out	171	188	17
Total	242	260	18
Daily			
In	1,439	1,385	-54
Out	1,439	1,385	-54
Total	2,878	2,780	-98

Note: Trip generation based on Draft PIR methodology.

Based on ITE Trip Generation rates and BTD mode share data for the area, the additional floor of lab and/or R&D space in conjunction with the reduced clinical space, is expected to generate approximately 21 additional vehicle trips during the weekday morning peak hour and 18 vehicles trips during the evening peak hour. During a typical weekday, the project is expected to generate approximately -98 fewer vehicle trips over the course of the day. These reductions are a direct result of the reduced clinical component of the BBF building which generates substantially more traffic compared to office and R&D.

The Massachusetts Environmental Policy Act (MEPA) requires unadjusted trips to be taken into account when looking at their review thresholds. The unadjusted daily trips are provided in Table 3. As shown, the change in program results in no additional daily unadjusted vehicle trips.

Table 3
Unadjusted Vehicle Trip Generation Comparison

	Draft PIR	Current Program	Change (Vehicle Trips)
Daily Trips	6,518	6,424	0%

Note: Trip generation based on Draft PIR methodology.

Water Demand/Wastewater Generation

As mentioned previously, BWH is considering the addition of a floor to the BBF project. This addition will increase water demand and wastewater generation. The following includes the increases and reductions when compared to the Draft DPIR building program for the BBF.

BBF Additional Floor

The additional floor, when taken into account along with slight changes in the building program mix, increases wastewater generation by 1,778 gallons per day (gpd) and increases water demand by 1,956 gpd. These increase amount to a less than 2 percent increase for wastewater generation and water demand.

We hope that this information is useful to you. Please call if you have any questions or comments.

Attachment C
Wind

CONSULTING ENGINEERS
& SCIENTISTS

Tel: 519.823.1311
Fax: 519.823.1316

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West
Guelph, Ontario, Canada
N1K 1B8

April 30, 2014

Michael Noll
Senior Associate / Architect
NBBJ
One Boston Street, Suite 5200
Boston, MA 02108

Re: Pedestrian Wind Conditions
Brigham and Women's Hospital
Boston, Massachusetts
RWDI Reference No. 1202055

Email: mnoll@nbbj.com

Dear Michael,

Rowan Williams Davies & Irwin Inc. (RWDI) has prepared this letter to comment on the potential wind effects of recent design changes to the proposed development at Brigham and Women's Hospital in Boston, Massachusetts. Updated architectural renderings were provided to RWDI by your office on April 22, 2014. The comments provided here are based on our extensive wind engineering experience in the Boston area and the results of wind tunnel tests conducted in 2009 by RWDI for the full development of the area (which was approved by the BRA in 2010).

The wind tunnel tests for the area were conducted for the No Build and Full Build Configurations as illustrated in Images 1a and 1b. The Full Build Configuration included the proposed Binney Street Building, Partial Hospital/Fenwood Inn, the Residential Project and the Brigham and Women's Building. Findings from this study were summarized in the following report:

"Final Report - Pedestrian Wind Study - Massachusetts Mental Health Center - Boston, Massachusetts, RWDI Project number: #0941016, October 9, 2009, prepared by Roman Stangl and Hanqing Wu"

Image 1a – Wind Tunnel Model of No Build in 2009

Image 1b – Wind Tunnel Model of Full Build in 2009

Based on the test results and on our understanding of the usage at pedestrian areas around the proposed development (as presented in 2009), the overall wind conditions were determined to be comfortable for their intended usage in most areas. The number of locations with dangerous wind activity was reduced from four for the No Build Configuration to one for the Full Build Configuration on an annual basis. Uncomfortable and unacceptable wind conditions were detected in several areas around the proposed buildings and conceptual wind control measures were described to bring about improvements.

As indicated by the current renderings received by RWDI on April 22, 2014, the general massing of the proposed Brigham and Women's Hospital Building remains similar to the one that was tested in 2009 and approved in 2010 (see Images 2a and 2b below). These two designs have remained similar with respect to the following important points: 1) their heights and dimensions; 2) the location of their main entrances (which have remained at the northeast corner and along the west façade); and 3) with the presence of a setback at Level 4 along the south and east façades.

Image 2a – Southeast View of the Currently Proposed Building

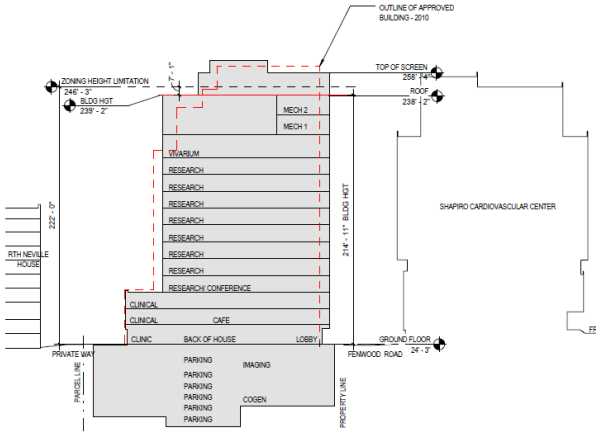


Image 2b – Section of Currently Proposed versus the One Tested in 2009 and Approved in 2010 in Red Dash Line

However, there are several design modifications that should be noticed:

- The 2009 design that was tested and approved in 2010 has stepped west and east façades for the tower with a curved walkway between the Brigham and Women's Building and the future residential building to the west (see Image 3a). The current building has a rectangular plan with a landscaped area along the west side, which is aligned with Binney Street to the north (Image 3b). The design for the future residential project to the immediately west has also changed. These modifications are expected to result in similar wind conditions when compared to our wind tunnel results in 2009.

- Along the north side of the currently proposed building, the first floor sets back slightly from the main façade above (Image 2b). A canopy has been included above the main entrance at the northeast corner (Image 2a). Furthermore, the current design has terraces (or setbacks) at all four tower corners at Level 10 (Image 2a). These are positive design features for wind control.

- The small height difference as shown in Image 2b will not affect the pedestrian wind conditions.

- Dense landscaping has been included in the 2010 approved design and in the currently proposed design, as shown in Images 3a and 3b. However, they were not included in our wind tunnel testing in 2009 for conservative reasons. If coniferous or marcescent species are selected, reduced wind speeds can be expected on site throughout the year.

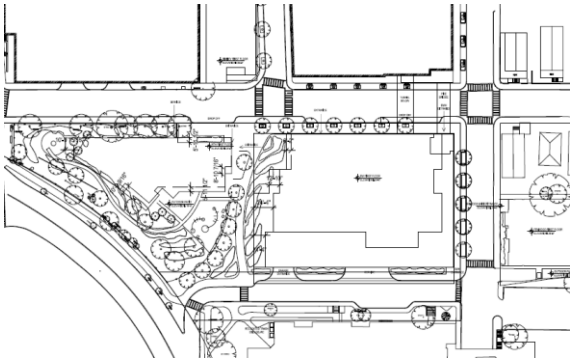


Image 3a – Site Plan for the 2010 Approved Design

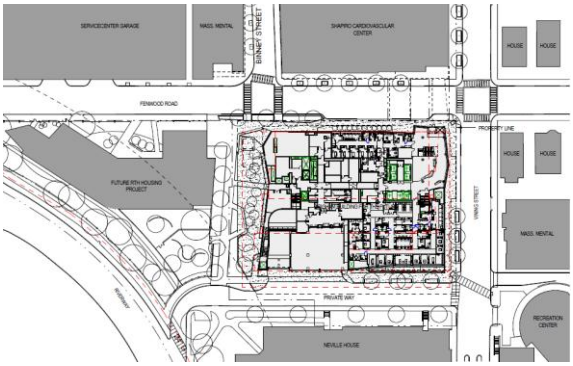


Image 3b – Site Plan for the Currently Proposed Design

Considering the similarity in building massing, location landscaping and general design, it is our opinion that the expected wind conditions around the currently proposed design of Brigham and Women's Hospital Building will be similar to those predicted by the wind tunnel tests in 2009 for the 2010 approved design. The small height difference is not anticipated to affect the pedestrian wind conditions previously defined.

We trust the above assessment satisfies your requirements for the project. Should you have any questions or require additional information, please do not hesitate to contact us.

Yours very truly,

ROWAN WILLIAMS DAVIES & IRWIN Inc.

Sonia Beaulieu, M.Sc., P.Eng., ing.
Senior Project Manager / Associate

Hanqing Wu, Ph.D., P.Eng.
Technical Director / Principal

Attachment D

Shadow

7:00 AM MARCH 21

BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

7:30 AM MARCH 21

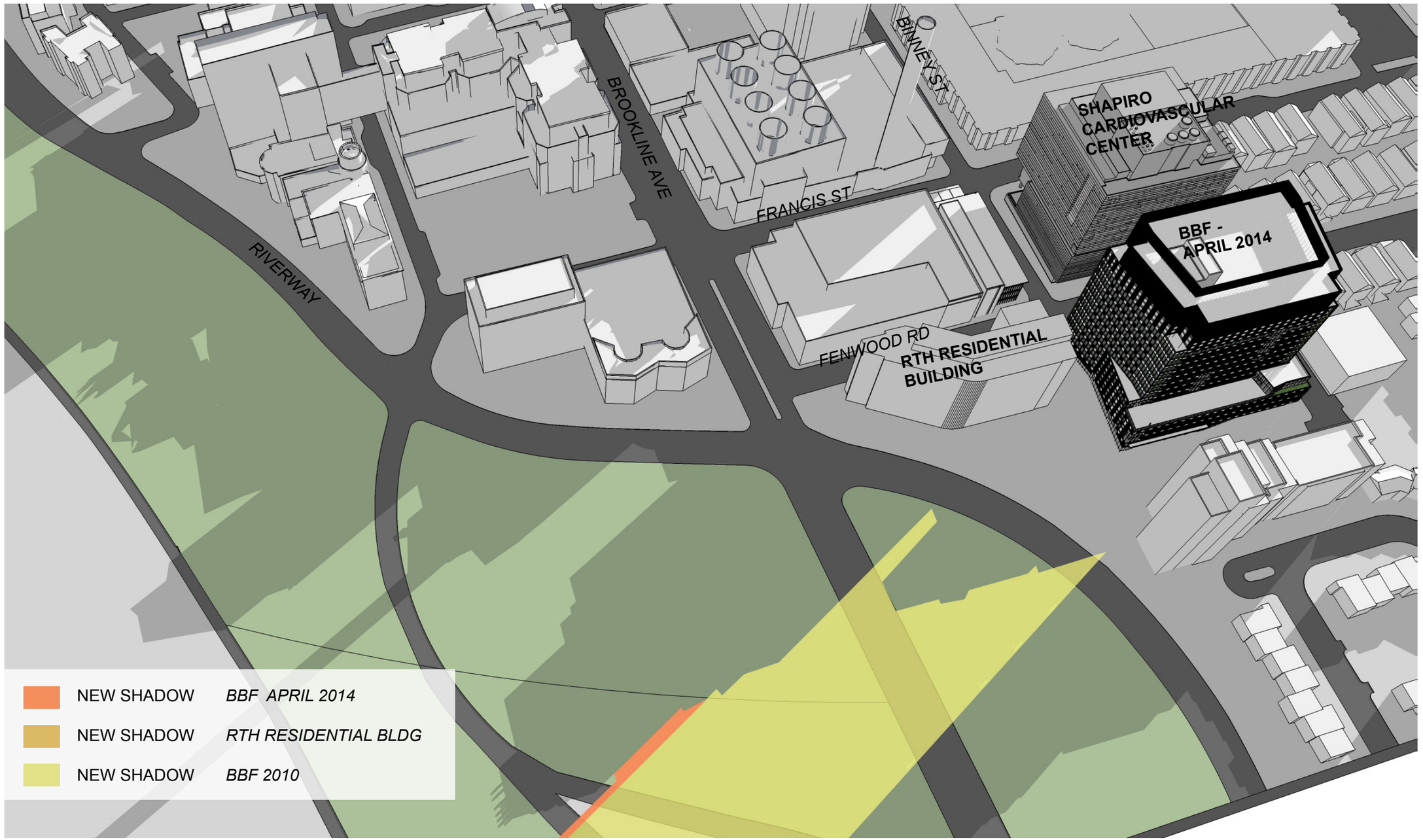
BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

8:00 AM MARCH 21



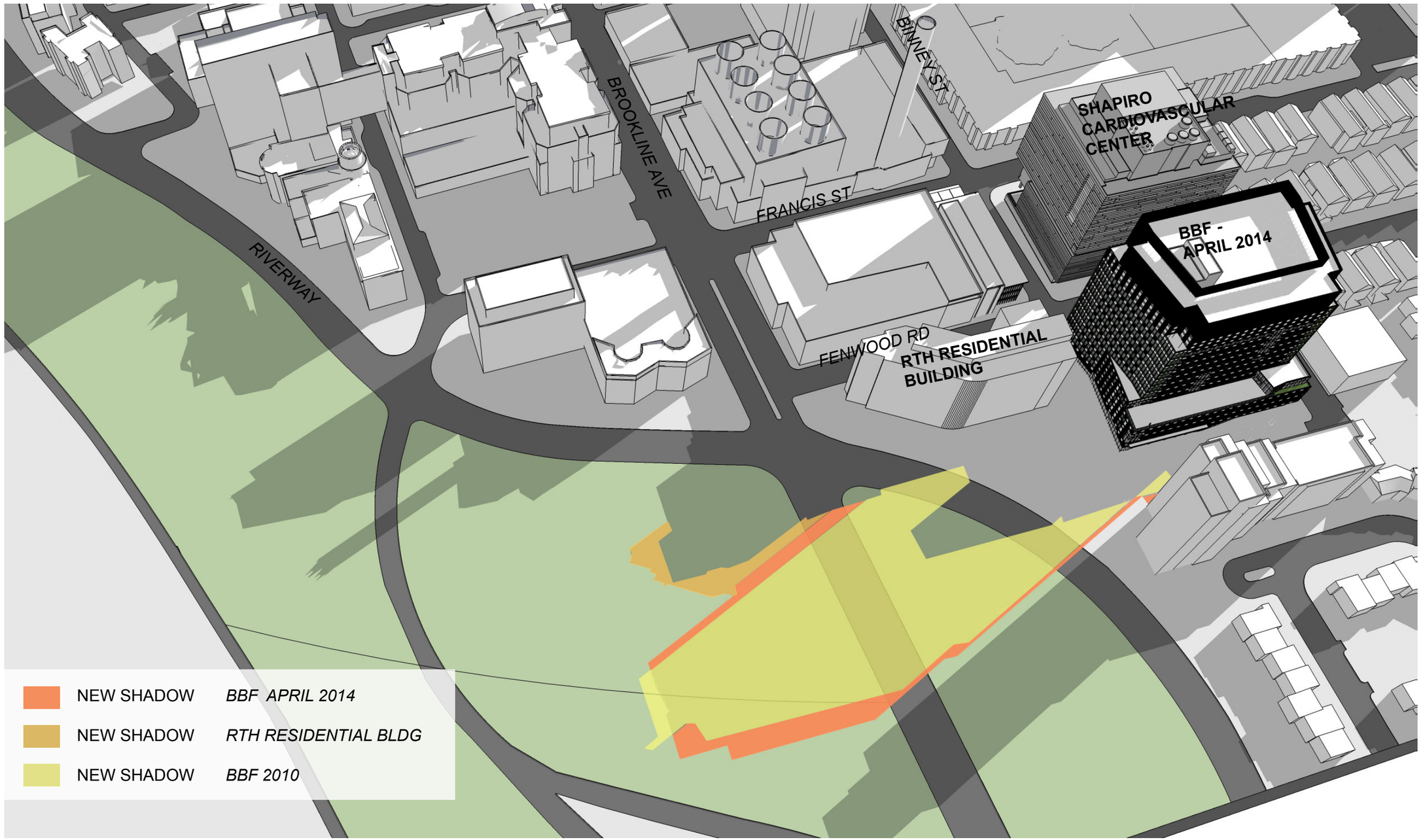
BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

8:30 AM MARCH 21



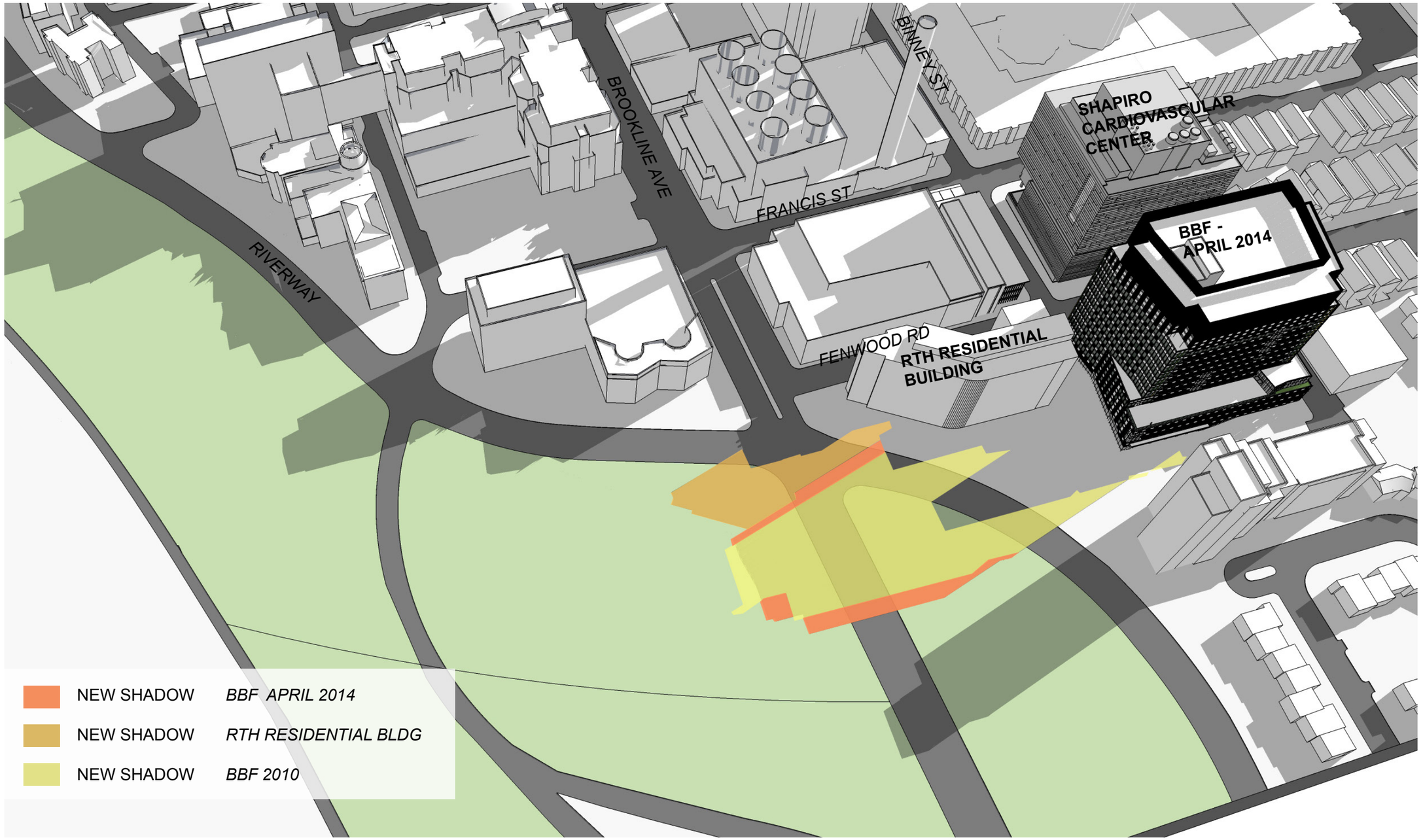
BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

9:00 AM MARCH 21



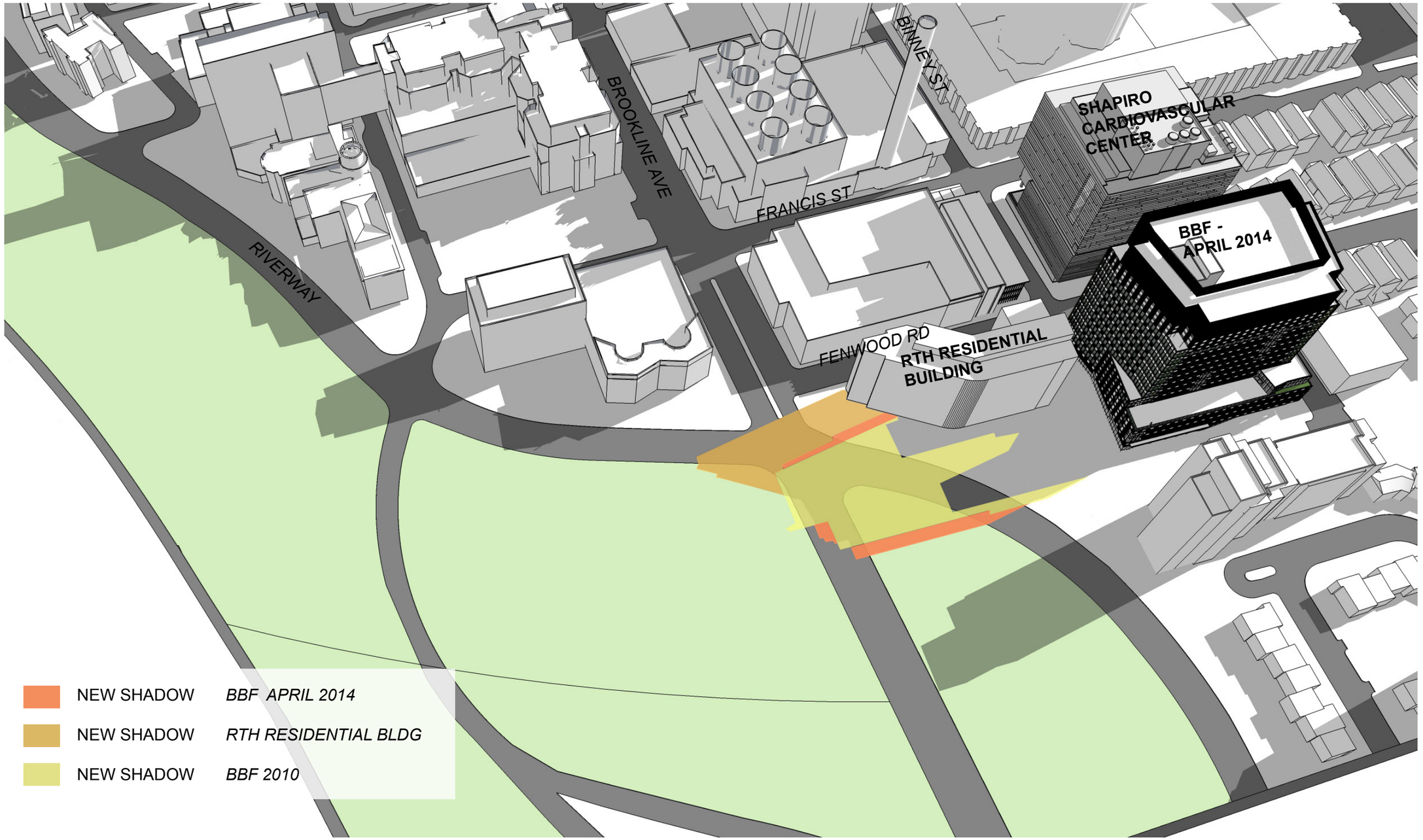
BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

9:30 AM MARCH 21



BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

10:00 AM MARCH 21

BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

NBBJ

10:30 AM MARCH 21

BRIGHAM AND WOMEN'S HOSPITAL

BBF SHADOW STUDY

April 2014

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