April 22, 2014

Hon. Meenakshi Srinivasan  
Chair  
New York City Board of Standards and Appeals  
250 Broadway, 29th Floor  
New York, NY 10007  

Re: New York Methodist Hospital  
Center for Community Health  
505-525 6th Street (Block 1084, Lots 39, 164, 1001, and 1002)  
BSA Cal. No. 289-13-BZ

Dear Chair Srinivasan and Commissioners:

We are submitting this letter in connection with the application by New York Methodist Hospital (the “Hospital”) for a variance to facilitate the development of a new ambulatory care facility, known as the Center for Community Health (the “Center”), on the Hospital’s main campus in Brooklyn. Perkins Eastman is an architecture firm with extensive experience in the design of healthcare facilities, including in New York City. We have designed the proposed Center in our best judgment to satisfy New York Methodist Hospital’s programmatic needs and to adhere to current best practices. For the reasons set forth below and illustrated in the attached diagrams, the alternative design for the Center proposed by Preserve Park Slope in the March 25, 2014, submission to the Board by Stuart Klein (the “Garage Overbuild”) would not satisfy the Hospital’s programmatic needs and would not address the unique physical conditions of the site.

The Garage Overbuild differs from the proposed Center in that it includes significant construction over the Hospital’s existing garage (the “Garage”), located to the immediate west of the proposed development site, resulting in a larger building footprint and lower building heights. While the proposed Center requires the construction of only a loading dock and boiler plant over a portion of the garage, the Garage Overbuild requires the construction of a five-story wing over the entire garage footprint, with a depth of 95 feet from 5th Street (the “Garage Wing”). Perkins Eastman previously studied a scheme with a five-story wing over the Garage and found it to have a number of deficiencies, as summarized in our letter to the Board dated March 4, 2014. As described below, the Garage Overbuild would have most of these same deficiencies, as well as most of the same infirmities as the Complying Development studied in the application materials.

We have organized the deficiencies of the Garage Overbuild into five categories: (1) circulation, (2) operations, (3) structural conflicts, (4) program and planning, and (5) access and traffic. We note that the floor plans for the Garage Overbuild provided by Preserve Park Slope are very diagrammatic and, as such, allow only a conceptual analysis of the proposal. Detailed plans would most likely reveal additional issues.
Circulation

The configuration of the proposed Center on the U-shaped development site is based on a design principle by which circulation paths for patients and staff are oriented around a centrally located core. Patients are led progressively from the circulation core toward more controlled, private, and dedicated spaces—from the waiting area to registration, then to processing, then to preparation, and finally to treatment in the eastern and western wings of the building. This configuration allows for a rational, compact circulation network that minimizes travel distances between arrival points, care delivery spaces, and support spaces.

The Garage Overbuild’s Garage Wing, which is 165 feet long, compromises this circulation scheme by significantly increasing the length of the building’s floor plates. Further, the building’s public circulation core, which is in the same location as that of the proposed Center, is not centrally located in relation to the extended floor plates. The protracted length of the floor plates forces patients and staff to walk excessively long distances from arrival points to care delivery spaces and support spaces. This is difficult for patients and inefficient for staff. For example, surgical patients would in some cases have to travel more than 400 feet between PACU and the operating rooms—more than twice the travel distance between these facilities in the proposed Center. Materials management, located at the westernmost portion of the Garage Wing on the first floor—which, as with the Complying Development, would not be connected to the rest of the building—would also be further removed from the other facilities in the building, resulting in increased travel times for maintenance and medical staffs. (See Diagram 1)

Operations

Another fundamental feature of the proposed Center’s interior configuration is that patients and staff are provided with separate circulation pathways, ensuring that back-of-house service operations do not intersect with public pathways and patient treatment areas. In the Garage Overbuild, back-of-house staff circulation, which is served by a “West Core” at the western end of the building, cuts through patient areas. This results in patient encounters with waste and material movement, which is contrary to good healthcare practice. (See Diagram 2)

The remote locations of the Garage Overbuild’s materials management and loading dock facilities create other operational issues. Materials delivered from materials management, located at the westernmost portion of the first floor, to the rest of the building would have to pass by the loading dock to get to the West Core, creating a bottleneck condition. As described below, there are structural constraints that would limit the Garage Wing’s first floor to a smaller floor plate than shown on the Garage Overbuild plans, thereby exacerbating this condition. In addition, the Garage Overbuild’s loading dock is located farther north than the proposed Center’s in order to accommodate the service connection between materials management and the rest of the building, thus precluding a direct connection between the loading dock and the main service elevators in the West Core. (See Diagram 3) These features of the Garage Overbuild’s design are fundamentally flawed and severely impact the building’s operations.
Structural Conflicts

There are a number of structural conflicts in the Garage Overbuild that preclude the construction of that scheme. The resolution of these conflicts would require the substantial modification of the building's program and/or costly structural reinforcement work, with longer periods of suspension of the Garage's operations during construction. The structural conflicts include the following:

- The southwest portion of the Garage Wing is located directly over the at-grade access ramp to the Garage's lower levels. This portion of the site cannot accommodate first-floor construction because of the required vertical clearance for vehicles. As a result, the first floor must be reduced in depth from 5th Street, with negative impacts on program area and, as described above, materials distribution and loading. (See Diagrams 4 and 5)

- The West Core is not designed with the configuration and dimensions needed to accommodate the proposed mechanical, service, circulation, and lobby functions. Even at the dimensions shown on the Preserve Park Slope plans, the West Core would interfere with the proposed vehicular access ramp to the below-grade parking levels. Further, there is no means for staff to access the West Core's staff lobby directly from the Garage. (See Diagram 3)

- The Garage Overbuild's operating rooms and oncology imaging cannot be located above the active Garage unless sufficient vibration isolation is provided, which requires complex and costly construction. Further, these facilities require a column spacing that does not align with the existing Garage grid. This condition can be resolved only with a transfer structure that increases the floor-to-floor height and the height of the Garage Overbuild. (See Diagram 5)

- The size of the Garage Overbuild necessitates a separate boiler plant above the Garage Wing, further adding to the weight of structure bearing on the Garage.

In short, the Garage Overbuild contemplates not merely a five-story enlargement of the existing Garage, but a separate load-bearing building requiring structural reinforcement and other complex construction. The points of increased loading introduced by the Garage Wing, including from vibration isolation, column transfers, and a relocated boiler plant, would necessitate additional foundation work in the Garage, with significant impacts on Garage operations during construction. (See Diagram 5)

Program and Planning

Based on the diagrammatic floor plans submitted to the Board by Preserve Park Slope, the Garage Overbuild appears to contain significantly less program area than the proposed Center. Most notably, the third floor does not contain surgical waiting and preparation facilities, and significant portions of patient recovery (PACU) are omitted. (See Diagram 6) Further, the Garage Overbuild does not make accommodations for the mechanical, electrical, plumbing, and fire protection (MEP/FP) and stair core in the building's east wing, which requires 1,200 square feet of space on each of the first through fourth floors and 1,000 square feet of space on the fifth floor. Addressing these oversights would negatively impact the space dedicated to Urgent Care, the Institute for Cancer Care, the Women's Center, and the Institute for Orthopedic
Medicine and Surgery. This type of construction over the Garage would also most likely require an additional MEP/FP core and, as described below, an additional public circulation core on 5th Street, the introduction of which would further impact the building’s program.

As described above, the proposed Center is designed in accordance with best-practice healthcare planning to lead patients efficiently through the multiple stages of treatment. Facilities for waiting, preparation, surgery, and recovery are arranged in the Center to create a rational, linear circulation path for patients. The Garage Overbuild, however, deviates from this configuration; PACU is located closest to the public circulation core and the operating rooms farthest, with waiting and preparation omitted from the building entirely, as described above. This configuration represents poor planning and is inconsistent with today’s healthcare standards. (See Diagram 6)

Access and Traffic

The proposed Center was designed to limit vehicular access to the building to 6th Street and keep truck maneuvering off of 5th Street, with the intent of minimizing traffic activity on 5th Street and near the John Jay Educational Campus. The Garage Overbuild does not achieve either of these objectives. First, to mitigate the issues of the building’s inefficient circulation network and the surgical suite’s non-linear layout, an additional patient entrance and circulation core on 5th Street would be required, with increased demands on security and access control. Patient drop-offs at this entrance would cause increased vehicular traffic on 5th Street. Drivers who drop off patients and wish to park in the new garage would then have to either access the midblock vehicular driveway from a new entrance on 5th Street, creating additional pedestrian and vehicular conflicts, or drive multiple blocks along one-way streets to reach the vehicular driveway entrance on 6th Street.

Second, since the Garage Overbuild’s loading dock is located farther north than the proposed Center’s, trucks would not have sufficient clearance to maneuver on-site and would instead maneuver on 5th Street. This truck activity would create increased conflicts with existing vehicular and pedestrian traffic and with new traffic generated by a 5th Street entrance. (See Diagram 7)

Conclusion

For the reasons cited above, the Garage Overbuild creates circulation, operation, structural, planning, and access issues and does not satisfy the Hospital’s programmatic needs.

Very truly yours,

Francis Gunther, AIA
Principal
Operations

Cancer Center

West Core

East Core

Affiliated Physicians

Fourth Floor

Crossing Public and Service Circulation

Service circulation
Public circulation

Perkins Eastman

DIAGRAM 2
Even if the configuration shown were possible, this location places materials management the furthest distance away from the remainder of the facility resulting in increased time for all servicing/supplying of the majority of the facility.

The loading dock location shown would require trucks to maneuver within the street, blocking through traffic and increasing potential risk for pedestrians, particularly the students traveling from the high school across the street. The PPS alternative is contrary to prior comments received from the larger community.

No building area could be constructed at dock level over this portion of the existing garage as it is required to permit access to the garage levels below.

The location of materials management & loading dock as shown in the alternative is unworkable. In the proposed development, the loading dock is set back from 5th street to enable truck maneuvers to occur on-site (off-street) and permit vehicles to enter & exit the parking deck unencumbered. Its southern end is extended to provide the required direct access to the service elevators.

Location & configuration of staff lobby and west core is unworkable. There is no means for staff to access this lobby from the parking levels below grade. As blocked out it also impinges on vehicular access ramp to new garage levels below. In addition, as shown, the west core does not appear to be sized/proportioned appropriately to accommodate the required MEPFP risers, vertical service & passenger transportation, corridors and lobby functions that would all need to occur in this area.
Structural Conflicts

No Clearance

Vertical Circulation Disconnect
Horizontal-Vertical Circulation Conflict
Structural Conflicts

Boiler Plant

Vibration Isolation

Transfer structure (Disruptive)

Mechanical

Cancer Center

Surgery

Sterile Supply

Building Support/ Material Management

Existing Garage

No Clearance

Foundation Reinforcement for Boiler Plant and Materials Storage and Possible Transfer Support
Program and Planning

Diagram 6

Prep is missing

Waiting is missing

Elevators → Waiting → Prep → Surgery → Recovery

Typical Linear Patient Path

Alternative’s Patient Path
Access and Traffic

- Patient Drop off
- Truck Maneuvering in 5th Street
- Car Entrance in 5th Street
- Conflicts with Garage Access

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DIAGRAM 7