GEORGE M.
JANES &
ASSOCIATES

PLANNING with TECHNOLOGY

250 EAST 87TH STREET
NEW YORK, NY 10128

www.georgejanes.com

T: 646.652.6498
F: 801.457.7154
E: george@georgejanes.com

August 30, 2011

Board of Standards and Appeals
40 Rector Street, 9th Floor
New York, New York

RE: BSA Application 588-11-BZ Spence School rear yard enlargement

Dear Chairperson Srinivasan & Commissioners:

My office has conducted a review of the Spence School application for a glass and masonry three-story equivalent enlargement in the rear yard that contains an amenity (an atrium and/or lounge) and two wide corridors. Our review has focused on the impact the proposed three-story enlargement would have on the neighboring Emily Trevor Townhouse at 15 East 90th Street.

Summary

The proposed enlargement, which requires a zoning variance for its height, will impair the rear of the Emily Trevor Townhouse. The rear yard of the Trevor Townhouse, which is already impaired by a 1987 variance granted to the lot directly behind it, will become enclosed by two buildings both of which require zoning variances. Further, due to the nature and design of the proposed addition, there may be noise, light and privacy impacts on the higher floors of the Townhouse.

A smaller alternative, proposed by the School's neighbors, is functionally identical to the Spence School proposal, but does not require a variance for its height, and is more appropriate for the site. Submitted as evidence to support this document are photosimulations that show existing conditions, proposed conditions and the alternative, which are attached herein.

Existing conditions

The Emily Trevor Townhouse is 14.67' from the existing cafeteria of the Spence School, which is directly behind the Townhouse rising approximately 20' over the existing rear yard. The yard is 25.0' wide and is demarked on the east and west by brick walls approximately 9.0' tall. The rear yard of the Townhouse is at elevation 103.5'. The curb elevation of 15 E. 90th Street is at 105.0' and the curb elevation of 91st Street is at 111.5'. This means that the rear yard of the Townhouse is in a small hole, 8.0' lower than the elevation of the curb at 91st Street and 1.5' lower than 90th Street.

The first floor kitchen overlooks the rear yard, tucked under the bay window that extends from the second floor dining room. The dining room bay window extends 4.25' into the rear yard and is 10.42' from the Spence School cafeteria

wall at its nearest. The third floor contains the master bedroom which overlooks the rear yard, looks down into the skylight of the Spence School cafeteria and across from classrooms. The fourth and fifth floors have bedrooms overlooking the yard and are across from the roof-top playground of the Spence School.

The proposal

The Spence School proposal is for a masonry and glass three-story equivalent enlargement in the rear yard that contains an amenity (an atrium and/or lounge) and two wide corridors. The enlargement connects the existing Spence School to 17 E. 90th Street, which has been acquired by the school for expansion, and is 35' from the rear yard grade of Trevor Townhouse, against which it will abut. The proposed three-story enlargement will be clearly visible from the first floor kitchen, the second floor dining room and the third floor master bedroom, and will require a variance for its height which is 27' above the curb elevation of 91st Street and 33.5' above the curb elevation of 90th Street.

The alternative

J.C. Calderon Architect, PC developed an alternative that would connect the Spence School to 17 E. 90th Street, serving the programmatic needs of the school, while not requiring the height variance. It is functionally identical to the Spence School proposal, but eliminates the large atrium, thereby allowing a lower building. This alternative is described fully in the submission made by the residents of 21 E. 90th Street.

Photosimulations

My office modeled both the current Spence School proposal and the alternative as 3D massing models. A brick texture identical to Spence's 1987 addition was used for the masonry portion of the structure. A translucent blue glazing was used for the glass portion of the structure. People were inserted into the models for scale and also to reflect the use of this space. These models were then rendered to match existing conditions photographs of the site taken on November 18, 2010. The photosimulations are verifiable digital photomontages, which means that their accuracy can be measured since they are made from dimensionally accurate 3D CAD models and rendered with a computer camera set to replicate the camera used to take the photographs. The photosimulations are attached to this document[1].

[1] The photographs were all taken with a wide angle lens (24mm). Normally, a 50mm lens is used for photosimulation, which better replicates the human perception of distances. Because of the close distances and large size of the proposed addition, however, a 50mm lens simply could not show the entire action within the frame of the photographs. Consequently, a wide angle lens had to be used. This means that the distances in the photographs are different from how the human eye would perceive them; in reality, objects in the photographs are actually larger than they appear. In effect, the photosimulations understate size of the project as it would appear to the human eye.

View 1, the yard
The depth of the rear yard of the Trevor Townhouse is shallow, at 14.67 feet. It is bounded by the Townhouse to the south, an approximately 20 foot high wall to the north, and approximately nine foot high walls on to the east and west. The bay window on the second floor overhangs the rear yard by about 4.25 feet and is visible to the right of the photograph. These conditions make the space feel enclosed and smaller than it actually is.

The proposal will abut the easterly lot line of the rear yard of the Trevor Townhouse, removing the yard wall of 17 E. 90th Street. Because the yard is so small, the proposed three-story enlargement appears to tower over the yard, with the top of structure 35 feet higher than the elevation of the yard. The enlargement as proposed will block out a considerable portion of the yard's access to the sky, darkening the space during daylight hours.

While the alternative still physically encloses the space, it blocks less of the yard's access to sky and, consequently, will block less light than the proposal.

View 2, the dining room
The view from the dining room is from a bay window that is just over 10 feet from the rear wall of the Spence School cafeteria. The most open view is to the east where the three-story enlargement is proposed. Because the dining room is on the second floor the views are over the easterly yard wall.

The proposed three-story enlargement will be less than eight feet from the closest bay window. Because of the configuration of the interior space and the use of glass on the upper part of the building, students and faculty inside the enlargement will likely have a view into the Townhouse's dining room, seriously compromising its privacy as well as adding concerns about light and noise generated by the use.

The alternative reduces the mass of the building outside the dining room window, but will still compromise this room's privacy and potentially create impacts related to noise and light.

View 3, the master bedroom
The master bedroom spans the entire rear of the 3rd floor of the Trevor Townhouse. Views from it look down into the skylight of the Spence School cafeteria. These windows have much more light than the lower floors because the 1987 Spence School addition directly behind the Townhouse steps back from the rear yard and exposes these windows to more sky.

The proposed enlargement can be clearly seen directly outside the window of the master bedroom. Because it is designed as a two-story atrium facing the Trevor Townhouse, people will not normally be visible from the nearest master bedroom

window, but light and nose emitted by the use remains a concern, as well as the addition of a building so close to the master bedroom window[2].

The top of the alternative can be seen at the very bottom of the view from the master bedroom. The alternative removes the presence of a building directly outside the bedroom window. Light and noise, however, emitted from the enlargement would still remain a concern.

View 4, the roof
The roof of the Trevor Townhouse is not easily accessible and is not a view commonly experienced. Even when it is, the proposed connector can only be seen by looking down off the rear of the building.

The purpose of this view is to demonstrate the material difference in the volume of the proposed three-story glass enlargement when compared to the alternative. There is little change in the people shown in the two proposals, because there is little change in usable floor area, with the alternative only narrowing the upper corridor. Most of the change in volume comes from the reduction of the two-story atrium and the impact on the volume of the enlargement can be clearly seen in this view. Functionally, the spaces are identical, though volumetrically the alternative is much more modest.

Conclusion
It is difficult to argue against growing a school, especially an Upper East Side institution like the Spence School. This proposal, however, does not increase the school's capacity and will not result in the education of any additional children. It is a very large--indeed monumental--hallway, which is far larger than it needs to be to achieve the institution's programmatic goals. The alternative removes the need for the height waiver and reduces the impact on the Emily Trevor Townhouse. Consequently, Spence's current proposal should not receive the requested variances because they are not the minimum required.

I appreciate this Board's attention to this important matter. Should you have any questions or comments, please feel free to contact me at (646) 652-6498.

Sincerely,

George M. Janes, AICP
Principal

[2] The fourth and fifth floors have smaller bedrooms in the rear of the Townhouse. The proposed three-story glass enlargement will not be directly visible from these bedrooms but impacts from light and noise generated by the proposed use remain a concern.