



Environmental and Planning Consultants

440 Park Avenue South, 7th Floor
New York, New York 10016
tel: 212-696-0670
fax: 212-213-3191
www.akrf.com

December 19, 2007

The Honorable Meenakshi Srinivasan
Chair
New York City Board of Standards and Appeals
40 Rector Street - 9th Floor
New York, New York 10006

Re: **Congregation Shearith Israel ("CSI")**
6-10 West 70th Street/99 Central Park West
74-07-BZ /CEQR No.: 07BSA071M

Dear Madam Chair:

This letter responds to questions raised by the Board of Standards and Appeals at the November 27, 2007 public hearing for the above-referenced zoning application regarding shadows that would be cast by the proposed new building. At the hearing, the Board requested a full shadows analysis according to the methodology presented in the *City Environmental Quality Review (CEQR) Technical Manual*, evaluating the project's incremental shadows on sun-sensitive receptors for the four analysis days recommended in the *CEQR Technical Manual*.

Following the methodology for assessing shadows provided in the *CEQR Technical Manual*, a screening analysis was performed to determine whether shadow cast by the proposed new building could be long enough to reach any nearby sun-sensitive resources at any time of year. According to the *CEQR Technical Manual*, such resources include publicly accessible open spaces, architectural resources with sunlight-dependent features (such as stained glass windows on a church or synagogue), and important natural features and scenic landscapes.

The screening analysis compared the shadows cast by the existing building to those cast by the proposed new building to identify incremental shadows that would be cast by the new building that are not cast today (i.e., shadows cast by the portion of the proposed building above the roof height of the existing building). A street map of the project site and surrounding area was prepared, and all open spaces and historic resources were denoted on the map. Using the heights of the proposed building and the existing building, the full extent of the area that could be shaded by the project was calculated for the full year. This analysis disregards the shadows that are already cast by other existing buildings in the surrounding area.

The attached graphic illustrates the extent of the shadows that would be cast by the new building and those that are already cast by the existing building.

This analysis shows that, disregarding shadows attributable to existing buildings, the incremental shadows from the new building would fall onto areas about one block south of the project site, the project block, and in a small area on the block immediately to the north. However, many of those shadows would fall in locations that are already being shaded by other buildings.

The project could also cast some incremental shadows on Central Park, which is a sun-sensitive resource as defined by the *CEQR Technical Manual*. Therefore, a detailed assessment of new shadows on the park was conducted for four representative days of the year: March 21 (equivalent to September 21, the equinoxes); June 21, the summer solstice; May 6 (equivalent to August 6, midway between solstice and equinoxes); and December 21.

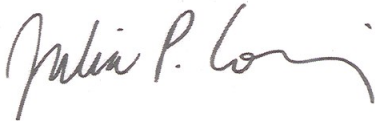
The detailed assessment of incremental shadows cast on Central Park for the four analysis days was conducted following the methodology set forth in the *CEQR Technical Manual* and was included in the submission made to the Board in August 2007. That analysis concludes that the proposed building would cast some new shadow on Central Park in the spring and summer. The new shadow would be cast at the end of the day and would slightly increase the long shadows already cast by other buildings on the park at this time.

The extent of incremental shadow would vary in size and location depending on the season but would never occur farther than 210 feet into the park. In both spring and summer, the area affected would be limited to the area approximately between West 70th Street and West 71st Street, if those streets extended into the park. This affected area, 210 feet wide (west to east) and about one block long (north to south), contains trees, grass and a pedestrian path, and is currently under the leafy canopy of the shade trees. There are no passive recreation facilities (i.e., benches), no playgrounds, and no active recreation facilities. The areas of grass and trees are currently fenced off and not publicly accessible. The duration of the incremental shadow would always be quite short, and never exceed 50 minutes at any time of year. In warmer months leaves on the tall trees of the park already cast ample shade and under the trees, the increase in shadow would be far less noticeable. The very small duration of additional shadow would not be likely to affect the ability of the trees or other vegetation to survive. The size of the net new shadow cast by the proposed building would be insignificant, especially in comparison to the shadows cast by existing buildings in the neighborhood. The proposed building would therefore not have a significant adverse shadow impact on Central Park.

We would be pleased to provide additional information in response to any other questions related to the shadow studies conducted.

Sincerely,

AKRF, INC.



Julia P. Cowing, AICP
Senior Vice President

cc: S. Friedman, L. Cuisinier

