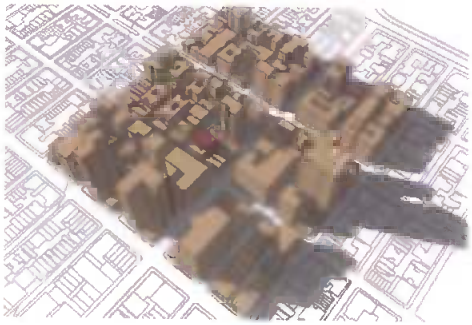
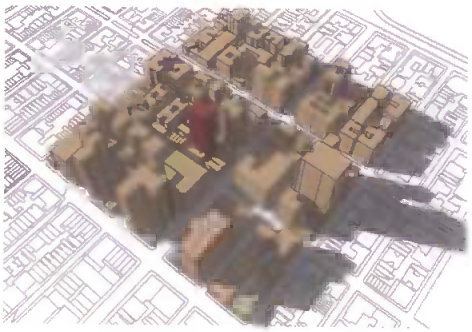
RAMAZ SCHOOL VARIANCE APPLICATION ANALYSIS

Manhattan, New York





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January, 2008

ACKNOWLEDGEMENTS

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1.0 INTRODUCTION

1.1. Purpose of Report

The Coalition to Oppose Ramaz Tower consists of cooperative and condominium associations; civic groups and merchant associations; as well as concerned citizens and neighbors on the Upper East Side of Manhattan, NY. The Coalition is opposed to the variance request of the Ramaz School (the "Applicant"), which is located at 121-125 East 85th Street within the R10A and C5-1A zoning districts.

This report consists of several studies, including a shadow impact study, land use survey, comparable development survey, and an as-of-right development massing diagram which demonstrates that the scale and massing of the proposed development is inappropriate in relation to the existing neighborhood. The allowed height limit within the R10A zone is 185 feet and within the C5-1A zone is 210 feet; the Applicant's proposal is for a new building of approximately 355 feet.

1.2 Site Location

The property in question is located at 121-125 East 85th Street (*See Figure 1*). The project site consists of Lots 10 and 13 on Tax Block 1514. It includes the Congregation Kehilath Jeshurun Synagogue and the Ramaz School buildings, located on the north side of East 85th Street between Park and Lexington Avenues in Manhattan, New York.

The 18,724 gross square foot (gsf) Congregation Kehilath Jeshurun Synagogue, located on Lot 10, consists of a three storey building and is approximately 50 feet tall. The 65,185 gsf Ramaz School, occupies Lot 13, and consists of two interconnected buildings of six to eight stories which are approximately 104 feet tall (*See Figure 2*).

1.3 Proposed Development

Ramaz School has proposed that the old school be demolished and replaced by the newly constructed school and residential tower. It is seeking a variance to rebuild the school building from an existing 6/8 story building to an 11 story building with 17 additional floors of condominiums located above. The lower 10 floors of the proposed building would house the school and some related administrative functions. The remaining two-third of the proposed tower, floors 11-28, would house 53 residential units.

The proposed school (approximately 107,146 gsf) would be located on the sub-cellar through 10th floor and would include a cafeteria, kitchen, nurseries, administrative space, gymnasium, locker rooms, storage rooms, rooftop playground for the lower school, library,

lounge and several all-purpose classrooms. The residential uses are proposed to be located above the school on floors 11 through 28 and total approximately 106,000 gsf. The total height of the proposed structure is 355 feet.

As part of this proposal, the synagogue, which consists of 3 stories, will remain on the site. This structure is approximately 50 feet tall with 18,724 gsf of space. In connection with the redevelopment of the Ramaz School, the applicant proposes to build a play area over the roof of the synagogue. The rooftop play area would be accessible from the 5th floor of the newly constructed Ramaz School. Additionally, the synagogue's roof and various mechanical systems would be upgraded. It is proposed that the school building be partially cantilevered over the synagogue to accommodate 5 floors of the larger floor plates required by the school, while avoiding any changes to the structure of the interior of the synagogue.

VARIANCE STUDY

EAST 85TH STREET, NEW YORK, NY

SOURCE: LONELY PLANET

FIGURE 1: SITE LOCATION

0 1000 ft

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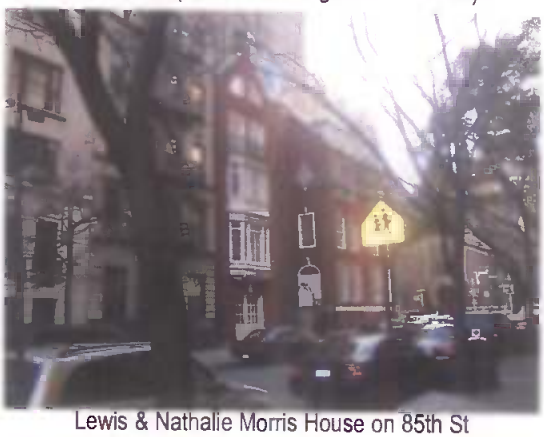
85th Street (between Lexington & Park Ave)

Buildings in Study Area

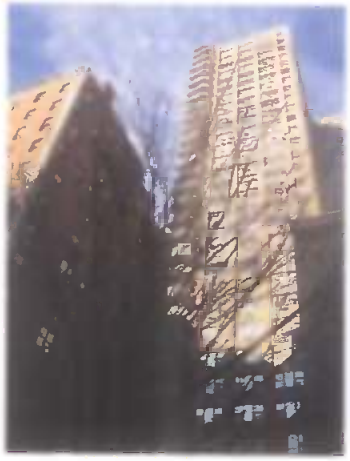


Lewis & Nathalie Morris House on 85th St

Mid-Block Highrise (38 Floors), 115E 87th St

The Savoy: Mid-Block Highrise (30 Floors) on 85th St

Street Wall, 115E 87th St



The Savoy

115 E 87th St

VARIANCE STUDY

FIGURE 2: SITE PHOTOS

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

2.0 ZONING

2.1 Zoning History

Contextual zoning districts were created in 1985 after a two-year study by the City Planning Commission and Community Board 8, working together with civic groups and many individual block associations. The study resulted in a generic zoning recommendation to limit the height and bulk of residential construction in certain residential areas like the Upper East Side at a time when tower construction threatened to change the character and scale of these neighborhoods and homogenize residential Manhattan into an indistinguishable high rise haze.

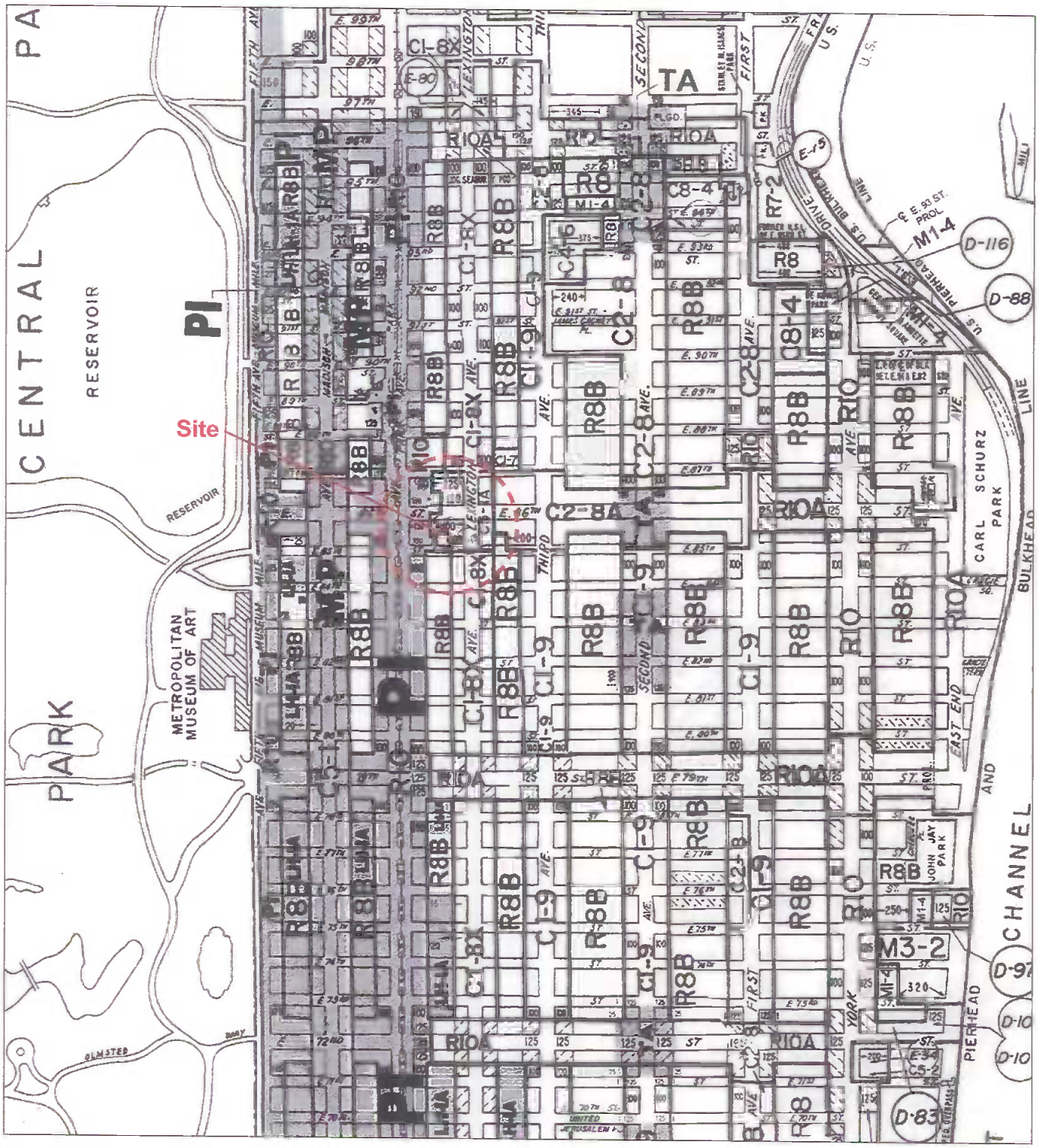
In these new contextual districts a specific height limitation was imposed in addition to the floor area ratio (FAR) limitation. Mid-block sites received the lowest height, with higher but still limited residential buildings allowed along the wider avenues. This "hills and valleys" planning recommendation was intended to preserve the existing character, light and scale of mid-block low rise residential streetscape in areas of the city where it predominates. The recommendation was based principally on the greater traffic capacities of the 100 foot wide avenues, as compared with the 60 foot wide streets, in addition to the increased light and air potential of these wider avenues.

There are a number of instances where taller blocks were built prior to the introduction of this contextual zoning which may result in isolated instances of non-compliance.

2.2 Existing Zoning

The study area, including all properties within a 400 foot radius of the project site contains both residential and non-residential zoning districts. These zoning districts include two high-density residential districts, R10 and R8B, as well as three commercial districts, C5-1A, C1-8X and C2-8A (*See Figure 3*).

The project site is located partially within an R10 district and partially within a C5-1A (R10A equivalent) zoning district (*See Figure 4*).



400-foot study area boundary

VARIANCE STUDY

FIGURE 3: ZONING MAP

EAST 85TH STREET, NEW YORK, NY

SOURCE: NYC DEPT. OF CITY PLANNING

0 1000 ft

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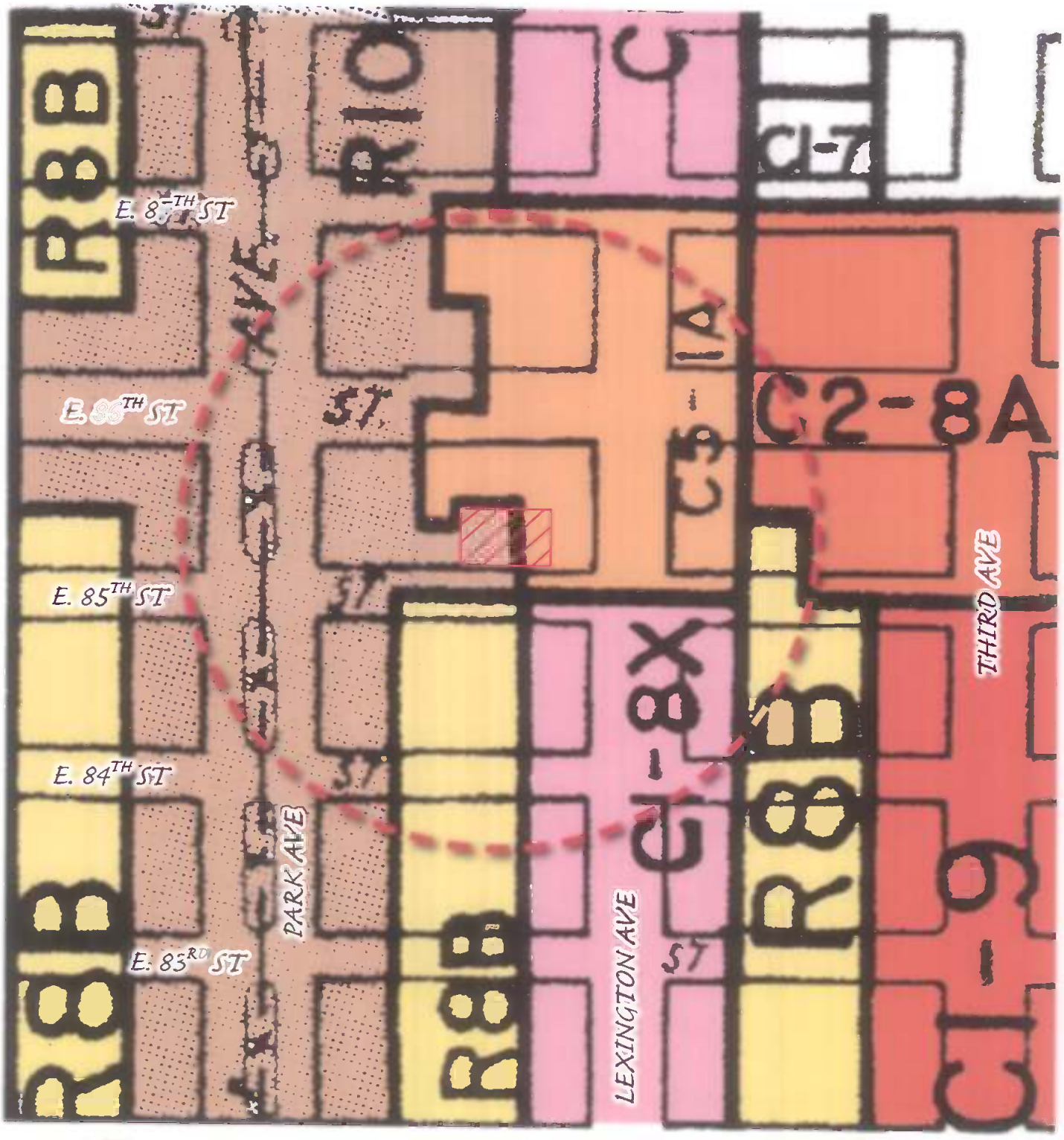

VARIANCE STUDY

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

FIGURE 4: ZONING MAP (400' RADIUS)

0 200 ft

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2.3 R-10 description

R10 districts permit the highest residential density in the city. This density is found on avenues and wide crosstown streets south of 96th Street in Manhattan and in the Manhattan and Brooklyn central business districts. The permitted FAR in the R10 district is 10.0 and this can be increased to 12.0 if lower-income housing is provided. (12.0 FAR is the maximum residential density permitted by the State Multiple Dwelling Law.) Where lower-income housing is provided, density can reach 700 dwelling units per acre. Parking is generally not required in the Manhattan Core however, elsewhere it is required for 40% of the dwelling units in new developments. The Quality Housing Program is optional in R10 districts.

2.4 C5-1A description

C5-1A is a contextual district. In the C5-1A district, residential bulk and density are governed by the regulations of the R10A district. Areas that conform to R10A district regulations are mapped along the wide cross streets and avenues on the Upper West Side and Upper East Side. Designed to be compatible with existing older neighborhoods, R10A districts differ from R10 districts in greater lot coverage and modified height and setback regulations.

Towers are not permitted in the R10A districts. The FAR is 10.0, which can be increased to 12.0 if lower income housing is provided. The maximum base height before setback, which is 150 feet within 100 feet of a wide street and 125 feet on a narrow street, is designed to match the height of many older apartment buildings. Above the base height, the required minimum setback is 10 feet from a wide street and 15 feet from a narrow street. The maximum height of a building is 210 feet within 100 feet of a wide street and 185 feet beyond 100 feet of a wide street.

In a C5-1A low bulk commercial district, the permitted commercial FAR is 4.0, with a residential bulk and density governed by the R10A regulations, i.e., FAR 10.0, with the possibility of increasing this to 12.0 if a large plaza, arcade or lower-income housing is provided.

The maximum building height and setbacks are determined by the building envelope which may not be penetrated by the building. The building envelope is controlled by the intersection of front and rear sky exposure planes that rise according to a specific ratio. Only the front sky exposure plane is applicable on wide streets. The Quality Housing Program is mandatory in R10A districts.

In this case the entire building is subject to all applicable Quality Housing bulk provisions, which in the case of R10 and R10 equivalent districts require that the building comply with the bulk regulations applicable in an R10A district. A mixed-use building in a C5-1A district is also governed in its entirety by the Quality Housing Program's applicable regulations.

C5-1A commercial district with an R10A residential equivalent:

Maximum FAR:	10.0 (to 12.0 with lower-income housing)
Maximum lot coverage:	Corner lot 100% Interior or through-lot 70%
Maximum street wall:	150 feet
Minimum lot area per DU:	79 square feet
Maximum DUs per acre:	581
Required parking:	Generally not required in Manhattan -elsewhere 40% of dwelling units
Quality Housing Program:	Mandatory

3.0 BUILT CONTEXT

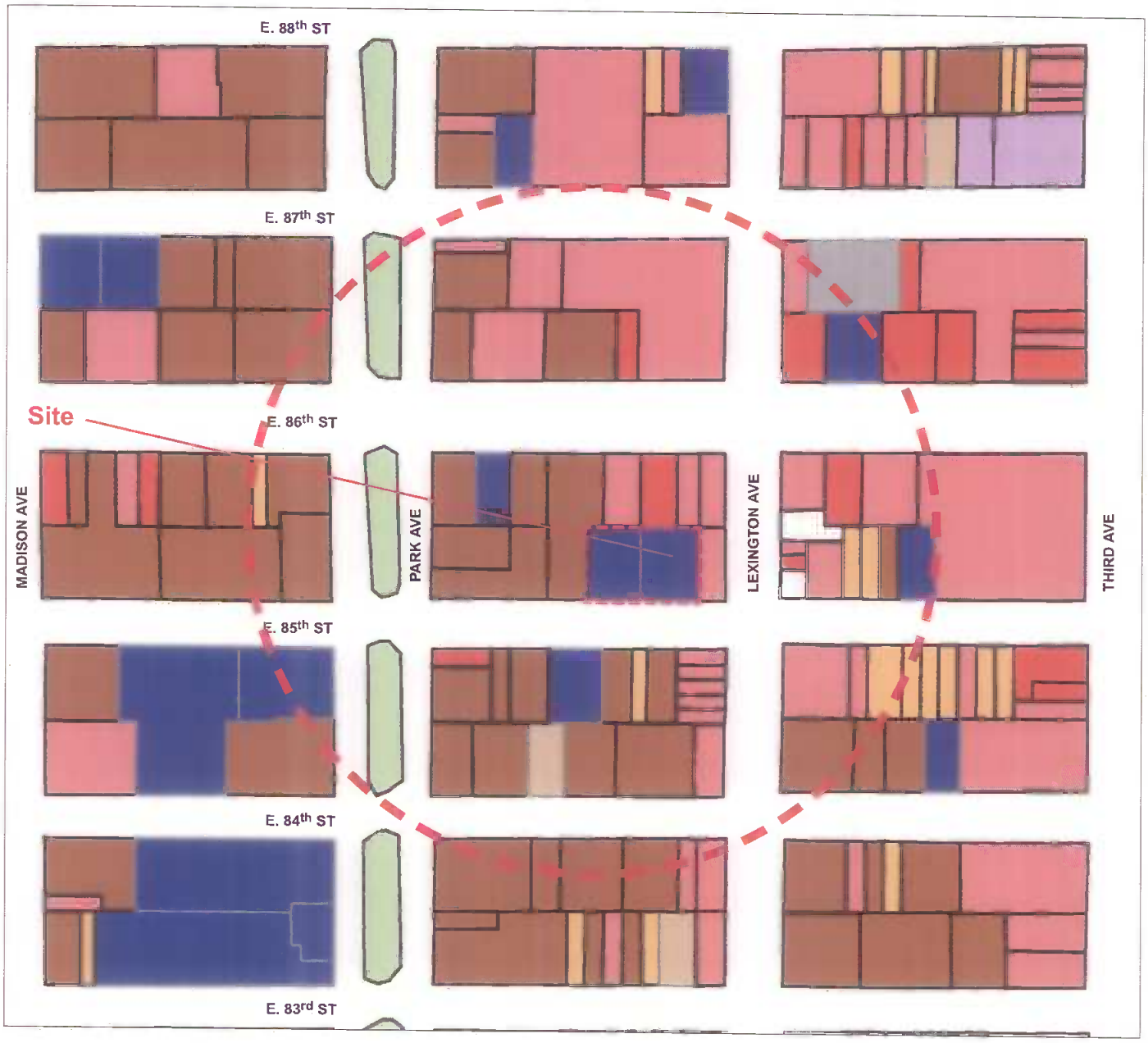
3.1 400 Foot Radius

Properties located within 400 feet of the project site will be most significantly affected by the proposed action. The project site is located on the North side of East 85th Street between Park and Lexington Avenues.

A 355 foot, 28 story tower building represents a major change in the scale of the mid-block and the overall context of the neighborhood, and is in direct conflict with the principles and objectives of the contextual zoning of the area, which is designed specifically to protect against such large scale mid-block development.

Land uses within the wider study area include residential, commercial, industrial & manufacturing, transportation, & utility, public facilities & institutions, open space & outdoor recreation, parking facilities and a small amount of vacant land.

Specific land uses within the 400' radius of the proposed development site are illustrated in *Figure 5*. As is evident from this illustration, the most prominent land uses within the immediate vicinity of the site are residential and mixed-use. Lands to the west are identified as primarily residential, while lands to the east are identified as primarily mixed-use - comprising commercial uses at ground floor level and residential uses above. There are also a significant number of public facilities and institutions located within the 400' radius and these are primarily schools and religious institutions.



LEGEND

- One & Two Family Buildings
- Multi-Family Walk-Up Buildings
- Multi-Family Elevator Buildings
- Mixed Use Buildings
- Commercial Buildings
- Industrial & Manufacturing
- Transportation & Utility
- Public Facilities & Institutions
- Parking Facilities
- 400-foot study area boundary
- Site boundary

VARIANCE STUDY

FIGURE 5: EXISTING LAND USE (400' RADIUS)

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

0 200 ft

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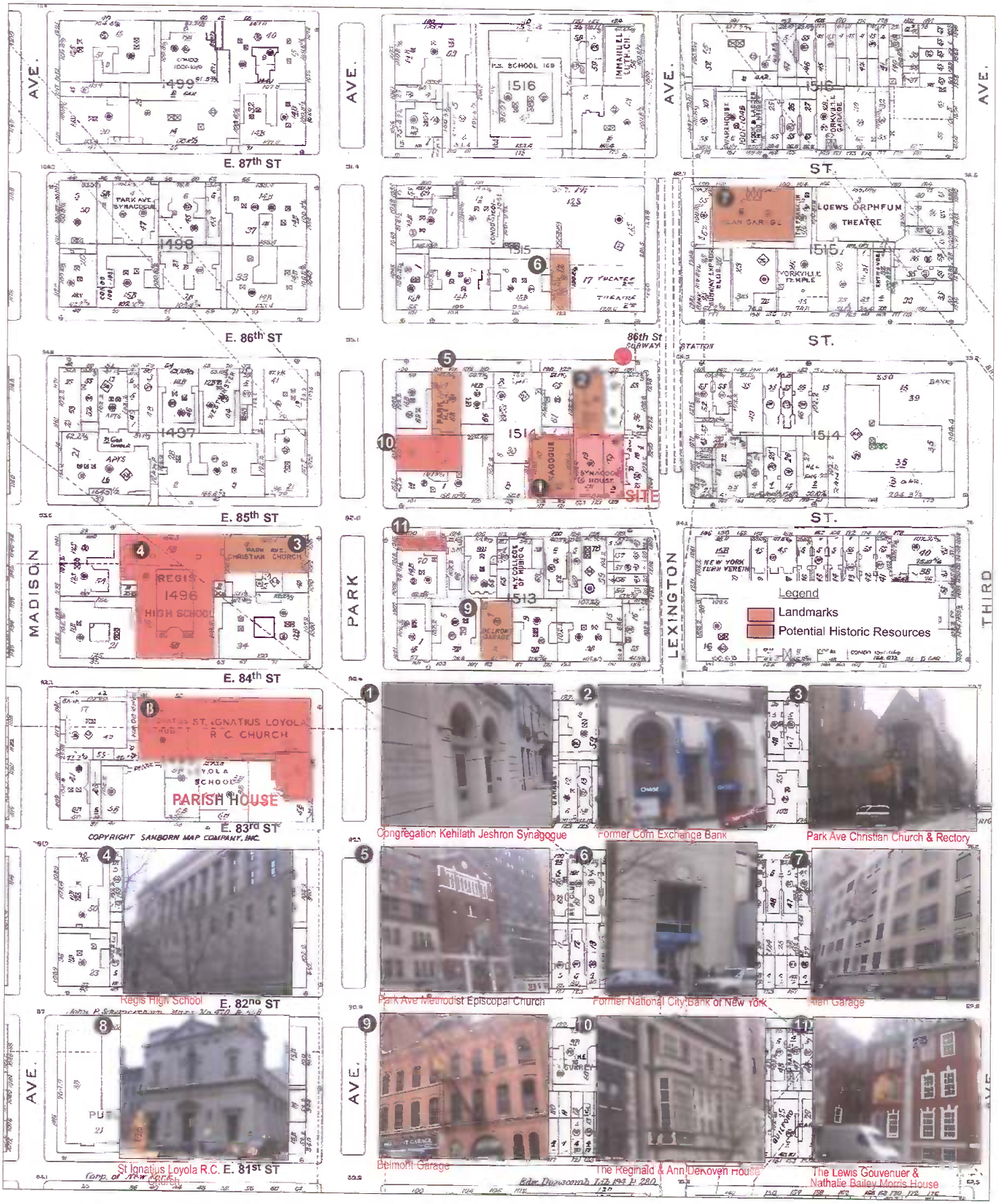

VARIANCE STUDY

FIGURE 6: LANDMARKS & POTENTIAL HISTORIC RESOURCES (400' RADIUS)

0 200 ft

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3.2 Potential historic resource (sensitive receptors)

There are a number of architectural resources located within the 400′ radius. These include properties listed on the State and National Registers (S/NR), S/NR-eligible properties, National Historic Landmarks (NHLs), New York City Landmarks (NYCLs) and Historic Districts, and properties determined eligible for landmark status. *Figure 6* illustrates the location of these landmarks in relation to the proposed development site. They include the Reginal and Ann DeKoven House (NYCL), the Lewis Gouvenuer and Nathalie Bailey Morris House (NYCL, S/NR) Regis High School, Saint Ignatius Loyola Church and 86th Street Subway Station (S/NR –eligible)

A field survey of existing land uses, educational institutions, and buildings surrounding the project site indicates that there are several potentially eligible landmark buildings and historic resources that contribute significantly to the neighborhood's character located within a 400′ radius of the site (*See Figures 6 & 7*).

Educational institutions within the immediate study area include Regis High School on East 85th St. between Madison and Park Avenues, Saint Ignatius Loyola School on East 83rd St. between Madison and Park Avenues, the Ramaz School on East 85th St. between Park and Lexington Avenues and the Board of Education on East 82nd St. between Madison and Park Avenues.

Other landmark buildings within the area include; the Congregation Kehilath Jeshurun Synagogue on East 85th St. between Park and Lexington Avenues, the Former Corn Exchange Bank on East 86th St. between Park and Lexington Avenues, Park Avenue Christian Church and Rectory on Park Avenue at East 85th St., Saint Ignatius Loyola Church on E84th St. and Park Avenue, Park Avenue Methodist Episcopal Church on East 86th St. between Park and Lexington Avenues, the Former National City Bank of New York on East 86th St. between Park and Lexington Avenues, Alan Garage on East 87th St. between Lexington and 3rd Avenues and Belmont Garage on East 84th St. between Park and Lexington Avenues.

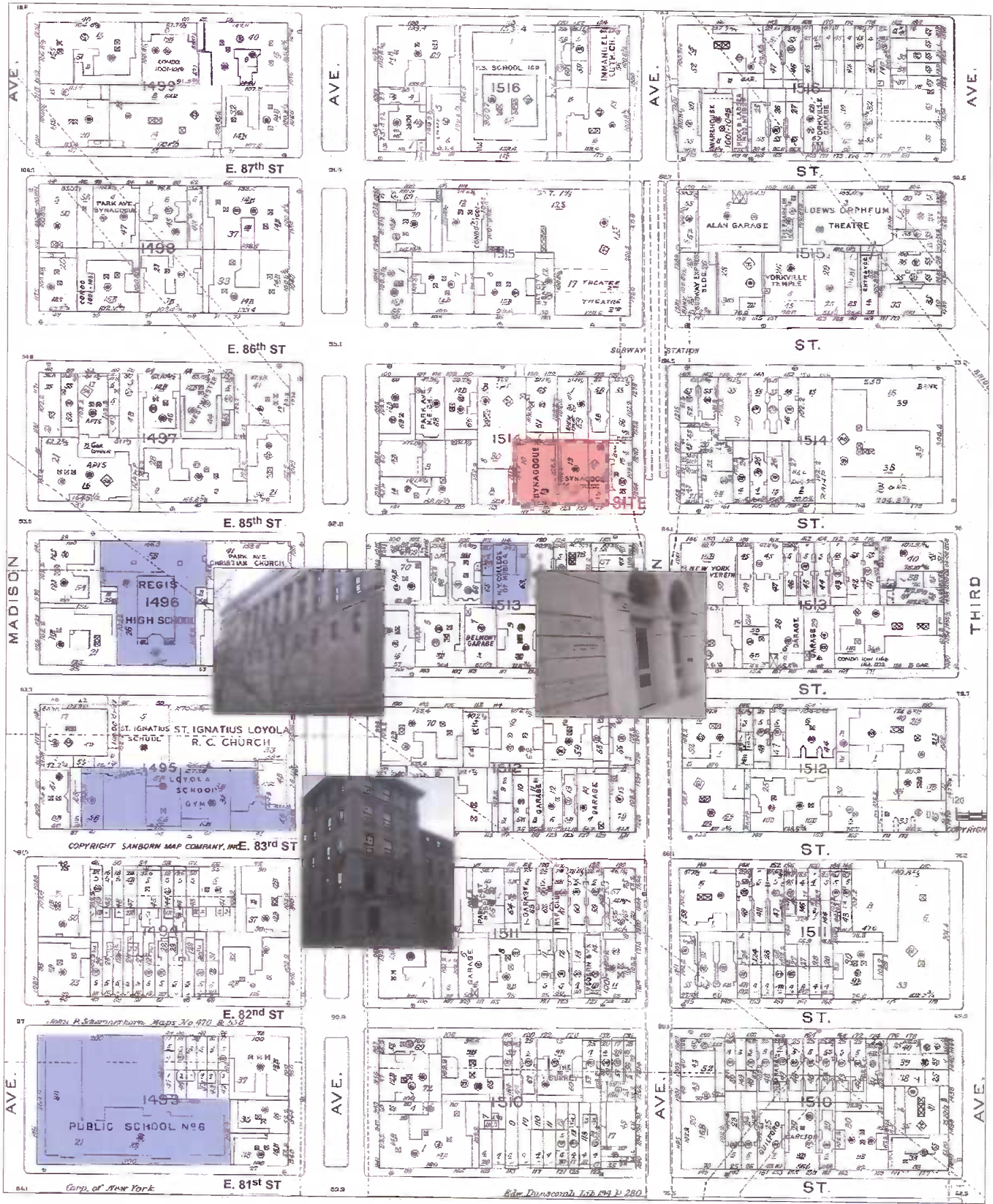
3.3 Mid block high rises

All mid-block high rise buildings within a five block by three block radius of the proposed development site have been mapped out to illustrate the location of tall buildings over 20 stories in this area (*See Figure 8*).

There are two mid-block high rise buildings within this study area. The Savoy, constructed in 1971, is a residential building of 30 stories and is located at 111 East 85th Street,

between Lexington and Park Avenues. Another mid-block residential high rise, constructed in 1972, consists of 38 stories and is located at 115 East 87th Street, between Lexington and Park Avenues. All other tall buildings over 20 stories within the study area are located on corner sites abutting Avenues, reflecting the Manhattan zoning philosophy of locating taller buildings on Avenues and lower buildings mid-block.

It is important to note that the two mid-block tall buildings mentioned above were constructed *prior to the creation of the contextual zoning district* in 1985. As previously mentioned in Section 2.1, the contextual zoning district resulted in a generic zoning recommendation to limit the height and bulk of residential construction in certain residential areas, like the Upper East Side, at a time when tower construction threatened to change the character and scale of these neighborhoods and homogenize residential Manhattan into an indistinguishable high rise haze.



VARIANCE STUDY

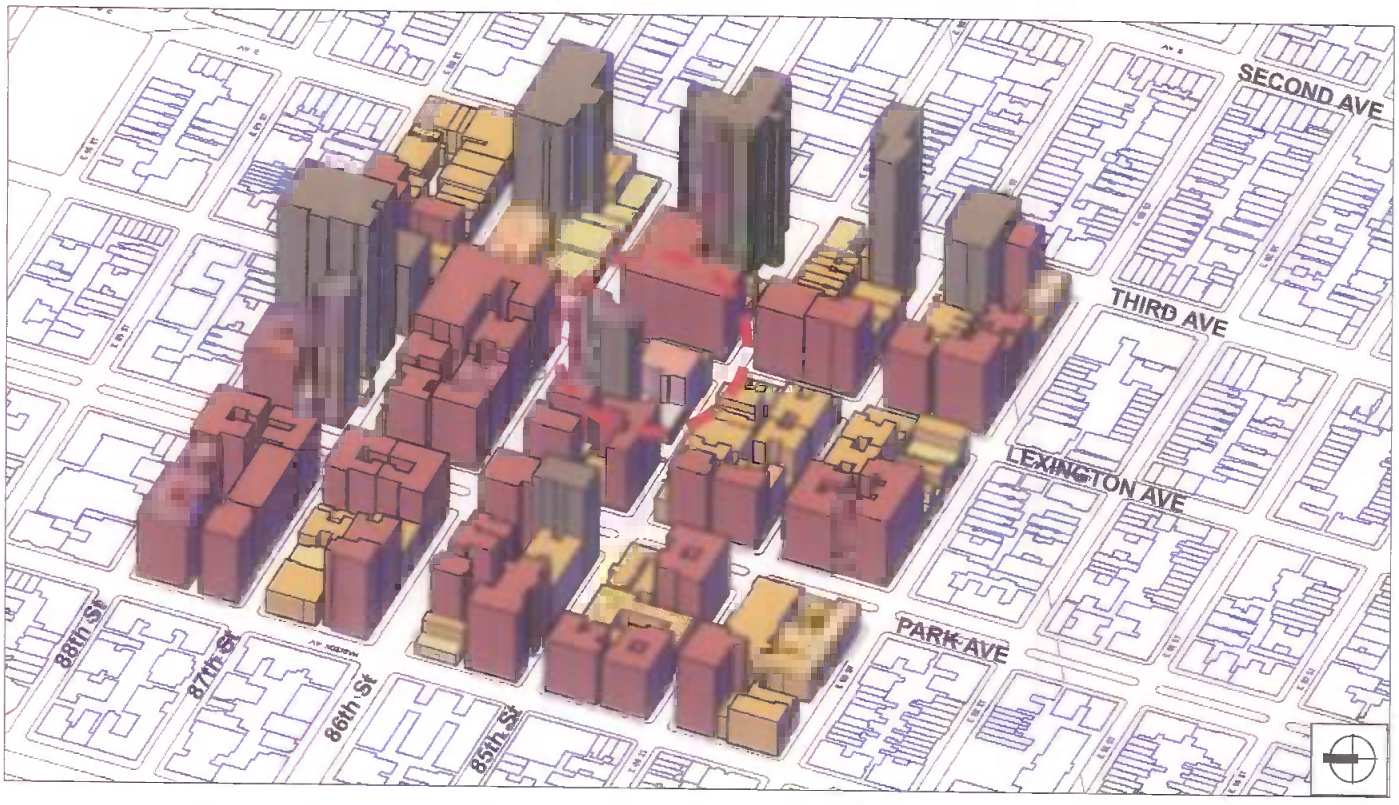
FIGURE 7: EDUCATIONAL INSTITUTIONS (400' RADIUS)

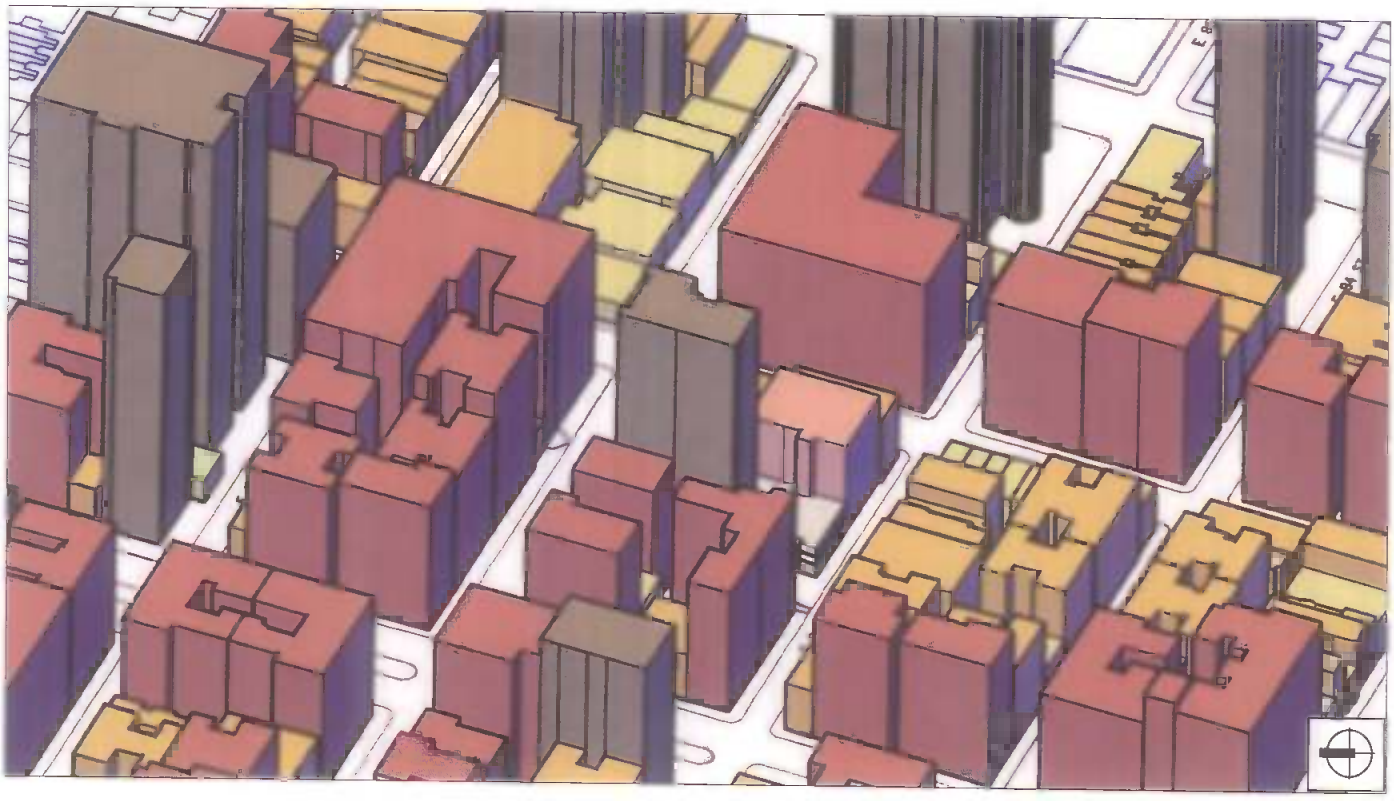
EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

0 200 ft

BFJ Planning





0-5 STORIES 5-10 STORIES 10-20 STORIES OVER 20 STORIES

VARIANCE STUDY

FIGURE 8: EXISTING MID BLOCK HIGH RISES (COMPARABLE DEVELOPMENT SURVEY)

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

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4.0 COMPARISON OF DEVELOPMENTS

4.1 As-of-Right

An as-of-right development complies with all applicable zoning regulations and does not require any discretionary action by the City Planning Commission or Board of Standards and Appeals.

As previously discussed in Section 2.3, under the designated zoning C5-1A (R10A equivalent), the maximum development permitted is:

Table 4.1 C5-1A (R10A equivalent) General Residence District

	Wide Street	Narrow Street
Base Height (min/max):	125 ft – 150 ft	60 ft – 125 ft*
Building Height (max):	210 ft	185 ft*
FAR:	10.0	10.0*
Lot Coverage – corner lot	100%	100%*
Lot Coverage – interior/through lot	70%	70%*

* The proposed development site is located on a narrow street at an interior lot and therefore these figures pertain to this particular site.

Using these maximum development parameters permitted under as-of-right development, the current proposal could consist of:

Table 4.2 Maximum Development Permitted using Proposed Development Design under R10A Equivalent As-of-Right Zoning Parameters

	School / Community Facility	Residential	Entire Building
Building Height in C5-1A:	136′ approx.	74′ approx.	210′ approx.
Building Height in R10:	136′ approx.	49′ approx.	185′ approx.
Number of Floors: (incl. upper mechanicals)	10 (plus 3 below base plane)	7	17 (over base plane)
FAR:	-	-	10.0 (to 12.0 with lower-income housing)

No. Units	-	14	-
Residential Floor Area:	n/a	34,337 nsf	-

4.2 Proposed Development

In order to construct the proposed new Ramaz School and residential building, the applicant is seeking variances of lot coverage, rear yard, recreation space, street wall continuity and height and setback requirements. The applicant is also seeking a variance to address one issue of existing non-compliance concerning the Congregation Kehilath Jeshurun Synagogue.

A variance is a discretionary action by the Board of Standards and Appeals which grants relief from the use and bulk provisions of the Zoning Resolution to the extent necessary to permit a reasonable or practical use of the land. A variance may be granted, after a public hearing, when *unique conditions on a specific parcel of land would cause the property owner a practical difficulty and undue hardship* if it were developed pursuant to applicable provisions.

The development as proposed including variances would consist of:

Table 4.3 Development as Proposed including Variances

	School / Community Facility	Residential	Entire Building
Building Height in C5-1A:	136' approx.	355'	355' approx.
Building Height in R10:	136' approx.	319'	319' & 136' approx.
Number of Floors: (incl. upper mechanicals)	10 (plus 3 below base plane)	21	31 (over base plane)
FAR:	-	-	12
No. Units	n/a	53	-
Residential Floor Area:	n/a	69,991 nsf	-
Total Floor Area:	107,146 gsf	106,000 gsf	213,146 gsf

Analysis of the above figures indicates a number of discrepancies between what the existing zoning regulations permit on the site and what the Applicant is seeking to build through the requested variances (*See Figures 9, 10 & 11*). These include, but are not limited to:

- **Lot Coverage**: According to ZRCNY §24-11 lot coverage of interior lots in R10A zones must not exceed 70 percent. The applicant is seeking a lot coverage variance to cover ***approximately 94 percent*** of the site to include the existing synagogue and the proposed new structures.

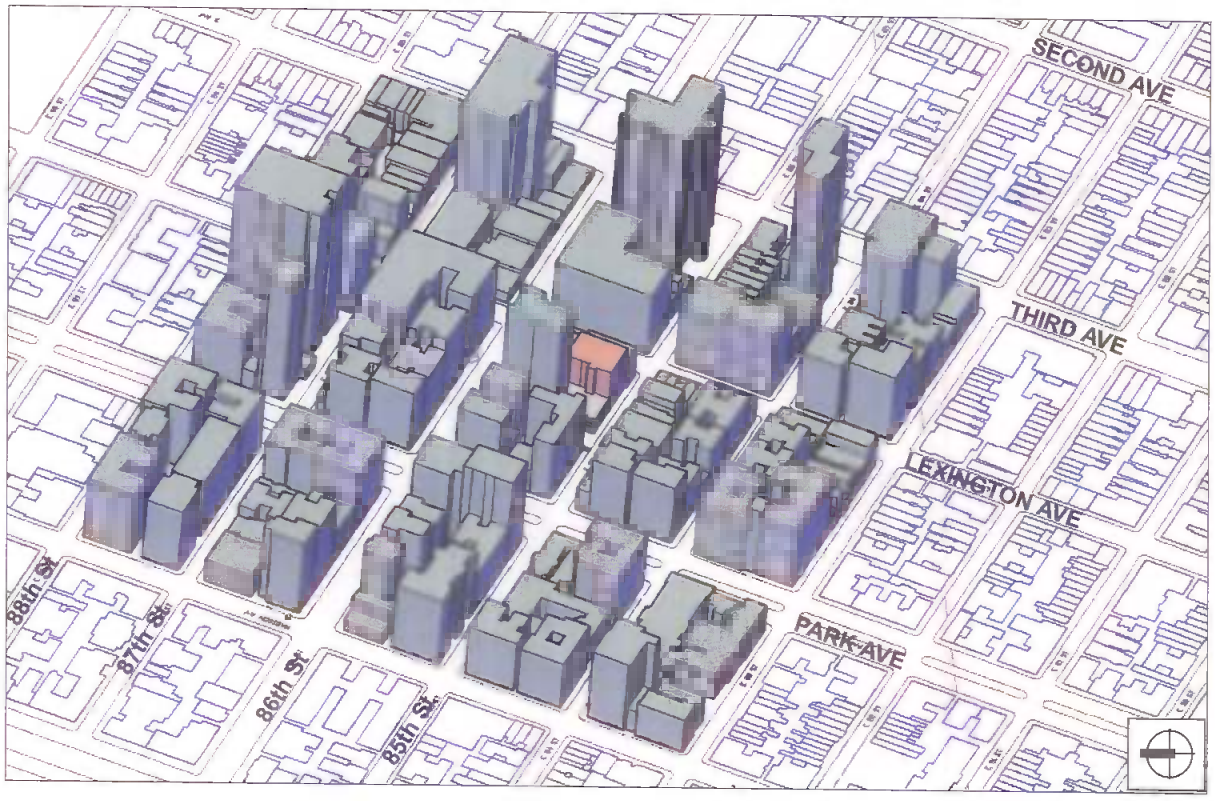
- **Building Height (in R10A district):** ZRCNY §23-663 indicates that the maximum permitted building height in an R10A district is 185 feet. The applicant is seeking to build a 319 foot tall (355 feet including mechanical bulkhead and screen wall) building, which is ***an additional 134 feet*** (more than 70 percent taller) than the permitted maximum in an R10A district.

- **Building Height (in C5-1A district):** ZRCNY §35-24 indicates that the maximum permitted building height in a C5-1A district is 210 feet. The applicant is seeking to build a 319 foot tall (355 feet including mechanical bulkhead and screen wall) building, which is ***an additional 109 feet*** beyond the permitted maximum in a C5-1A district.

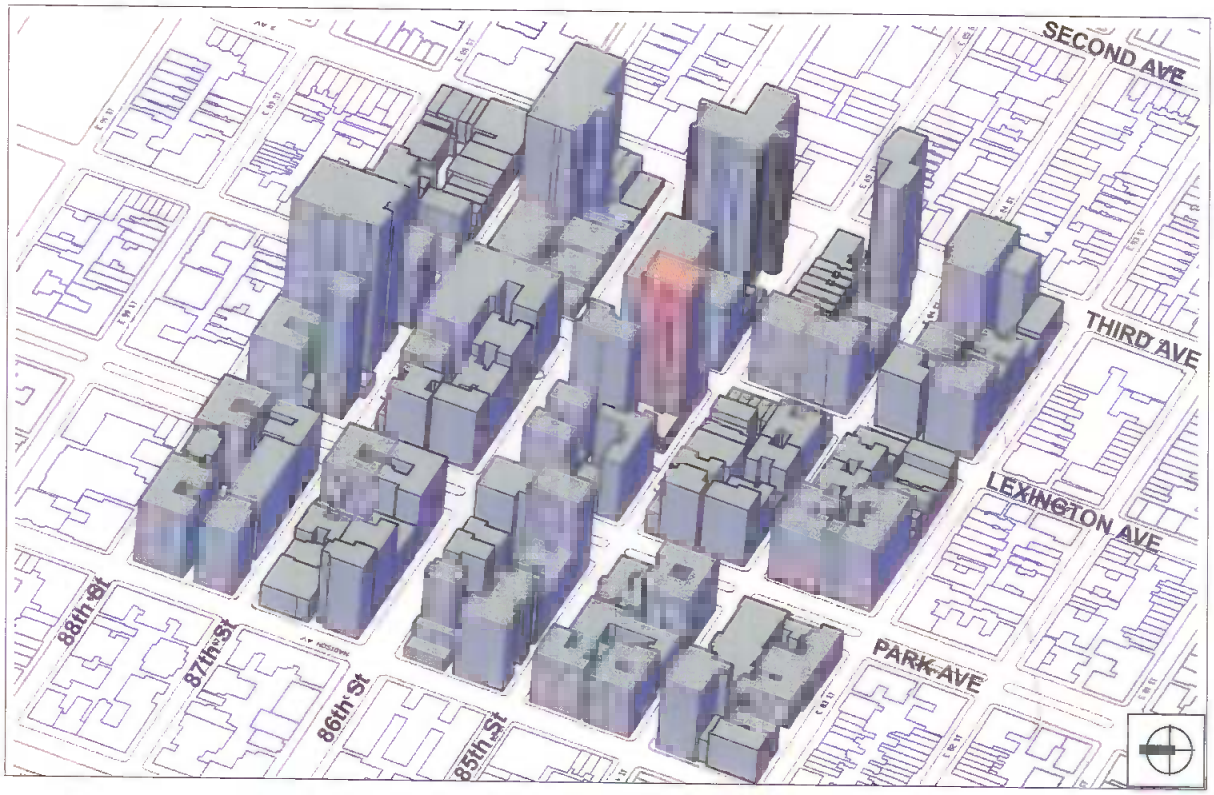
- **Base Height:** ZRCNY §23-663(b) indicates that the maximum base height permitted on a narrow street in an R10A district is 125 feet, located within 10 feet of the rear yard line. The applicant is seeking ***an additional 194 feet*** to construct a 319 foot tall building (355 feet including mechanical bulkhead and screen wall) within 10 feet of the rear yard line.

- **Street Wall Setback (in C5-1A district):** ZRCNY §35-24(c) indicates a minimum street wall setback of 15 feet from a narrow street (E85th street). The applicant proposes a setback of 10 feet, which is ***33 percent (5 feet) less*** than required in this district.

- **Residential Floor Area:** 34,337 square feet of net residential area is permitted under the as-of-right development scenario, versus the 69,991 square feet proposed. This results in ***an additional 35,654 square feet*** of net residential development in excess of that permitted under the as-of-right scenario.



EXISTING CONDITION



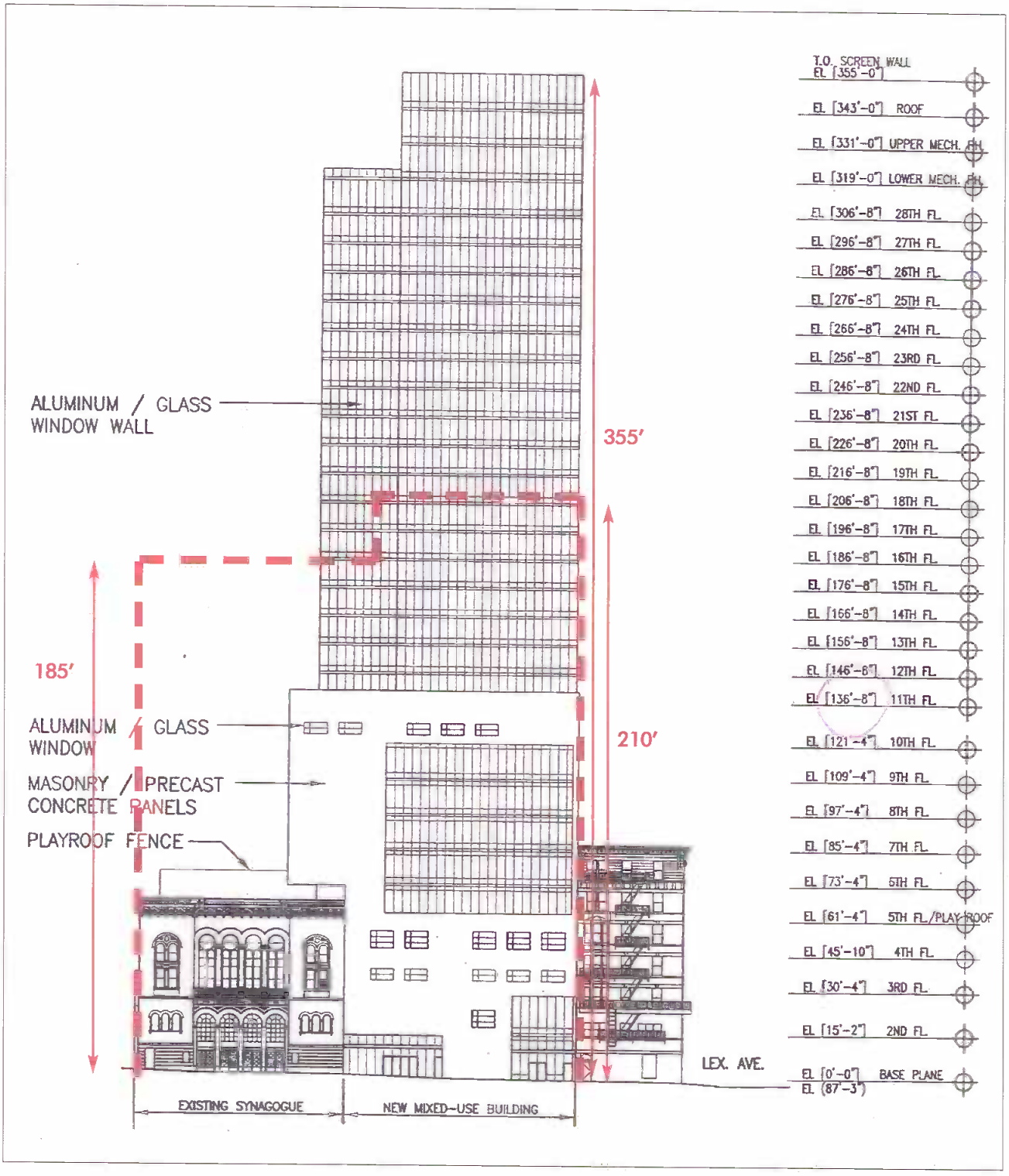
PROPOSED CONDITION- 355' BUILDING HEIGHT

VARIANCE STUDY

FIGURE 9: EXISTING VS PROPOSED MASSING MODEL

EAST 85TH STREET, NEW YORK, NY

SOURCE:BFJ PLANNING



Development Permitted under As-Of-Right

VARIANCE STUDY

FIGURE 10: AS-OF-RIGHT VS PROPOSED SOUTH ELEVATION

EAST 85TH STREET, NEW YORK, NY

SOURCE: PROPOSED ELEVATION FROM APPLICANT'S CEQR EAS

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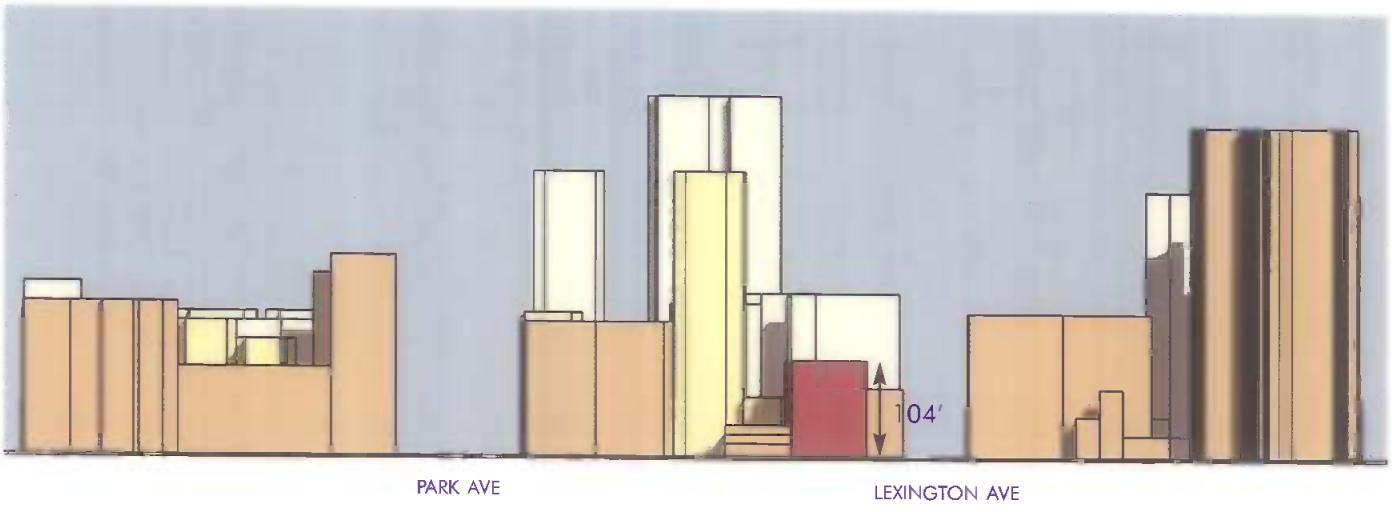
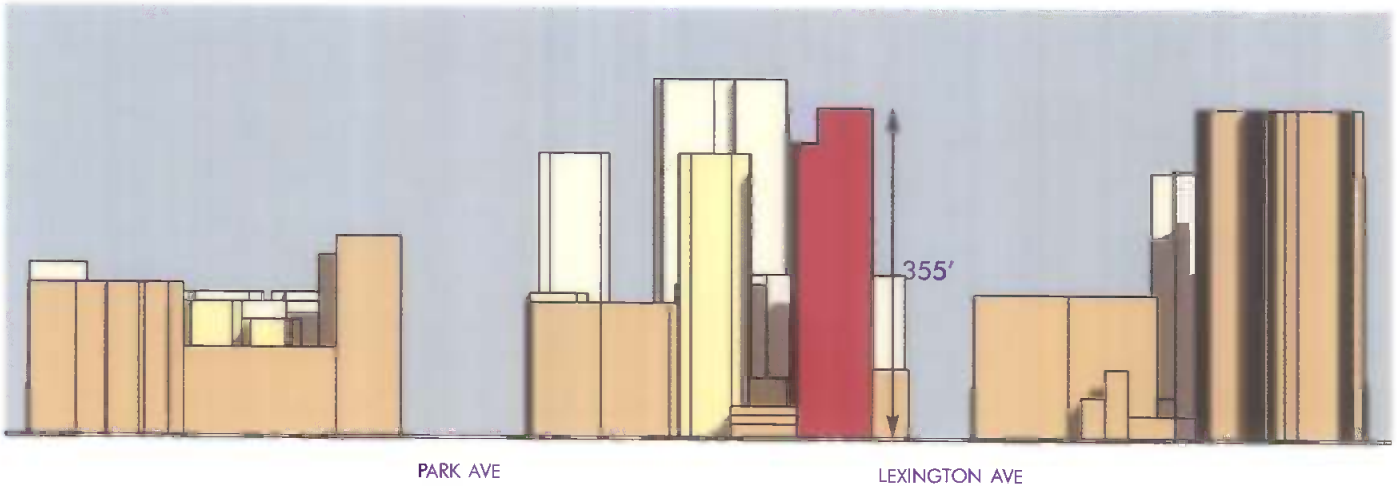


EXISTING HEIGHT: 104'

AS-OF-RIGHT HEIGHT: 185'/210'



PROPOSED HEIGHT: 355'

VARIANCE STUDY

FIGURE 11: E. 85TH ST ELEVATION

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

0 200 ft

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Allowing the requested variances may set a precedent for other similar mid-block sites. It creates a situation similar in effect to spot zoning or the rezoning of property under single ownership to benefit the landowner, rather than in accordance with a well considered Plan. It can be argued that permitting the requested variances could create a "windfall" profit for the Ramaz School and Congregation Kehilath Jeshurun Synagogue. It would however, work to the detriment of the surrounding buildings which would be cast in shadow, in addition to the introduction of a greater intensity of people, traffic and building size in this mid-block narrow street. The proposal would have a negative impact on the context of other historic resources nearby and would be inconsistent with the existing character of the surrounding neighborhood and contextual zoning area.

5.0 SHADOWS AND OTHER IMPACTS

5.1 Shadow Assessment

A shadow assessment demonstrates the potential shadow impact produced by the proposed development at various times of the year, as well as identifying potential shadow impacts on sensitive receptors for example, publicly accessible open space, historic resources and natural features in the area.

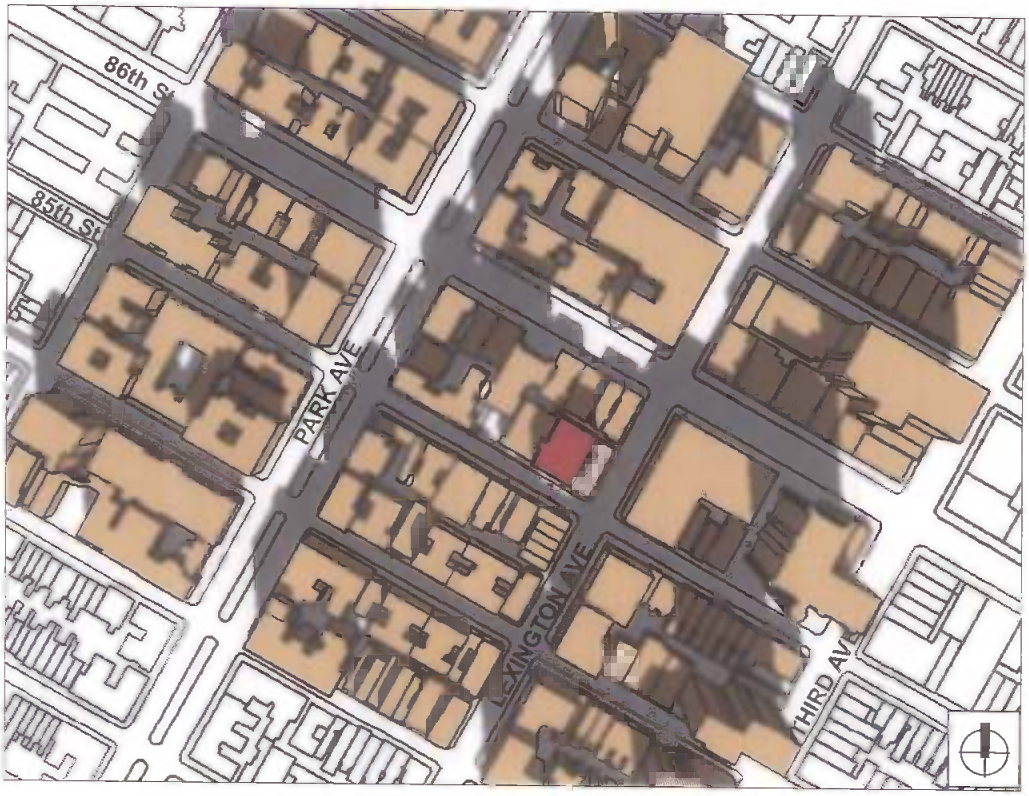
As described in Section 1.4, the proposed development will consist of the demolition of the existing 6/8 story school building and replacing this with an 11 story school building plus 17 additional floors of residential development above. This will result in a total new building height of 28 stories or 355 feet. According to the *CEQR Technical Manual,* the longest shadow cast by any structures in New York City would be 4.3 times the height of that structure. For a building with a height of 355 feet, this would result in a longest shadow cast of approximately 1,526.5 feet.

Given the height and bulk of the proposed development and the uncharacteristic nature of the development in the context of the surrounding area, a detailed shadow analysis was prepared to determine the extent of potential impacts. Using the methodology for conducting a shadow analysis contained in the *CEQR Technical Manual,* the shadow analysis as described below was performed for the three representative seasons of the year examining both the existing condition and the proposed condition. The analysis considered shadows at noon on March 1st – for spring time (also representative of autumn time), July 13th – for summer time and November 22nd – for winter time – (*See Figures 12, 13 & 14*).

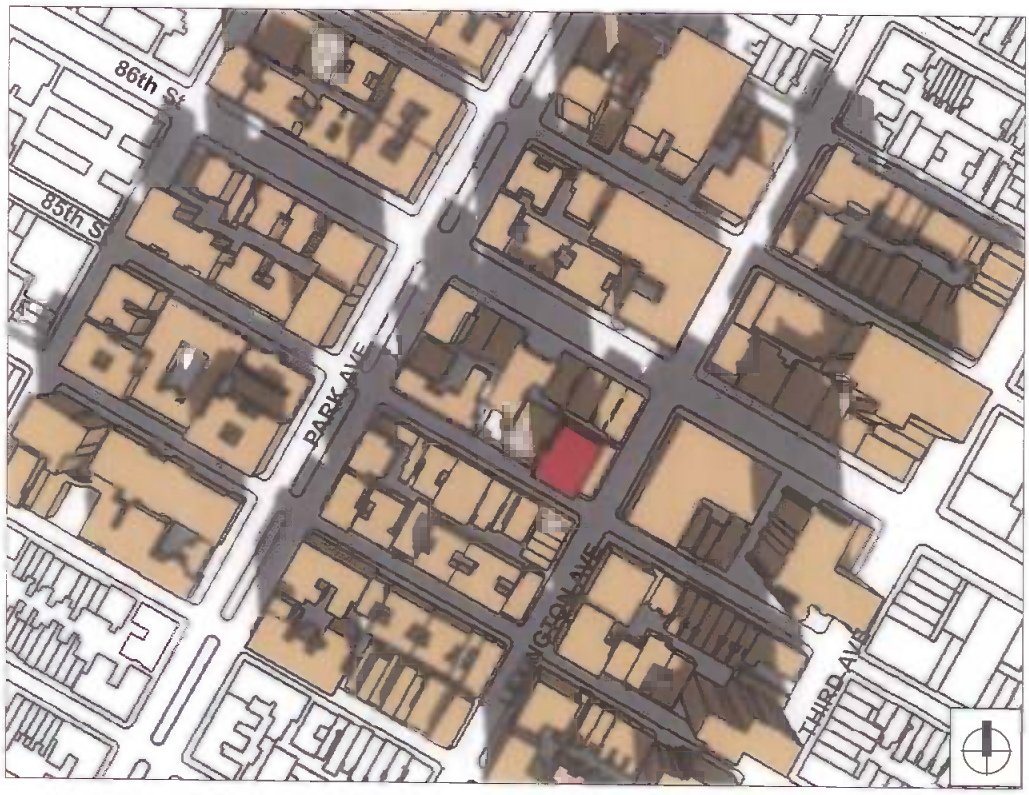
5.2 Shadow Comparison

Figures 12-14 illustrate entering and exiting angles from true north for the proposed building and the shadows cast on the surrounding area and define the extent, timing, and duration of the proposed building's shadow for each representative month of interest.

Figure 15 illustrates the shadow paths of the proposed 355' building and the effect that the development will have on the immediate area at various times throughout the year. The shadow analysis diagrams indicate the variance that will occur between the shadows cast from the existing 6/8 story structure and those that will be cast from the proposed 28 story structure.



EXISTING CONDITION



PROPOSED CONDITION

VARIANCE STUDY

FIGURE 12: SHADOW ANALYSIS (NOON, SPRING TIME)

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

0 300 ft

BFJ Planning

EXISTING CONDITION

PROPOSED CONDITION

VARIANCE STUDY

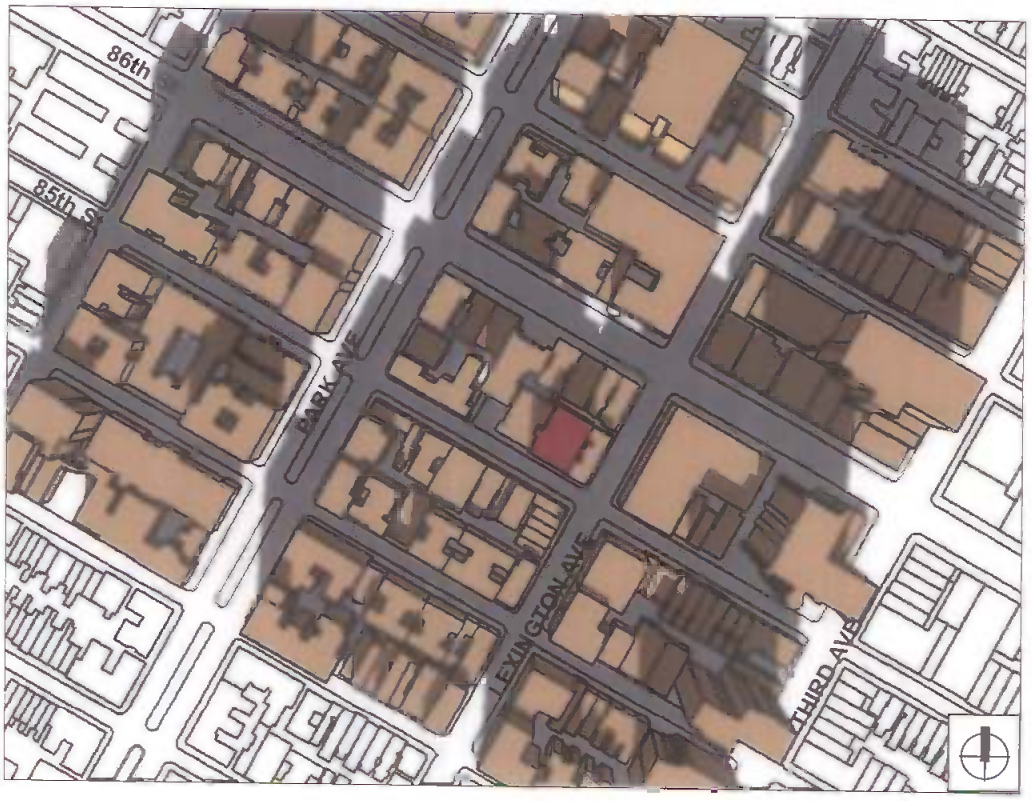
FIGURE 13: SHADOW ANALYSIS (NOON, SUMMER TIME)

EAST 85TH STREET, NEW YORK, NY

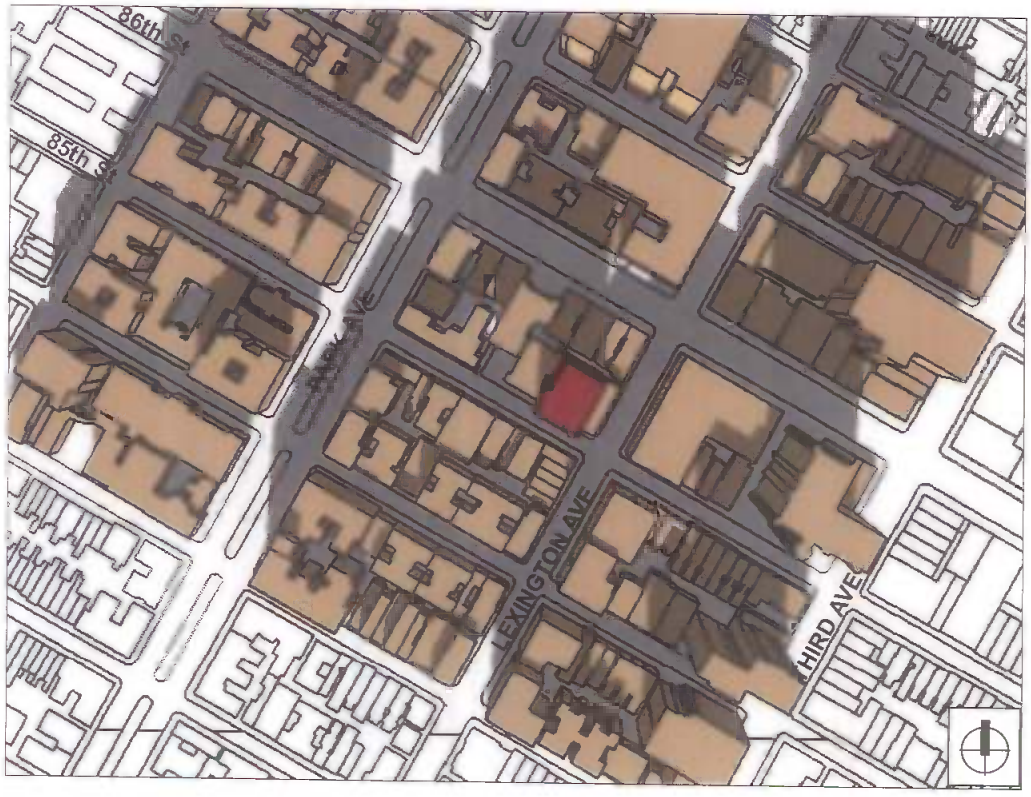
SOURCE: BFJ PLANNING

0 300 ft

BFJ Planning



EXISTING CONDITION



PROPOSED CONDITION

VARIANCE STUDY

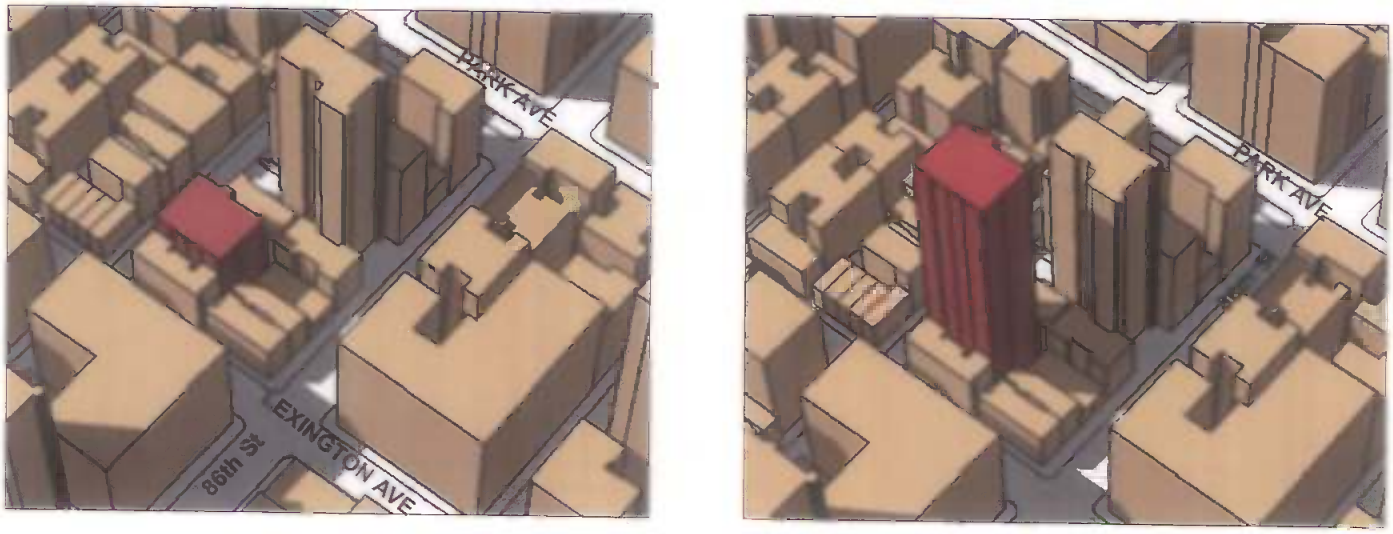
FIGURE 14: SHADOW ANALYSIS (NOON, WINTER TIME)

EAST 85TH STREET, NEW YORK, NY

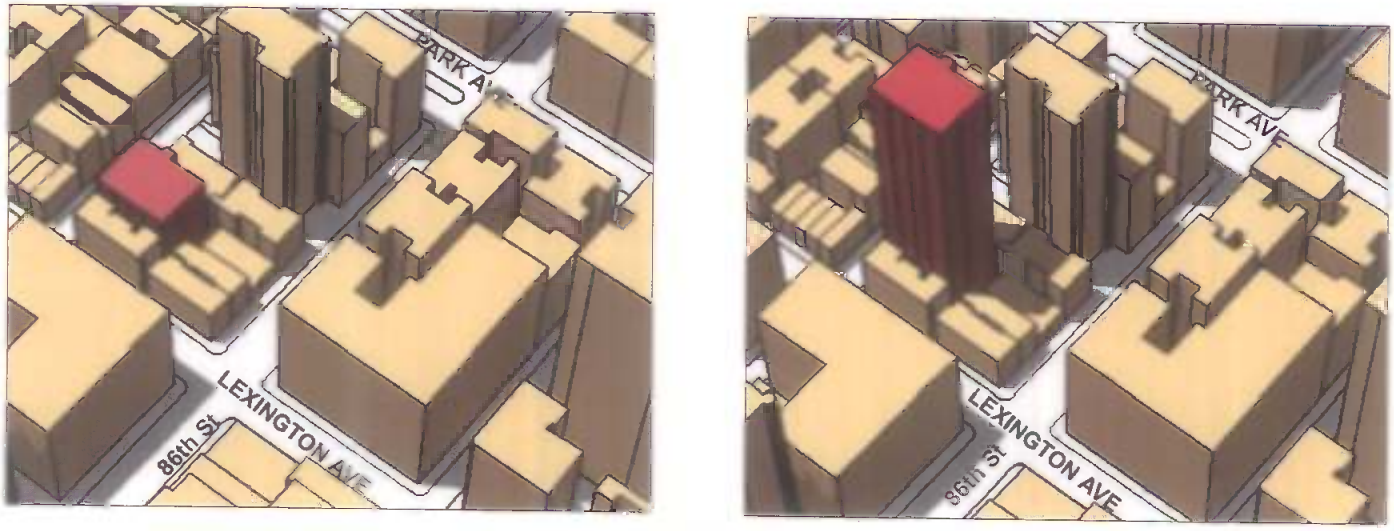
SOURCE: BFJ PLANNING

0 500 ft

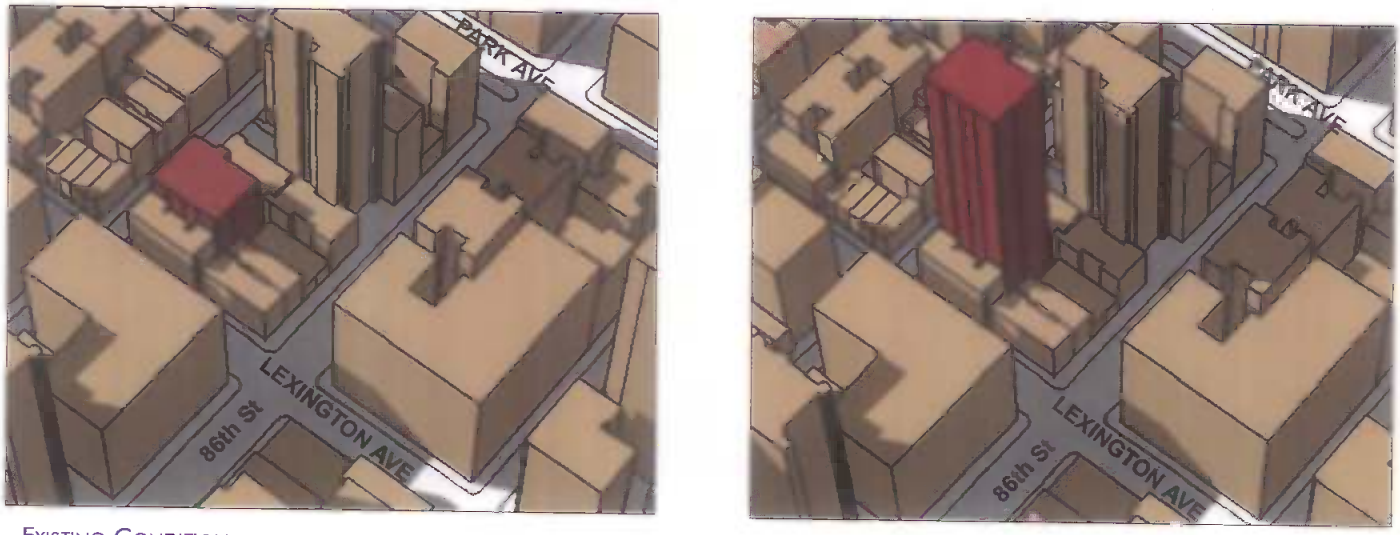
BFJ Planning



NOON, SPRING TIME



NOON, SUMMER TIME



EXISTING CONDITION

NOON, WINTER TIME

PROPOSED CONDITION- 355' BUILDING HEIGHT

VARIANCE STUDY

FIGURE 15: SHADOW ANALYSIS COMPARISONS

EAST 85TH STREET, NEW YORK, NY

SOURCE: BFJ PLANNING

BFJ Planning

Currently, there is no shadow cast on the Savoy residential building to the west of the site during spring/autumn months. The proposed building will cast a shadow on the eastern and northern facades of the Savoy during these months. In addition, the proposal will cast a shadow over the rooftops of the former corn exchange bank and the commercial/residential property at 120 East 86th Street. as well as extending the existing shadow over East 86th Street.

The proposed building will have the least impact in terms of shadow cast during the summer months, as the sun is highest in the sky. There is little or no shadow cast during these months by the building in its current form. The proposed development will increase the shadow cast on the rooftops of the old corn exchange bank and the commercial /residential property at 120 East 85th Street. It will also introduce shadow over the rear section of the synagogue rooftop. This will have a negative impact on the proposed playroof to be located on the synagogue rooftop. The shadow path diagram in *figure 16* demonstrates that the proposed development will cast this shadow on the playroof for much of the day during summer months, when the playroof would presumably be subject to its most intensive use.

The greatest impact in terms of shadow cast from the proposed development will be seen during winter months, when the sun is low in the sky and casting long shadows. As indicated in *figure 16* the existing condition during the winter months primarily affects the rooftop of the old corn exchange bank. The proposed condition indicates that the shadow cast will now affect both the old corn exchange bank and the commercial/residential property at 120 East 85th Street, in addition to casting an extended shadow across E86th Street and onto the property at 115 East 86th Street, which is currently free from this shadow impact during the winter months. The Savoy residential building to the west of the proposed development is also significantly affected by the proposed shadow condition. The eastern elevation, which currently receives no shadow interference during the winter months, will be significantly cast in shadow by the proposed development.

A significant shadow impact occurs only if the shadow added by the project reduces sunlight on sensitive uses substantially or to unacceptable levels. The above analysis indicates that the residential users at the Savoy will be significantly impacted by the shadow cast by the proposed development during spring/autumn and winter months in particular. In addition, the playroof area proposed by the applicant will receive a significant shadow impact during the summer months, when the area will be most used. This will be further exacerbated by the cantilever element at fifth floor level.

5.3 Other Impacts

There are a number of impacts associated with a development of this scale during and after construction. These include construction, pedestrian and vehicular traffic, noise, dust, neighborhood character, visual, historical significance, water and waste, and demand for services.

- **Zoning and Public Policy:**

The proposed building violates the underlying principles of zoning on the Upper East Side: towers should be restricted to the avenues (wide streets) and low rise contextual buildings should predominate in the mid-block on narrow streets. This "hills and valleys' policy is articulated below in an extract from an article for NY Law School's *'City Law'* by Norman Marcus, former Counsel for the New York City Planning Commission.

"Contextual districts were created almost fifteen years ago after a two-year study by the Department of City Planning. The study resulted in a generic zoning recommendation to limit the height of residential construction in certain residential areas like the Upper East Side, the Upper West Side and Murray Hill/Gramercy Park at a time when silver development and tower construction threatened to change the character and scale of these neighborhoods, disrupt their contiguous backyards and homogenize residential Manhattan into an indistinguishable high rise haze. In these new contextual districts a specific height limitation was imposed in addition to the FAR limitation. Mid-block sites received the lowest height, with higher but still limited residential buildings allowed along the wider avenues. This "hills and valleys" planning recommendation was based principally on the greater traffic capacities of 100-foot wide avenues as compared with the 60-foot wide east-west streets, the greater distance between buildings across the avenue allowing more light and air potential and finally, upon the built character of the avenues as opposed to mid-blocks."

- **Visual Impacts and Neighborhood Character:**

The proposed development seeks the demolition of a 6/8 story building and the construction of a 355 foot 28 story education facility and residential tower. As previously mentioned in this report the proposed development site is in a mid-block location in an area characterized by the Manhattan zoning philosophy of locating tall buildings along avenues and lower buildings along streets. In addition, the area is covered by a contextual zoning designed to maintain this development pattern and preserve the existing neighborhood character.

The construction of a 28 story tower would create significant negative visual impacts on the composition of East 85th Street's streetscape, in addition to the negative visual impact that would be imposed on the residents of the existing low rise buildings on the street.

The Synagogue which is located on the proposed development site and to the west of the proposed tower, is over a century old and has potential historic significance as a building. It is proposed that the new development will cantilever over this 4 story building at the fifth floor level. It is reasonable to assume that the scale and bulk of the proposed structure will impact negatively on the visual appearance as well as the character of this old building. This will be exacerbated by the fact that the proposed tower will be cantilevered over the synagogue and detract from its status as a separate building.

- **Noise:**

The proposed development site is located on a primarily residential street. It is proposed that the development will take approximately 24 months to construct. During this time there will be significant noise and dust resulting from construction, from early morning through to late evening.

The proposal includes a playroof for the new Ramaz School on the roof level of the Synagogue. This area is in close proximity to a number of residential buildings in the neighborhood and is directly adjoining the Savoy residential building to the west of the Synagogue. In addition to the school's play use, this playroof will also be used for social, recreational and religious purposes. This will result in noise during the day from the children playing in this area as well as noise at other times when it is in use for additional activities. These activities will have an impact on the noise levels experienced by residents in the area.

- **Traffic:**

While the proposed development does not include a parking element, there will be a significant increase in traffic levels around the site, particularly during construction and during school opening and closing hours once construction has been completed.

Heavy construction traffic will cause a negative impact for existing residents and users of East 85th Street. The street is a narrow, one-way street which already experiences congestion from existing traffic levels. This street is also one of the cross town transverse routes through Central Park and experiences high levels of congestion as a result, particularly during peak hours. The presence of large construction vehicles will block street access and result in heavy congestion.

The presence of the Ramaz School on the south of East 85th Street, in addition to the Ramaz lower school at the existing building proposed to be demolished means that there are significant levels of pedestrian traffic on the street, particularly during school drop-off and pick-up hours. There is also a large amount of pedestrian traffic as a result of the residential buildings located on and around East 85th Street. The proposal for 53 additional residential units (approx. 213 new residents), 11 additional school workers and 48 additional students, will result in a significant increase in pedestrian traffic in the area. The addition of 272 people to this already crowded street may have a negative impact on existing users.

6.0 PRECEDENT SETTING ISSUES

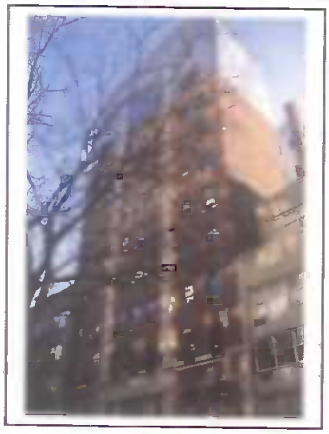
6.1 Other Schools and Institutes

There are a large number of schools and institutions located in the Upper East Side. *Figure* 16 identifies the location of the R8 residential zoning districts in the study area and *figure 17* identifies the locations of the fifty six (56) schools and institutions within this. It is clear that the majority of these schools and institutions are located in residential zoning districts. A study of these schools has indicated that those located mid-block are an average of 6 stories in height, with the highest mid-block school at 11 stories.

The majority of educational buildings are architecturally fitting to the character of the Upper East Side neighborhood and the height of these structures reflects and maintains the Manhattan zoning philosophy of locating taller buildings along the wider avenues and lower mid-block buildings along the narrower streets.

The table below identifies some of the typical mid-block schools and institutes located within the study area:

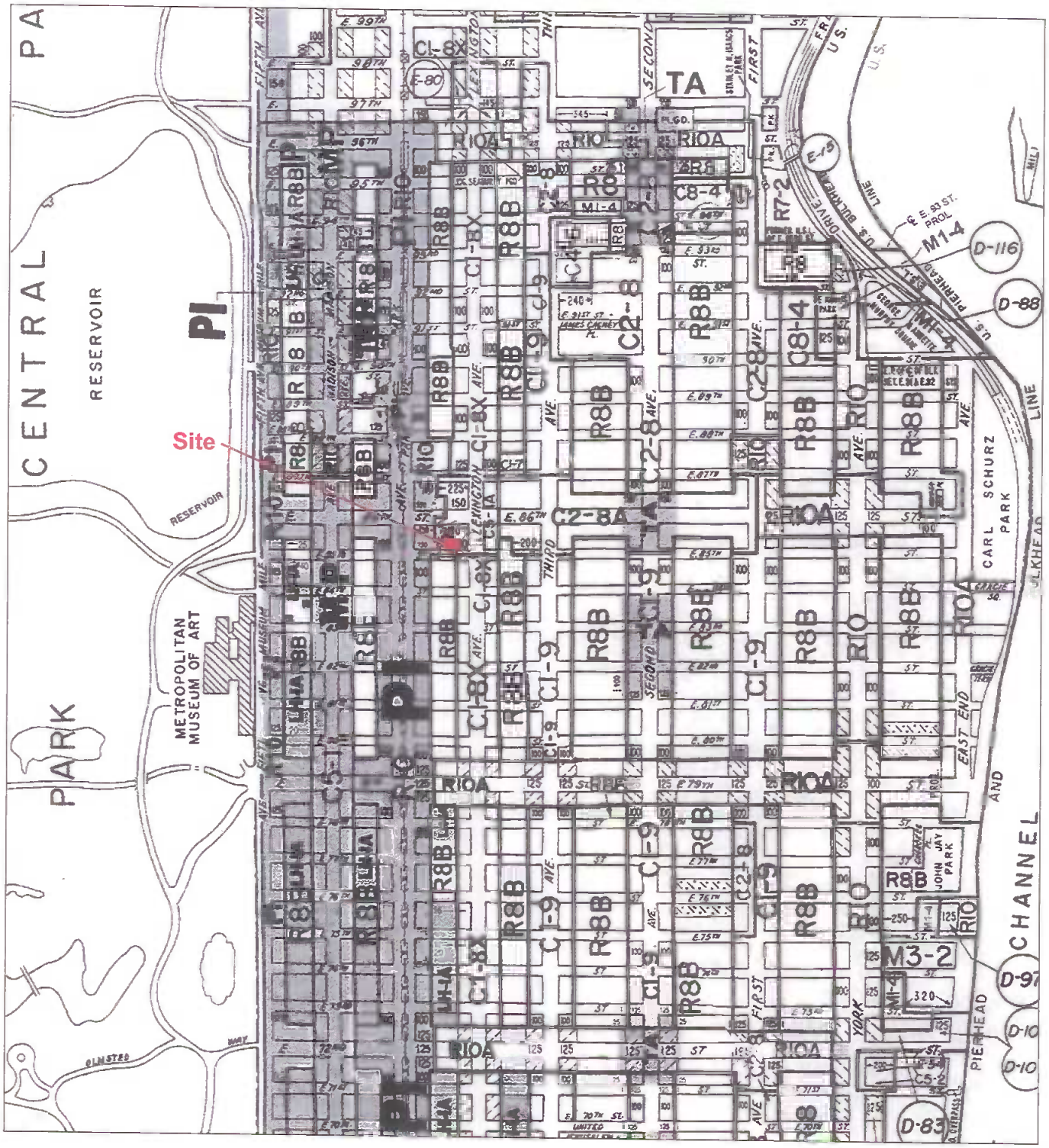
Table 6.1 Mid-block schools and Institutes within Study Area (See Figure 17 for locations)

School	Location	Height	Photograph
Lycee Francais (location no. 56)	East 76th St. between York Avenue & East River Drive	5 storey	
Birch Wathen School (location no. 53)	East 77th St. between 2nd & 3rd Avenues	11 storey	

Ramaz School (location no. 27)	East 78th St. between Madison & Park Avenues	7 storey	
Rudolph Steiner (location no. 21)	East 79th St. between Madison & 5th Avenues	4 storey	
Loyola School (location no. 18)	East 83rd St. between Park & Madison Avenues	6 storey	
Ramaz School (location no. 14)	East 85th St. between Lexington & Park Avenues	5/6 storey	

Regis High School (location no. 15)	East 85th St. between Park & Madison Avenues	6 storey	
Dalton High School (location no. 13)	East 89th St. between Lexington & Park Avenues	11 storey	
St. David's School (location no. 12)	East 89th St. between Madison and 5th Avenues	4/6 storey	

As outlined above, there are a number of private schools and educational institutions in the area. Our Client is concerned that a grant of the requested variances sought by the Ramaz School will set a precedent for such development in the future. It is reasonable to assume that any of these schools may seek similar variances in order to construct residential tower blocks above their educational institutions in a profit making endeavor, to the detriment of the surrounding neighborhood context and character. This action would become increasingly attainable should such a precedent be established in this case.



VARIANCE STUDY

FIGURE 16: ZONING MAP

EAST 85TH STREET, NEW YORK, NY

SOURCE: NYC DEPT. OF CITY PLANNING

0 1000 ft

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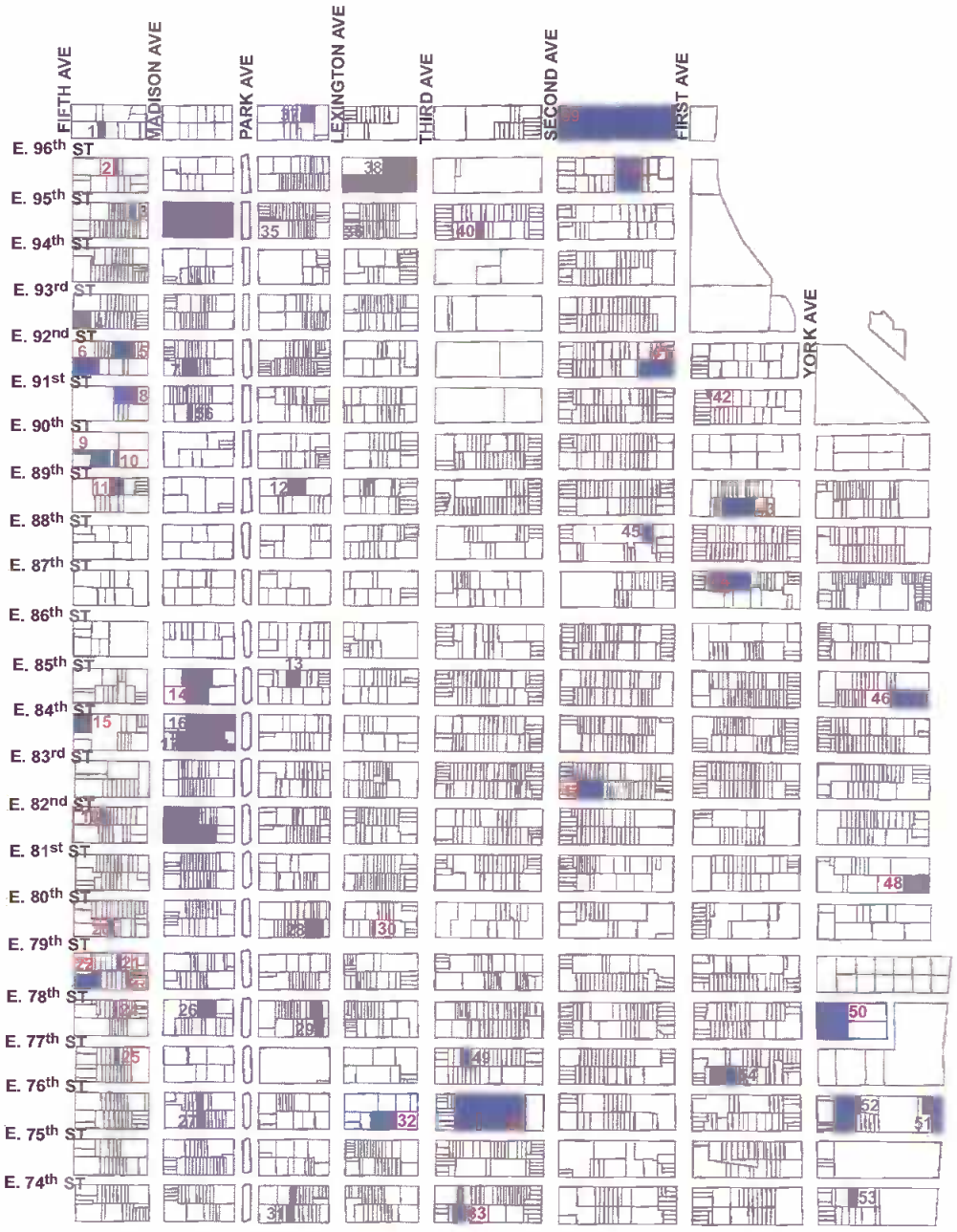
1. City of New York
2. D'Italia Scuola
3. Diller-Quaile School
4. Jewish Museum
5. The Nightingale Bamford School
6. Sacred Heart
7. St. Dalton School
8. Spence School
9. National Academy of Design
10. Church of Heavenly Rest
11. St. David's School
12. Dalton School
13. Ramaz School
14. Regis High School
15. Marymount School NY
16. St. Ignatius Loyola Church
17. Loyola School
18. Metropolitan Museum
19. Deveraux Blake School
20. Rudolf Steiner Gould
21. The School of Practical Philosophy
22. NYC Institute of Fine Arts
23. The Rudolf Steiner School
24. New York University
25. Brandeis University
26. Ramaz School
27. The Hewitt School
28. Hunter College
29. Allen Stevenson School
30. Dormitory Authority
31. The Buckley School
32. St. John the Baptist Church
33. Buckley School NYC
34. City University of NY
35. Town House International School
36. Congregation Orach Chaim
37. Church of St. Francis
38. Playground
39. Board of Education
40. St. David's Sports School
41. Board of Education
42. Heckscher Foundation for Special Education
43. Board of Education
44. Church St. Joseph
45. Rhinelander Children's Center
46. The Chapin School
47. Board of Education
48. The City University of NY
49. Birch Wathen School
50. Board of Education
51. The Town School
52. Lycee Francais
53. Epipheny Community Nursery School
54. Eleanor Roosevelt High School
55. Board of Education
56. Horace Mann School



VARIANCE STUDY

FIGURE 17: SCHOOLS AND INSTITUTES

EAST 85TH STREET, NEW YORK, NY

SOURCE: GIS PLUTO DATABASE, NYC DEPARTMENT OF CITY PLANNING

0 1000 ft

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7.0 SUMMARY AND CONCLUSIONS

7.1 Zoning

As outlined in *Sections 2.3 and 2.4*, the site is located within the R10 and C5-1A zoning districts. The entire building is subject to all applicable Quality Housing bulk provisions, which in the case of R10 and R10 equivalent districts require that the building comply with the bulk regulations applicable in an R10A district. A mixed-use building in a C5-1A district is also governed in its entirety by the Quality Housing Program's applicable regulations.

7.2 Built Context

The development pattern on the Upper East Side of Manhattan is characterized by predominantly low rise development along the streets of the mid-block, with higher rise development abutting the wider avenues. The principals and objectives of the contextual zoning of the area have been specifically designed to protect this development pattern and to prevent large scale mid-block development, as proposed in this variance application. A 355 foot tower building represents a major change in the scale of the mid-block and overall context of the neighborhood.

There are a number of sensitive receptors within a 400 foot radius of the site, including a number of potential historic resources and landmark buildings. These contribute significantly to the character of the neighborhood and would be negatively affected by the proposed tower development.

7.3 Comparison of Developments

In comparing the differences between the as-of-right and the proposed developments it is evident that the variances sought by the Applicant result in a build out which far exceeds that which the current zoning permits.

- The *lot coverage* would increase from a permitted maximum of 70 percent to approximately 94 percent of the site;
- the *building height* would include an additional 134 feet on top of the 185 feet permitted in the R10A district, and
- an additional 109 feet on top of the 210 feet permitted in the C5-1A district; the *base height* will include an additional 194 feet on the 125 permitted;
- the *street wall setback* would be 33 percent less than required and
- the *residential floor area* would include an additional 35,654 square feet of net residential development in excess of that permitted.

The proposal would have a negative impact on the built context and existing character of the surrounding neighborhood and contextual zoning area.
In addition, allowing the requested variances may set a precedent for other similar mid block sites. It would create a situation similar in effect to spot zoning - the rezoning of property under single ownership to benefit the landowner - rather than in accordance with a well considered Plan. It can be argued that permitting the requested variances could create a "windfall" profit for the Ramaz School and Congregation Kehilath Jeshurun Synagogue.

7.4 Shadows and Other Impacts

Section 5.2 demonstrates the impact that the proposed 355 foot building would have on shadows cast on the surrounding area at various times of the year. The greatest impact is seen during the winter months, when shadows are at their longest. The Savoy residential building would experience significant shadow impact during the winter months. The Savoy building will however experience shadow impacts, which it does not currently experience, throughout all seasons as a result of the proposed building height.

The play roof area proposed by the Applicant will receive a significant shadow impact during the summer months, when the area will be most used. This will be further exacerbated by the cantilever element at fifth floor level.

As illustrated in *Section 5.2*, other negative impacts as a direct result of the proposed development will include: violation of the underlying principles of zoning on the Upper East Side; negative visual impact of a 28 story tower on the streetscape in this area characterized by low rise mid-block development; negative visual impact on the adjacent synagogue, a potential historic resource; noise and dust impact from construction; noise impact from the proposed external play roof; and significant traffic impacts during construction and during school drop-off and pick-up hours on this already congested cross-town route.

7.5 Precedent Setting Issues

Following a study of other mid-block schools and institutions in the wider study area, a grant of the requested variances sought by the Ramaz School would set a precedent for similar development in the future. It is reasonable to assume that any of these schools may seek similar variances in order to construct residential tower blocks above their educational institutions in a profit making endeavor. This action would become increasingly attainable should such a precedent be established.

In conclusion, the proposed request for variances represents a significant overdevelopment of the site, in a manner which is inconsistent with the existing Manhattan zoning philosophy for this area. It is reasonable to assume that the grant of the requested variances will set an undesirable precedent for additional applications seeking similar development opportunities. This pattern of development will threaten the established character of the neighborhood, which the contextual zoning initiatives were designed to protect.