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ARCHITECT LETTER

May 12, 2010

Hon. Meenakshi Srinivasan, Chair  
New York City Board of Standards and Appeals  
40 Rector Street, 5th Floor  
New York, New York 10006

Re: New York University Langone Medical Center  
Emergency Department Expansion  
522-566 and 596-600 First Avenue, a/k/a 400-424 East 34th Street and  
423-437 East 30th Street  
Block 962, Lots 80, 108, and 1001 through 1107

Dear Chair Srinivisan and Commissioners:

We are submitting this letter in connection with an application for a zoning variance to facilitate the proposed renovation and expansion of the Emergency Department at the NYU Langone Medical Center (the "Medical Center"). The Emergency Department currently occupies a portion of the ground floor of the existing Tisch Hospital building, located on the Medical Center campus. The proposal includes the reconfiguration and renovation of this existing space, the expansion of the Emergency Department within the Tisch Hospital building, and the construction of a one-story enlargement on First Avenue immediately north of the existing Emergency Department (together, the "Proposed Expansion").

This letter will address the Medical Center's goals for the renovation and expansion of the Emergency Department and how they are addressed by the Proposed Expansion; the physical constraints on the development of the Proposed Expansion that cannot be resolved within existing zoning parameters; and design criteria to assure visibility for Emergency Department signage, which criteria cannot be satisfied within existing zoning restrictions.

**I. Background**

A. Project Goals

The goal of the Proposed Expansion is to improve emergency services for adult and pediatric patients at the Medical Center. Because of national trends, all emergency departments are experiencing increased patient loads, and the Medical Center is no exception. The current Emergency Department has 39,000 visits per year. This number is expected to increase at a rate of three to five percent per year, in line

with increases in recent years. The existing Emergency Department, which contains 9,250 gross square feet, is significantly undersized for current and projected demand. Because of this limited size, the existing facility has only 18 exam/treatment positions, one triage/treatment room, and no disposition seats (See Figure ES-01. Existing Emergency Department Floor Plan). The Proposed Expansion is needed to increase the size of the Emergency Department to meet current and projected patient volumes and to permit an upgrade of the Emergency Department facility.

The existing Emergency Department has an inefficient and constricted layout, both at the entrance to the Emergency Department and in the treatment areas. All patients enter at the same location and pass through the same entrance corridor, which results in walk-in pediatric and adult patients with various ailments mixing with trauma cases arriving by ambulance. There is a single waiting room which provides minimal separation between pediatric and adult patients, and more generally the facility's layout provides minimal acoustic and visual privacy. This mixing of different acuities results in a high level of stress for patients and Emergency Department personnel. Other inefficiencies in the facility's layout result in suboptimal staff travel distances and patient waiting times. The Proposed Expansion is needed to provide easier entry into the Emergency Department; separation between trauma, adult walk-in and pediatric patients; and a more efficient layout.

The Emergency Department is in need of a comprehensive signage program that identifies the entrance to the facility for arriving patients. The existing hospital buildings on the campus are poorly signed, and it is common for emergency patients to enter the wrong building. Conversely, visitors to other buildings on campus often mistakenly enter the Emergency Department and need to be redirected by medical staff. As described below, the Proposed Expansion includes a signage program designed to provide way-finding for visitors and clearly identify the Emergency Department facility.

In meeting these project goals, the Proposed Expansion should be aesthetically pleasing. It should contribute to and be harmonious with the surrounding context of the Medical Center campus.

#### B. The Development Site

The site of the proposed enlargement consists of an approximately 11,400-square-foot vacant parcel on the east side of First Avenue (the "Development Site"). It is located on the northwest portion of the zoning lot which comprises most of the superblock bounded by East 34<sup>th</sup> Street, FDR Drive, East 30<sup>th</sup> Street, and First Avenue (the "Zoning Lot"). The superblock also contains three lots which are not part of the Zoning Lot: one lot at the southwest corner of the superblock, occupied by New

York City Office of the City Medical Examiner, and two lots owned by Amtrak – one at the northwest corner of the superblock and another adjacent to the Development Site to the east. The Amtrak properties are occupied by ventilation buildings and emergency egress shafts which service the Amtrak tunnels that run beneath the site.

The Development Site is adjacent to Medical Center facilities to the north and south and currently provides ambulance drop off and pedestrian access to the existing Emergency Department located within Tisch Hospital. An air intake shaft serving mechanical equipment located in the cellar of Tisch Hospital occupies the eastern portion of the Development Site. The Development Site is irregularly shaped, with a frontage of approximately 138 feet along First Avenue and a depth that varies from approximately 50 to 125.5 feet.

The Medical Center campus includes multiple mid- and high-rise buildings between 6 and 27 stories in height, which are connected by smaller 1- and 2-story structures. The buildings are mostly of modern design and are clad in glass, metal, and brick. The Skirball Institute, which is located to the south of the Tisch Hospital building and occupies a significant portion of the Medical Center campus's First Avenue frontage, has a glass façade at street level.

### C. The Neighborhood

The neighborhood surrounding the Zoning Lot is characterized largely by medical and other institutional uses and some residential uses. The Medical Center campus marks the northern end of the First Avenue “medical corridor,” which includes the Bellevue Hospital Center, Arron Diamond AIDS Research Center, Hunter College School of Health Professions, NYU School of Dental Medicine, and Veterans' Affairs Medical Center, among other medical uses. Across First Avenue from the Zoning Lot is the 10-story Arnold & Marilyn Greenberg Hall, which is part of the Medical Center.

The non-medical institutional uses in the immediate area include the Chinese Mission to the United Nations building, located on the corner of First Avenue and East 34<sup>th</sup> Street, and the Chapel of the Sacred Hearts of Jesus and Mary, located at 325 East 33<sup>rd</sup> Street. The area west of First Avenue across from the Zoning Lot includes Kips Bay Towers, a large residential complex with mid- and high-rise residential towers and a parking garage. Other residential buildings in the neighborhood include modern 14- and 22-story apartment buildings on the west side of First Avenue at East 33<sup>rd</sup> and East 34<sup>th</sup> Street; the Rivergate residential complex, 35 stories at its tallest point, which occupies the full block bounded by East 34<sup>th</sup> Street, First Avenue, East 35<sup>th</sup> Street, and FDR Drive; four- and five-story tenement buildings on First Avenue near East 34<sup>th</sup> Street; and a new residential building and tenement buildings on the north side of East 33<sup>rd</sup> Street west of First Avenue.

Some of the areas in the vicinity of the Zoning Lot – the west side of First Avenue north of East 32<sup>nd</sup> Street, the north side of East 33<sup>rd</sup> Street, and most of East 34<sup>th</sup> Street – have strong streetwalls, but other areas in the surrounding neighborhood do not. The Kips Bay Towers, located across First Avenue, are set back from the property line. There is a public space, associated with the Rivergate complex, located at the northeast corner of First Avenue and East 34<sup>th</sup> Street. Other breaks in the streetwall are caused by recessed building entrances, loading docks, and parking garage entrances and exits.

## **II. Design Parameters**

### **A. Development Constraints**

There are existing physical constraints on the Development Site that affect the design of an enlargement to the Emergency Department. Most significantly, the Development Site contains an air intake shaft that serves air handlers located in the basement of Tisch Hospital. Originally, this air intake was provided by a structure located on an easement within the southerly Amtrak property. However, that structure was removed in order to facilitate Amtrak's ongoing reconstruction of its ventilation structure. As a replacement, Amtrak constructed the current shaft on the Development Site. The air intake shaft, in combination with the shallow dimensions of the Development Site, severely limits the area in which to construct an enlargement of the Emergency Department. As long as the air intake shaft remains in its current location, the floorplate of any enlargement would be severely limited, and existing inefficiencies in the layout of the Emergency Department's entrance, corridors, and waiting areas would not be resolved.

In addition, the Development Site is subject to a change in grade level. The floor level of the existing Emergency Department is lower than the curb level at the location of the Emergency Department entrance at its north end, thus requiring an entrance ramp for access. The grade change decreases further north along First Avenue.

### **B. Signage**

The Emergency Department's exterior signage must incorporate a number of design parameters to be effective. The architectural team has identified a set of design standards that will achieve the required level of legibility and visibility; these design standards have been refined to reflect the proposed building's design, streetscape and environmental conditions.

*Visibility and sign placement*

The most important aspect of designing effective signage is to provide for its visibility and clarity to the intended viewer. Public safety requires that the emergency entrance be clearly identified and not visually obstructed. The design of the Emergency Department signage must take into account a number of factors that affect the signage's visibility.

The signage must be visible to northbound traffic on First Avenue, since all vehicles ultimately approach the Emergency Department from this direction. Traffic on East 34<sup>th</sup> Street, a major eastbound cross street, must loop around either Second Avenue to East 30<sup>th</sup> Street or FDR Drive to East 25<sup>th</sup> Street in order to access the Emergency Department. First Avenue is a five-lane, heavily traveled, and often congested roadway. Traffic often backs up at the traffic signal at East 33<sup>rd</sup> Street, restricting the visibility of the Emergency Department.

The Emergency Department is one of three emergency departments located along the First Avenue medical corridor. The close proximity of both the Bellevue Hospital and the VA Hospital Emergency Departments and the lack of signage identifying each facility cause confusion for visitors. Further, there are multiple entrances to the Medical Center campus along First Avenue, and most of them are seen by approaching First Avenue traffic before the Emergency Department. Visitors to the Emergency Department are often instead drawn into the Medical Center's main entrance, which is more visually significant than other entrances, and as a result lose critical time in urgent situations. The Emergency Department entrances must therefore be clearly identified as part of the Medical Center, rather than other hospitals along First Avenue, and must be clearly distinguished from other Medical Center entrances. The building name for the Emergency Department must be located on the building's exterior façade and must be legible from the Medical Center's main entrance.

The Medical Center has established an emergency drop-off lane separated from First Avenue traffic flow by a "Qwick Kurb" (i.e. a temporary curb) to allow patients to be safely dropped off at the Emergency Department's walk-in entrance, but traffic congestion often blocks the view of the lane divider for vehicles that are not in the far right lanes. If vehicles miss the drop-off lane, they must take a long route to loop back around to First Avenue via FDR Drive and East 25<sup>th</sup> Street, losing critical time in urgent situations. The Emergency Department signage must be legible and visible to vehicles well before they encounter the emergency drop-off lane.

To mitigate these problems, signage must be located within the cone of vision for approaching traffic and must account for impediments to visibility.

Generally, a driver's cone of vision extends 10 degrees to the right and left. This limited field of view necessitates that signage be located as close to the roadway as possible, oriented perpendicular to the path of travel. Ideally, the Medical Center Emergency Department signage would be visible (recognizable as a sign) from a distance of approximately 650 feet from the south, along First Avenue, which corresponds to the closest cross street, East 30th Street. The signs should be legible (readable) from a distance of 300 feet. On First Avenue, traffic often backs up at the traffic signal at East 33rd Street restricting the visibility of the front of the building. This vehicle back-up often includes buses, delivery vans, and other tall vehicles. To ensure visibility, some of the Emergency Department identification signage must be of a sufficient height so that it is at least partially visible above a bus in order to allow patients to see the Emergency Department before passing the emergency drop-off lane.

#### *Clarity of journey*

Historically facilities within the Medical Center campus have been referenced and known by building name (e.g. Tisch Hospital, Skirball Institute, and Rusk Institute). Based on this practice, the building name should be identified on the exterior of the building. Thus, in addition to need for the Emergency Department to be visible to vehicles traveling north on First Avenue, the entrance into the Emergency Department must be identified with signage at street level so that it can be visible to pedestrians and drivers at a close range. This is required to not only mark the actual entry door but also to differentiate the public entrance from the ambulance entrance. The signage at the ambulance entrance requires a lower level of visual prominence relative to the public Emergency Department entrance.

#### *Copy size, legibility, and negative space*

The posted speed limit on First Avenue is 30 MPH. This means drivers are traveling at a speed of 44 feet per second. At 300 feet a driver has 6.8 seconds to navigate to the right-hand lane of traffic in order to access the emergency drop-off lane. At 650 feet, which corresponds to the closest cross street, East 30th Street, a driver has 14.7 seconds to navigate toward the emergency drop-off lane. The combination of the urgency of Emergency Department visits, the visual barriers of the dense urban environment, and the complexity of approach given the close proximity of three hospitals to one another require that signage err on the side of larger rather than smaller in order to be adequately sized and highly visible.

#### *Color and design*

Although there are limited, definitive guidelines for the design of signage for Emergency Departments in the United States, NBBJ recommends that the

sign design for the Medical Center follow basic color and layout parameters, based on the firm's experience in designing Emergency Department signage for more than 40 major medical centers across the United States. Illuminated 24 hours per day, the background (negative space) color of the signage should be a vibrant red. The copy (also illuminated 24 hours per day) should be white. The illumination level should be high enough to provide for maximum visibility in low light conditions yet moderated (diffused) to prevent halation (blurring-together) of the letters.

### C. Development Options

We have investigated two development schemes for the renovation and expansion of the Emergency Department: a scheme that complies with applicable zoning regulations, including those for rear yards and signage (the "Complying Expansion"), and the Proposed Expansion, which does not comply with rear yard and signage regulations.

The Complying Expansion and Proposed Expansion treat interior renovations in Tisch Hospital in a similar fashion, but they address the enlargement differently due to the constraints of the Development Site. The Complying Expansion maintains the existing on-site air intake shaft that serves Tisch Hospital (including the Emergency Department) and retains the air handlers fed by the existing air shaft in the cellar of Tisch Hospital. (This cellar location is not optimal since it creates difficulties in servicing the equipment.) As illustrated in Figure ES-02. Complying Floor Plan, retaining the air shaft at the current location results in the north end of the site being constricted and, in turn, a mixing of patients within the entry area. Pediatric walk-in patients must pass through the adult waiting and triage rooms, and adult walk-in patients mix with ambulance patients in the corridor leading to adult emergency care services. The entrance cannot be relocated to the south because of the change in grade along First Avenue.

The Proposed Expansion addresses this deficiency by eliminating the existing air intake shaft. The removal of the air shaft provides sufficient space on the site to accommodate separate entrances and intake processing areas for pediatric and adult walk-in patients and patients arriving by ambulance. (See Figure ES-03. Proposed Floor Plan.) Two upgraded HVAC units will be installed on the roof of the Emergency Department to replace the existing units in the cellar of Tisch Hospital and to serve the expanded Emergency Department. One of the rooftop units is located in the required rear yard, which is not a permitted obstruction since it exceeds the maximum permitted height of 23 feet.

The Complying Expansion complies with surface area and height limitations for signs. The Proposed Expansion contains certain signage elements,

described in greater detail below, that provide the needed levels of visibility and legibility but do not comply with the applicable zoning regulations.

### **III. Satisfaction of Project Goals**

#### A. The Proposed Expansion

The Proposed Expansion satisfies the Medical Center's project goals. It increases the area of the Emergency Department from 9,250 gross square feet to 33,290 gross square feet, which, in accordance with commonly accepted planning benchmarks, would satisfy current and projected patient volumes. The Complying Expansion would increase the area to only 30,300 gross square feet. In addition, the Proposed Expansion contains a total of 29 exam/treatment rooms, three triage/treatment rooms, and an eight-seat disposition lounge, as contrasted with the 28 exam/treatment rooms, three triage/treatment rooms, and four disposition seats that would be provided by the Complying Expansion.

As illustrated in Figure ES-03, the Proposed Expansion provides separate entry corridors for walk-in patients and ambulance patients, as well as dedicated waiting areas for adult walk-in patients and pediatric patients. An entrance ramp is not required because the entrance is located further north than the existing Emergency Department entrance, where the ground floor level of the facility is the same as curb level. The design resolves inefficiencies in the layout of the Emergency Department, thereby reducing staff travel distances and patient waiting times. While the Complying Conditions scheme does not require an entrance ramp, it is unable to provide the other upgrades provided by the Proposed Expansion because its floorplate is limited by the existing air intake shaft on the Development Site (see Figure ES-02).

The design of the proposed Emergency Department enlargement is in keeping with the character of the other Medical Center buildings on the superblock. The enlargement will have a glass façade at street level similar to the Skirball building. This design approach will create a welcoming presence on the street that will help to identify the Emergency Department. The proposed layout will also provide more daylight for the Emergency Department, thereby improving the quality of the space and enhancing the patient experience. The glass parapet wall simplifies the design and reduces the mass by extending the illusion of transparency. The enlargement will shield the massive Amtrak shaft from its surroundings, thus improving the pedestrian experience along First Avenue. Landscaping will be provided to buffer the ambulance drop off area.

## B. Signage

The exterior signage of the Proposed Expansion achieves the required levels of legibility and visibility for providing way-finding for patients visiting the Emergency Department, but it does not comply with the applicable zoning regulations. The signage program contains a number of discrete elements.

The primary building identification consists of a red illuminated panel that is integrated into the south façade of the Emergency Department enlargement, which extends six feet beyond the existing Tisch Hospital building toward First Avenue and faces approaching First Avenue traffic. The location and scale of this sign ensure that it is visible to both approaching traffic and pedestrians that otherwise might be mistakenly drawn into the main hospital entrance.

In addition to the way-finding signage required for the Emergency Department, building identification signage is necessary to clearly differentiate the Medical Center's Emergency Department facility from the nearby Bellevue Hospital and VA Hospital. Vehicular level building identification signage is proposed to be located on the building façade, approximately 25 feet above grade, parallel with First Avenue, and integrated into the building cladding material. This identification signage would include a building name. A secondary building identification is located at street level so that it can be visible to pedestrians and drivers at a close range.

Public entrance signage will be integrated into the edge of the building's canopy and over the entrance door. Two-foot tall, red "EMERGENCY" lettering will be installed atop the canopy. A sign for the building name, with twelve-inch tall red lettering, will be located on the face of the canopy for vehicular level visibility. A sign for "ADULT AND PEDIATRIC EMERGENCY WALK-IN," located directly above the entry doors, will provide pedestrian level visibility.

The ambulance entrance must be identified in a manner that does not cause confusion to the general public but clearly informs the ambulance driver and personnel of where to go. Twelve-inch tall red "AMBULANCE ONLY" lettering on a neutral background (e.g. a material from the building's architectural palette) or white lettering on the building or ambulance entrance canopy will provide vehicular level visibility. Eight-inch tall, red "AMBULANCE" lettering above the ambulance entry doors will provide pedestrian level visibility.

## **IV. Requested Variances**

Pursuant to the zoning regulations for community facilities, the proposed one-story enlargement is a permitted obstruction in the required rear yard. However,

the rooftop mechanical equipment extends above the maximum permitted height at 23 feet. The equipment is screened by the building parapet which also extends beyond the 23 feet height restriction. Therefore a variance is being sought to permit a portion of the mechanical equipment and screen to be located on an area of the roof within the required rear yard.

In addition, a variance is being sought for the signage program. For a community facility use, the maximum allowable area for signs is 25 square feet or 15 percent of the street frontage, whichever is less, and the maximum height is 20 feet or the elevation of the first floor ceiling, whichever is less. As described above, signage for the Emergency Department needs to be larger and mounted higher than permitted in order to provide adequate way-finding and building identification. Therefore a variance is being sought to accommodate a greater surface area of signage with certain signs exceeding the permitted maximum height.

The plans and Statement of Findings submitted with the Application detail the variances being requested. We would be pleased to provide the Board with any additional documentation that you would find helpful in making your determination.

Very truly yours,

A handwritten signature in black ink that reads "Mark Lippi". The signature is written in a cursive style with a long horizontal stroke at the end.

Mark Lippi, AIA  
Principal

**KEY**

- AW ADULT WAITING
- ES EMS STORAGE
- PW PEDIATRIC WAITING
- S SUPPORT
- TR TRIAGE

- ADULT ENTRY PATH
- PEDIATRIC ENTRY PATH
- AMBULANCE TRANSPORT ENTRY PATH

**DGSF**

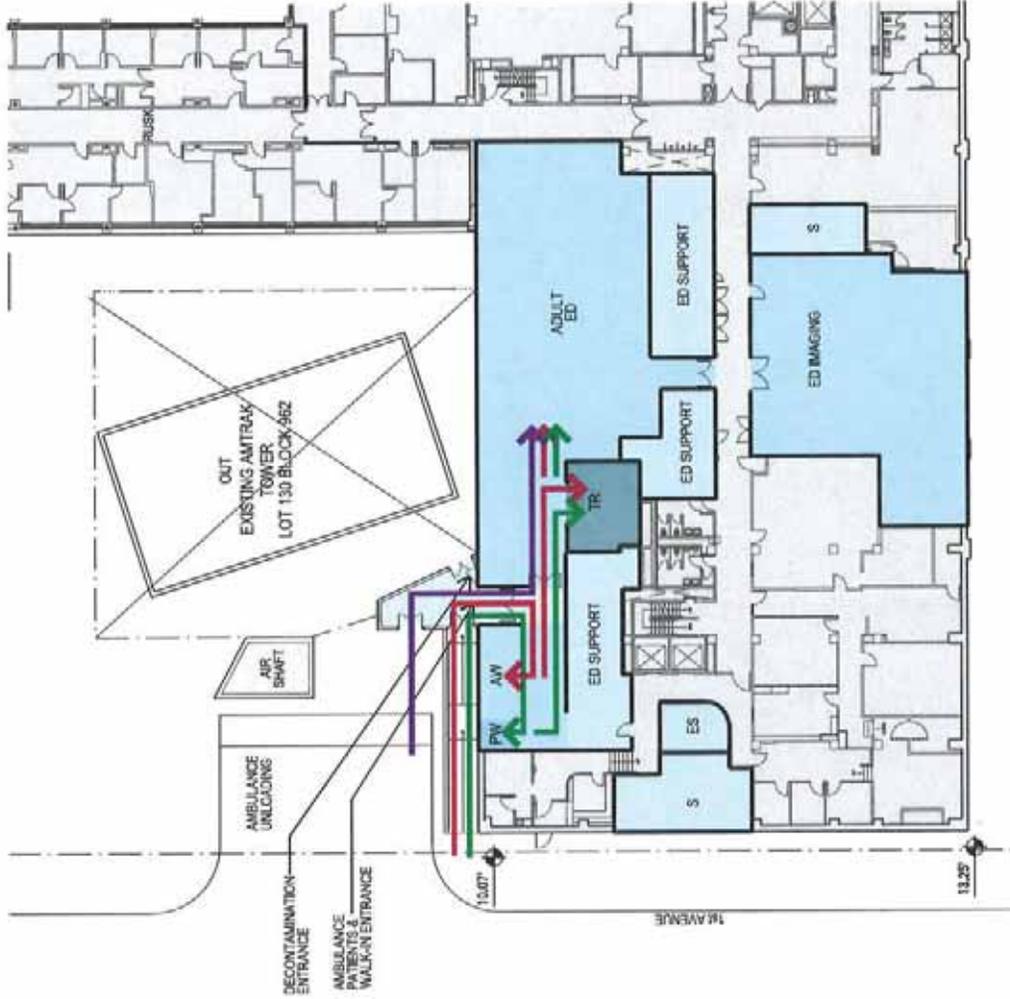
EXISTING ED / IMAGING- 9,250 SF

**PATIENT POSITIONS**

- 18 EXAM/TREATMENT ROOMS
- 1 TRIAGE / EXAM ROOMS
- 0 DISPOSITION SEATS

**PROGRAM CONSTRAINTS**

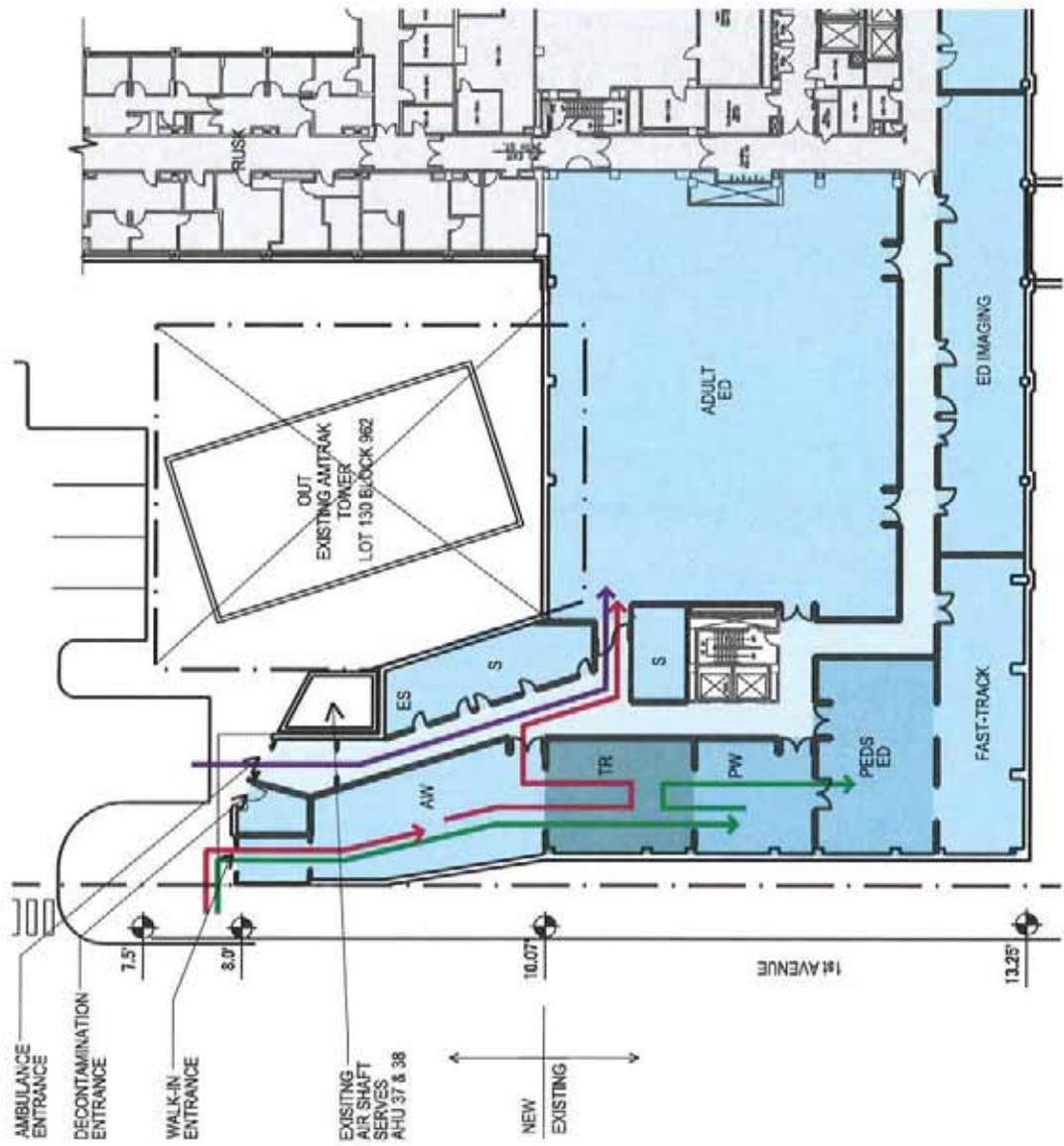
1. COMBINED ENTRANCE
2. MINIMAL SPACE PER PATIENT
3. POOR PATIENT FLOW:
  - MIXED TRAFFIC IN CORRIDOR
  - NO TRANSITION SPACE
4. NO SEPARATION OF ADULTS AND PEDIATRICS
5. MINIMAL ACOUSTIC/ VISUAL PRIVACY
6. INADEQUATE MECHANICAL SYSTEMS
7. INADEQUATE ELECTRICAL SYSTEMS



**EXISTING EMERGENCY DEPARTMENT FLOOR PLANS**

FOR INFORMATION ONLY  
SEPTEMBER 8, 2008

ES-01



**KEY**

- AW ADULT WAITING
- ES EMS STORAGE
- PW PEDIATRIC WAITING
- S SUPPORT
- TR TRIAGE
- ADULT ENTRY PATH
- PEDIATRIC ENTRY PATH
- AMBULANCE TRANSPORTATION ENTRY PATH

**DGSF**

RENOVATION ED / IMAGING- 22,850 SF  
 ADDITION NEW- 3,245 SF

**PATIENT POSITIONS**

- 28 EXAM/TREATMENT ROOMS
- 3 TRIAGE / EXAM ROOMS
- 4 DISPOSITION SEATS

**COMPROMISES**

1. ENTRANCE COMPROMISED
2. POOR PATIENT FLOW:
  - MIXED TRAFFIC IN AMBULANCE CORRIDOR
  - PEDIATRIC CROSS ADULT WAITING
3. PEDIATRIC WAITING IS EXPOSED TO ADULTS
4. REDUCED NUMBER OF PATIENT POSITIONS
5. REDUCED PLAN EFFICIENCY:
  - INCREASES STAFF TRAVEL DISTANCES
  - INCREASES PATIENT WAIT TIME
6. NO MECHANICAL UPGRADE
7. NO ELECTRICAL UPGRADE

NOTE: Interior partitions are for illustrative purposes only and are subject to change.

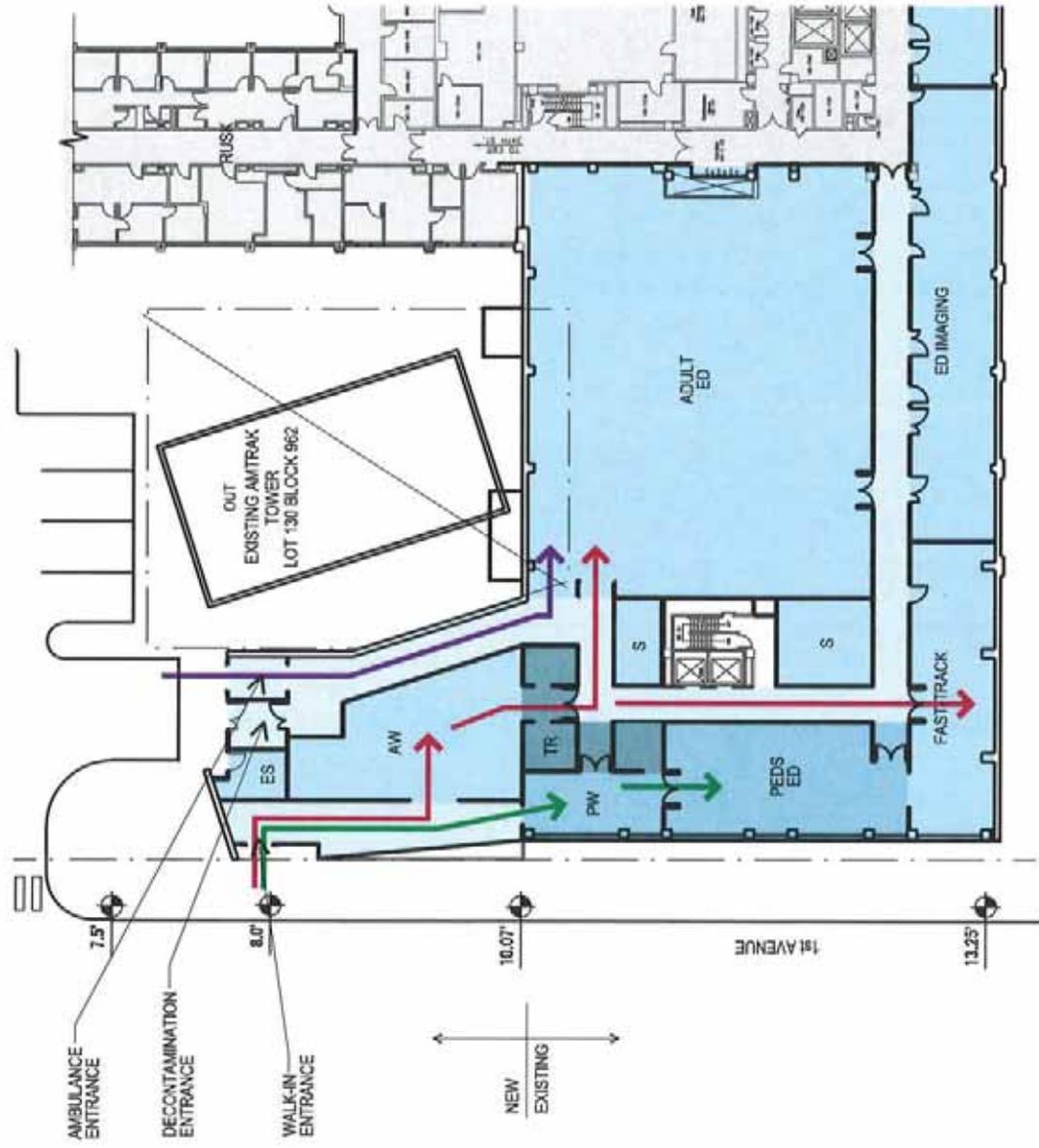
**COMPLYING FLOOR PLANS**

FOR INFORMATION ONLY  
 SEPTEMBER 4, 2009

**Langone Medical Center EMERGENCY DEPARTMENT**

NBBJ / POLSHEK PARTNERSHIP ARCHITECTS  
 2 FULTON STREET, NEW YORK, NY 10006 / 220 WEST 12TH STREET, NEW YORK, NY 10014





**KEY**

- AW ADULT WAITING
- ES EMS STORAGE
- PW PEDIATRIC WAITING
- S SUPPORT
- TR TRIAGE

- ADULT ENTRY PATH
- PEDIATRIC ENTRY PATH
- AMBULANCE TRANSPORT ENTRY PATH

**DGSF**

RENOVATION ED / IMAGING- 22,850 SF  
 ADDITION - 3,780 SF

**PATIENT POSITIONS**

- 29 EXAM/TREATMENT ROOMS
- 3 TRIAGE / EXAM ROOMS
- 6 DISPOSITION SEATS

**PLANNING CONCEPTS**

1. VISIBLE, SEPARATED WALK-IN ACCESS
2. DEDICATED SPACE FOR PEDIATRICS
3. SEPARATED AMBULANCE CORRIDOR
4. BETTER PATIENT FLOW
5. BETTER PLAN EFFICIENCY FOR STAFF
6. EXPANDS SPACE PER PATIENT

**INFRASTRUCTURE**

1. TWO NEW UNITS ON ROOF
2. REPLACEMENT OF BASEMENT UNITS
3. ELECTRICAL UPGRADE IN CELLAR

NOTE: Interior partitions are for illustrative purposes only and are subject to change.

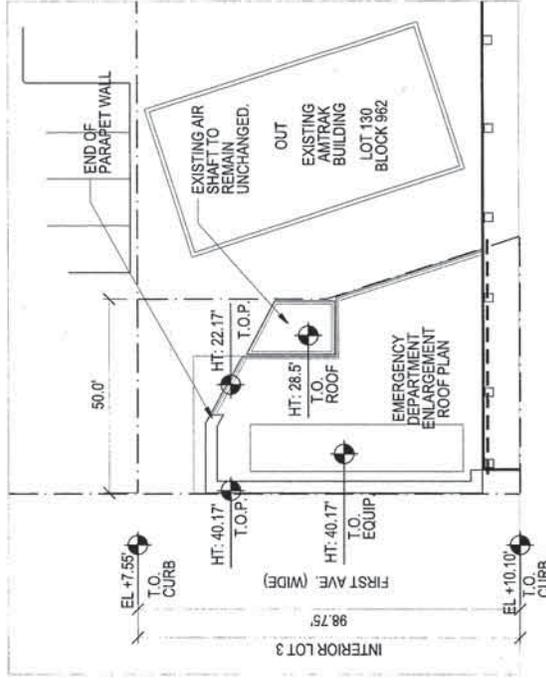
**FLOOR AREA SCHEDULE (COMPLYING)**

Floor	Use	Gross FA	Deductions	Zoning FA
Cellar	Electrical	2900 SF	2900 SF	0 SF
1st Floor	Emergency Department	3245 SF	0 SF	3245 SF
Roof	Mechanical	3245 SF	3245 SF	0 SF
<b>TOTAL</b>		<b>9390 SF</b>	<b>6145 SF</b>	<b>3245 SF</b>

NOTE: AREA REFERS TO ENLARGEMENT ONLY. NO ADDITIONAL FLOOR AREA PROPOSED IN THE EXISTING BUILDING.

**MEAN CURB LEVEL**

INTERIOR LOT #3  
 $(7.55' + 10.10') / 2 = EL +8.83'$  (HT: 0.0')



NOTE: "EL" IS ABOVE MANHATTAN DATUM. "HT" IS ABOVE ACL.

**ZONING CALCULATIONS: BLOCK 962, LOTS 80, 108 & 7501**

Applicable ZR Section: 24-36

**1. Zoning District**

Maps: R8, Map # 8D

**2. Lot Area**

(See Z-0.02)  
 408,511 SF

**3. Permitted Uses**

Use Groups 1-4

**4. Existing & Proposed Uses**

Use Group 3, College/ University  
 Use Group 4, Non-Profit Hospital and Related Facility

**5. Floor Area**

**a. Floor Area Permitted**  
 Maximum F.A.R.: 6.5  
 6.5 FAR x 408,511 = 2,665,322 SF

**b. Floor Area Proposed**

(See FA Schedule (Complying Building) and Z-0.02)  
 Existing Floor Area: 2,060,782 SF  
 Enlargement Floor Area: 3,245 SF  
 Proposed Floor Total Floor Area: 2,064,027 SF; Complies

**6. Lot Coverage\***

**a. Lot Coverage Permitted**  
 (See Z-0.02 for corner vs. interior/  
 through lot calculations)  
 Corner Lot: 75%; Interior & Through Lot: 65%  
 $(382,683 \times 65\%) + (25,828 \times 75\%) = 268,115$  SF

**b. Lot Coverage Proposed**

(See Z-0.02, Z-0.05)  
 Existing Lot Coverage: 195,560 SF  
 Enlargement Lot Coverage: 1,330 SF  
 Proposed Total Lot Coverage: 196,890 SF; Complies

**7. Rear Yards Requirements**

(See Z-0.04)  
 Complies

**8. Height & Setback**

(See Z-0.04)  
 Complying Building: Complies

**9. Parking Regulation**

Complying Building: None required  
 Complying Building: None provided

**10. Off-Street Accessory Loading Berths Regulation**

7 berths required for 2,064,027 SF of hospitals and related facilities.  
 7 berths provided (no new loading berths required)

**11. Curb Cuts**

Existing curb cut to be relocated.

**12. Street Trees Regulation**

Required when a development or enlargement increases the floor area on a zoning lot by 20% or more  
 $3,245 / 2,060,782 = <1\%$   
 None required; None provided

**13. Signage Regulation**

(See Z-0.06)  
 Complies

\* Indenture with City of New York dated 6/22/49, amended 9/19/75 limits Lot Coverage to 65 percent (265,532 SF).

Applicable ZR Section: 24-36

**NYU LANGONE MEDICAL CENTER  
 EMERGENCY DEPT. EXPANSION**

461 1ST AVENUE, NEW YORK, NY 10016

**ARCHITECTS**

NBBJ  
 2 BECTOR STREET, 35TH FL.  
 NEW YORK, NY 10008  
 PHONE 212 924 9000, FAX 212 924 9292  
 POLSHEK PARTNERSHIP  
 320 WEST 13TH STREET  
 NEW YORK, NY 10014  
 PHONE 212 807 7171, FAX 212 807 9817



DATE:	March 17, 2010
REVISED:	May 05, 2010
SCALE:	NBBJ/PPA
DRAWN BY:	
PROJECT NO.:	100410.04 / 0902

SHEET TITLE  
 COMPLYING CONDITIONS  
**ZONING  
 CALCULATIONS**  
**Z-0.01**

**FLOOR AREA & LOT COVERAGE (COMPLYING)**  
SEC. 24-11, SEC. 24-12

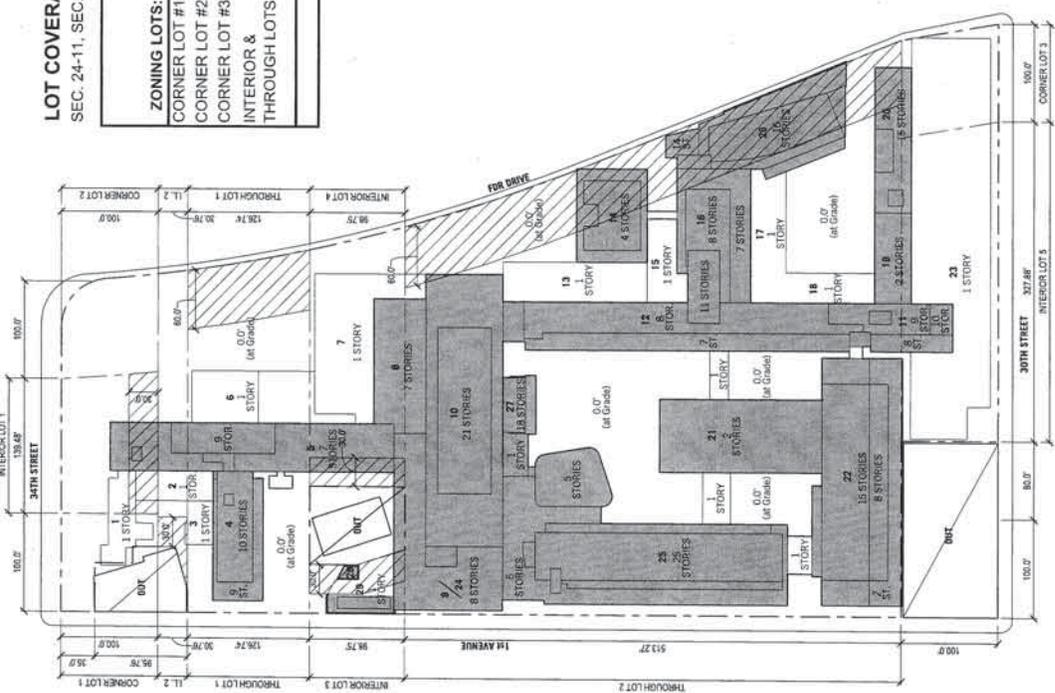
ZONING LOTS:	ALLOWABLE LOT COVERAGE SF	EXISTING LOT COVERAGE SF	ADDITIONAL COVERAGE SF PROPOSED
CORNER LOT #1	6,309 x (75%) =	4,732	-
CORNER LOT #2	9,519 x (75%) =	7,139	-
CORNER LOT #3	10,000 x (75%) =	7,500	729
INTERIOR & THROUGH LOTS	382,883 x (65%) =	248,744	194,831
<b>Complies</b>	<b>268,115</b>	<b>195,560</b>	<b>196,890</b>

**LOT COVERAGE PERMITTED (COMPLYING)**  
SEC. 24-11, SEC. 24-12

EXISTING FACILITIES:	FLOOR AREA SF	LOT COVERAGE SF
1. GREENHOUSE	2,460	-
2. VISITOR'S PAVILLION	1,482	-
3. HORIZON HOUSE	1,118	-
4. PERELMAN BUILDING	86,380	6,838
5. RUSK INSTITUTE	103,250	14,750
6. AUXILIARY PAVILLION	5,287	-
7. SERVICE WING NORTH	9,128	-
8. MILLHAUSER LABS	51,821	7,403
9. TISCH HOSPITAL (ASIP)	22,779	8,843
10. TISCH HOSPITAL	397,440	22,080
11. MEDICAL SCIENCE BUILDING - BERG	125,600	15,700
12. MEDICAL SCIENCE BUILDING	50,680	7,240
13. SERVICE WING EAST	4,104	-
14. COLES STUDENT LABS	40,695	8,139
15. LIBRARY	4,372	-
16. MEDICAL SCIENCE BUILDING - EAST	82,688	10,336
17. LOUNGE	5,596	-
18. CAFETERIA	2,976	-
19. DEANS SUITE	7,600	3,800
20. RUBIN HALL	90,000	6,000
21. ALUMINI HALL	25,500	12,750
22. SCHWARTZ HEALTH CARE CENTER	206,537	21,508
23. SCHWARTZ LECTURE HALL	30,694	-
24. TISCH HOSPITAL (ASIP ADD)	41,180	-
25. SKIRBALL INSTITUTE	448,380	34,148
26. SMILOW RESEARCH CENTER *	183,480	12,500
27. TISCH HOSPITAL (ELEVATOR ADD)	47,565	3,205
28. AIR SHAFT	-	266
<b>TOTAL</b>	<b>2,060,782</b>	<b>195,560</b>

PROPOSED FACILITIES:	FLOOR AREA SF	LOT COVERAGE SF
29. EMERGENCY DEPARTMENT ENLARGEMENT	3,245	1,330
<b>TOTAL</b>	<b>2,064,027</b>	<b>196,890</b>

\* BSA CALENDAR NUMBER 121-01-BZ, DATED NOVEMBER 20, 2001



**NYU LANGONE MEDICAL CENTER  
EMERGENCY DEPT. EXPANSION**

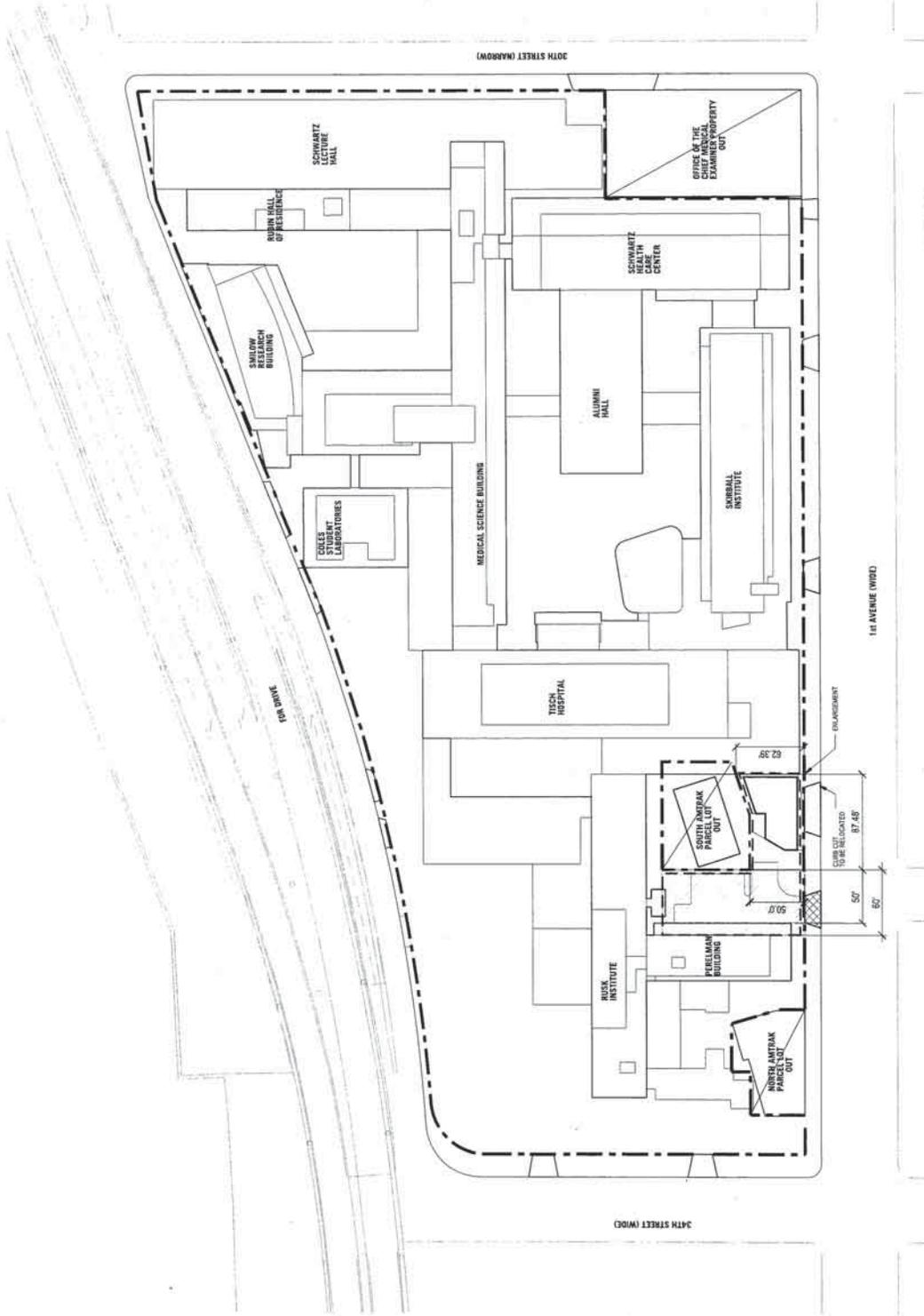
461 1ST AVENUE, NEW YORK, NY 10016

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DATE: March 17, 2010  
REVISED: May 06, 2010  
SCALE: NBBJ/PPA  
DRAWN BY:  
PROJECT NO: 100410.04 / 0902

SHEET TITLE  
COMPLYING CONDITIONS  
**FLOOR AREA, LOT  
COVERAGE & YARDS  
Z-0.02**



DATE:	April 1, 2010
REVISED:	May 05, 2010
SCALE:	VARIES
DRAWN BY:	NBBJ
PROJECT NO.:	100410.04 / 0902

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# NYU LANGONE MEDICAL CENTER EMERGENCY DEPT. EXPANSION

461 1ST AVENUE, NEW YORK, NY 10016

SHEET TITLE  
 COMPLYING CONDITIONS  
**SITE PLAN**  
**Z-0.03**

**ZONING CALCULATIONS: BLOCK 962, LOTS 80, 108 & 7501**

Applicable  
ZR Section

**1. Zoning District**

Maps R8, Map # 8D

**2. Lot Area**

(See Z-1.02)  
408,511 SF

**3. Permitted Uses**

Use Groups 1-4

**4. Existing & Proposed Uses**

Use Group 3, College/ University  
Use Group 4, Non-Profit Hospital and Related Facility

**5. Floor Area**

**a. Floor Area Permitted**

Maximum F.A.R.: 6.5  
6.5 FAR x 408,511 = 2,665,322 SF

**b. Floor Area Proposed**

(See FA Schedule (Proposed Building) and Z-1.02)  
Existing Floor Area: 2,060,782 SF  
Enlargement Floor Area: 3,780 SF  
Proposed Floor Total Floor Area: 2,064,562 SF; Complies

**6. Lot Coverage**

**a. Lot Coverage Permitted**

(See Z-1.02 for corner vs. interior/  
through lot calculations)  
Corner Lot: 75%; Interior & Through Lot: 65%  
(382,683 x 65%) + (25,828 x 75%) = 268,115 SF

**b. Lot Coverage Proposed**

(See Z-1.02, Z-1.05)  
Existing Lot Coverage: 195,560 SF  
Enlargement Lot Coverage: 4000 SF  
Proposed Total Lot Coverage: 199,560 SF; Complies

Applicable  
ZR Section

**7. Rear Yards Requirements**

(See Z-1.04)  
**DOES NOT COMPLY:** Requires Board of Standards and Appeals variance pursuant to Zoning Resolutions 72-21

**8. Height & Setback**

(See Z-1.04)  
Proposed Enlargement: Complies

**9. Parking Regulation**

Proposed Enlargement: None required  
Proposed Enlargement: None provided

**10. Off-Street Accessory Loading Berths Regulation**

7 berths required for 2,064,027 SF of hospitals and related facilities.  
7 berths provided (no new loading berths required)

**11. Curb Cuts**

Existing curb cut to be relocated.

**12. Street Trees Regulation**

Required when a development or enlargement increases the floor area on a zoning lot by 20% or more  
3,245 / 2,060,782 = <1%  
None required; None provided

**14. Signage Regulation**

(See Z-1.07)  
**DOES NOT COMPLY:** Requires Board of Standards and Appeals variance pursuant to Zoning Resolutions 72-21

\* Indenture with City of New York dated 6/22/49, amended 9/19/75  
limits Lot Coverage to 65 percent (265, 532 SF).

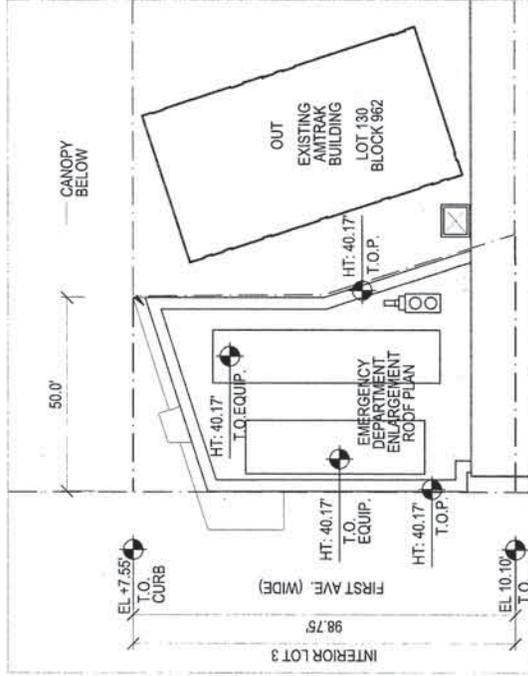
**FLOOR AREA SCHEDULE (PROPOSED ENLARGEMENT)**

Floor	Use	Gross FA	Deductions	Zoning FA
Cellar	Electrical	4600 SF	4600 SF	0 SF
1st Floor	Emergency Department	3780 SF	0 SF	3780 SF
Roof	Mechanical	4000 SF	4000 SF	0 SF
<b>TOTAL</b>		<b>12380 SF</b>	<b>8600 SF</b>	<b>3780 SF</b>

NOTE: AREA REFERS TO ENLARGEMENT ONLY. NO ADDITIONAL FLOOR AREA PROPOSED IN THE EXISTING BUILDING.

**MEAN CURB LEVEL**

**INTERIOR LOT #3**  
(7.55' + 10.10') / 2 = EL +8.83' (HT: 0.0')



NOTE: "EL" IS ABOVE MANHATTAN DATUM. "HT" IS ABOVE ACL.



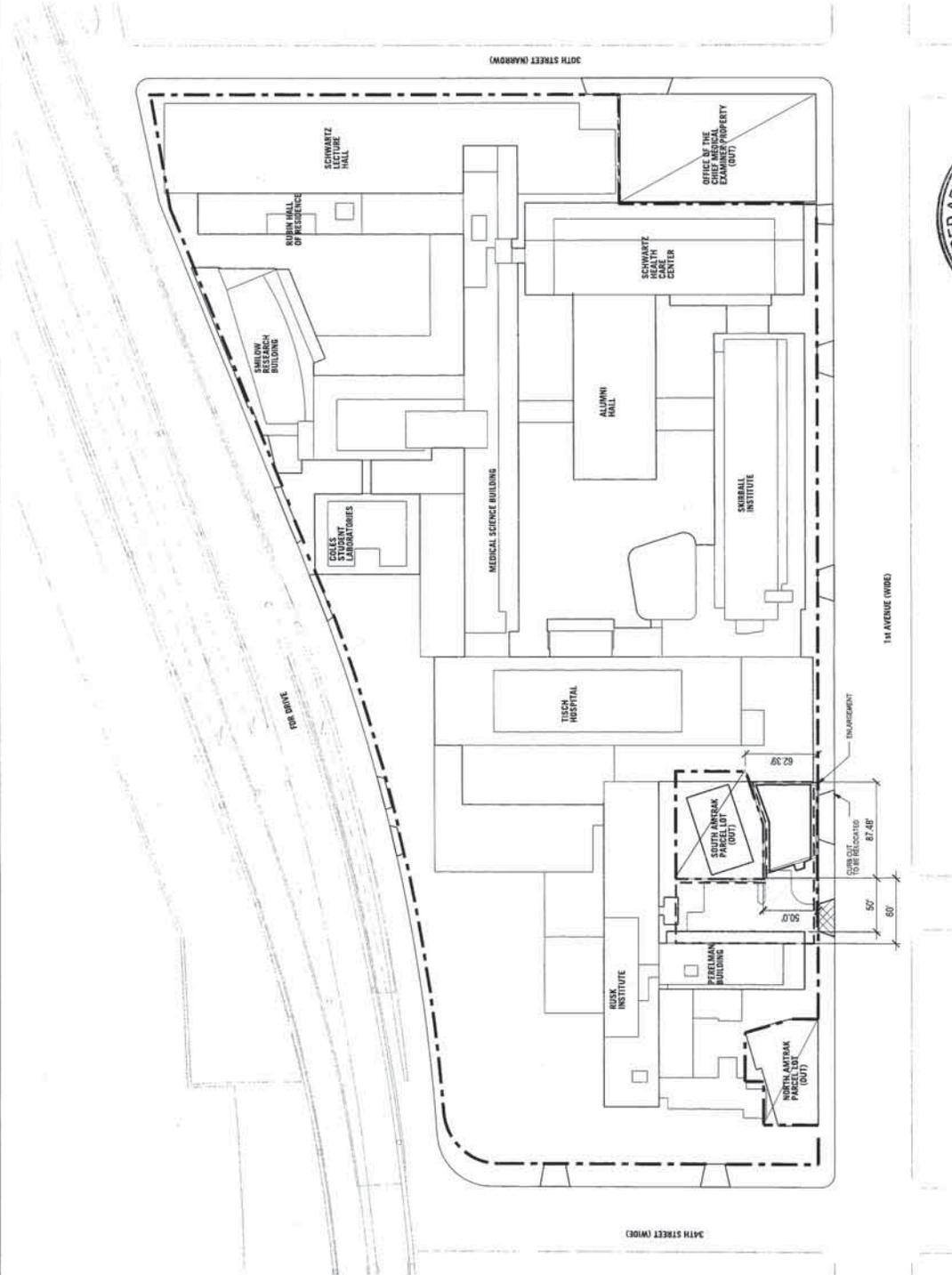
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**NYU LANGONE MEDICAL CENTER  
EMERGENCY DEPT. EXPANSION**

461 1ST AVENUE, NEW YORK, NY 10016

DATE:	March 17, 2010
REVISED:	May 06, 2010
SCALE:	NBBJ/PPA
DRAWN BY:	
PROJECT NO.:	100410.04 / 0902

SHEET TITLE  
**PROPOSED CONDITIONS  
ZONING  
CALCULATIONS  
Z-1.01**



KEY

- DEVELOPMENT SITE (PORTION OF LOT WHERE ENLARGEMENT TAKES PLACE)
- OUTLINE OF PROPOSED ENLARGEMENT
- ZONING LOT
- CURB CUT EXISTING
- CURB CUT RELOCATED FROM HERE
- LOCATION OF NEW CURB CUT
- AMTRAK ACCESS EASEMENT FORMER 33RD STREET



SHEET TITLE	PROPOSED CONDITIONS
DATE	April 1, 2010
REVISED	May 05, 2010
SCALE	VARIABLES
DRAWN BY	NBBJ
PROJECT NO.	100410.04 / 0902

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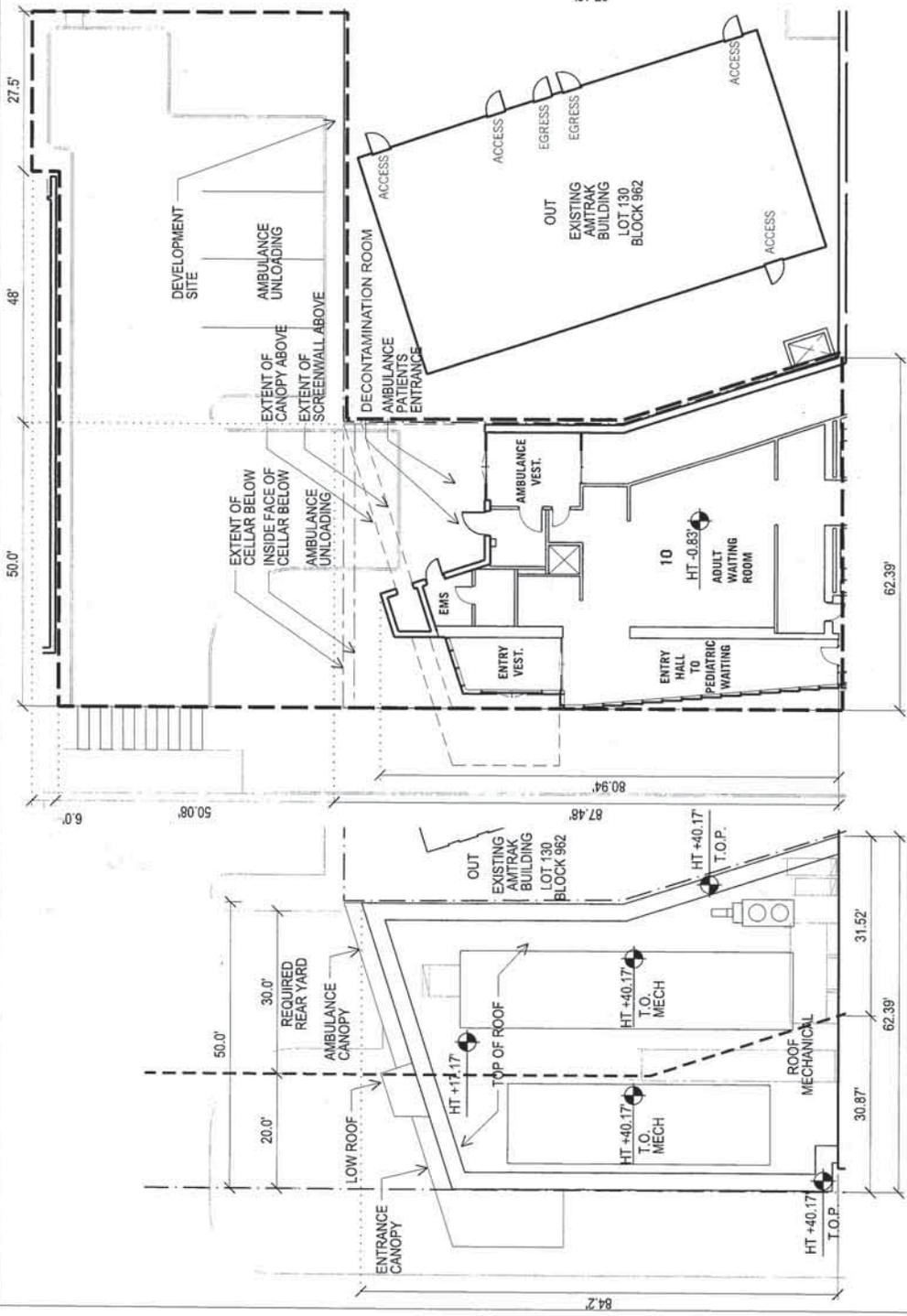
# NYU LANGONE MEDICAL CENTER EMERGENCY DEPT. EXPANSION

461 1ST AVENUE, NEW YORK, NY 10016





**LEGEND**  
 - - - - - REQUIRED REAR YARD  
 - - - - - DEVELOPMENT SITE  
 - - - - - PROPERTY LINE



**1 ROOF PLAN**  
 NOTE: LOCATION AND FOOTPRINT OF MECHANICAL EQUIPMENT IS SUBJECT TO CHANGE

**2 1ST FLOOR PLAN**  
 NOTE: INTERIOR LAYOUT AND PARTITIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE.

**3 CELLAR FLOOR PLAN**  
 NOTE: INTERIOR LAYOUT AND PARTITIONS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE.



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**NYU LANGONE MEDICAL CENTER  
 EMERGENCY DEPT. EXPANSION**  
 461 1ST AVENUE, NEW YORK, NY 10016

SHEET TITLE  
 PROPOSED CONDITIONS  
**FLOOR PLANS-  
 ENLARGEMENT**  
**Z-1.11**

DATE: April 1, 2010  
 REVISED: May 05, 2010  
 SCALE: VARIES  
 DRAWN BY: NBBJ  
 PROJECT NO: 100410.04 / 0902