

## STUDY TOUR U.S. EAST COAST 2012

## P R O G R A M

## FRIDAY MARCH 16:

**10:45:** DEP. WITH BA0813: KASTRUP AIRPORT *CPH*  
**13:15:** DEP. WITH BA0815: KASTRUP AIRPORT *CPH*  
 12:00: ARR. BA0813: LONDON HEATHROW AIRPORT *LHR*  
 14:20: ARR. BA0815: LONDON HEATHROW AIRPORT *LHR*  
**16:05:** DEP. WITH BA0215: LONDON HEATHROW *LHR*  
 19:35: ARR. BA0215: BOSTON LOGAN AIRPORT *BOS*  
 ACCOMODATION: HOLIDAY INN EXPRESS BOSTON  
*69 Boston St. Boston MA 02125 [www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail](http://www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail) (+1 (617) 288-3030)*

## SATURDAY MARCH 17:

**07:00:** BREAKFAST START: HOLIDAY INN EXPRESS BOSTON  
 08:00: DEP. HOLIDAY INN EXPRESS BOSTON  
 WITH RED LINE FROM *Andrew* TO *Park St.*  
**08:30:** MEETINGPOINT FOR THE FIRST GROUP: THE CORNER OF PARK & TREMONT STREETS: GUIDED TOUR: CITY WALK (2 hours for room: F-01, F-03, F-05, M-07, M-09, M-11, M-13)  
**10:30:** MEETINGPOINT FOR THE SECOND GROUP: QUINCY MARKET GUIDED TOUR: CITY WALK (2 hours for room: F-02, F-04, M-06, M-08, M-10, M-12)  
**14:00:** MEETINGPOINT: HARVARD YARD (42°22'26.21"N, 71°6'58.84"W) & VISIT TO: CARPENTER CENTER FOR THE VISUAL ARTS (42°22'24.86"N, 71°6'51.34"W) *24 Quincy Street, Cambridge MA 02138*, HARVARD CAMPUS ON YOUR OWN: HARVARD GRADUATE SCHOOL OF DESIGN (42°22'33.09"N, 71°6'50.01"W) *48 Quincy Street, Gund Hall, Cambridge MA 02138*, HARVARD GRADUATE CENTER (42°22'47.17"N, 71°7'5.11"W) *Harvard University*  
 ACCOMODATION: HOLIDAY INN EXPRESS BOSTON

## SUNDAY MARCH 18:

**07:00:** BREAKFAST START: HOLIDAY INN EXPRESS BOSTON  
**09:00:** MEETING AT: BOSTON ROOM *Holiday Inn Express Boston*  
 09:20: DEP. HOLIDAY INN EXPRESS BOSTON  
 WITH RED LINE FROM *Andrew* TO *South Station*  
**10:00:** ARR. ICA (THE INSTITUTE OF CONTEMPORARY ART) (42°21'10.16"N, 71°2'35.01"W) *100 Northern Ave. Boston MA 02210 [www.icaboston.org](http://www.icaboston.org)*  
 GUIDED TOUR: ICA (4 groups. Group 1: F-01, F-02 & F-03, Group 2: F-04, F-05 & M-06, Group 3: M-07, M-08, M-09, Group 4: M-10, M-11, M-12 & M-13)  
 BOSTON ON YOUR OWN  
 ACCOMODATION: HOLIDAY INN EXPRESS BOSTON

## MONDAY MARCH 19:

**06:00:** BREAKFAST START: HOLIDAY INN EXPRESS BOSTON  
**08:30:** BUS PICK UP: HOLIDAY INN EXPRESS BOSTON  
 09:30: BUS DROP OFF: LIBRARY & DINING HALL, P. EXETER ACADEMY (42°58'43.54"N, 70°56'58.05"W) *20 Main Street, Exeter NH*  
**11:30:** BUS PICK UP: LIBRARY & DINING HALL, P. EXETER ACADEMY  
 12:30: BUS DROP OFF: MIT CAMPUS  
**14:00:** GUIDED TOUR BY GREG TUCKER: MIT MEDIA LAB (42°21'37.63"N, 71°5'14.84"W) *Building E14, Cambridge MA*  
 15:00: MIT ON YOUR OWN: RAY & MARIA STATA CENTER *Building 32, 32 Vassar Street, Cambridge MA*, KRESGE

AUDITORIUM & CHAPEL *Building W15 & W16, 48 Massachusetts Ave. (Rear), Cambridge MA*, BAKER HOUSE *Building W7, 362 Memorial Drive, Cambridge MA*, SIMMONS HALL *Building W79, 229 Vassar Street, Cambridge MA*  
 ACCOMODATION: HOLIDAY INN EXPRESS BOSTON

## TUESDAY MARCH 20:

**06:00:** BREAKFAST START: HOLIDAY INN EXPRESS BOSTON  
**07:30:** BUSPACKING: HOLIDAY INN EXPRESS BOSTON  
**08:00:** BUS PICK UP: HOLIDAY INN EXPRESS BOSTON  
 11:00: BUS DROP OFF: YALE UNIVERSITY *New Haven, CT*  
 YALE CENTER FOR BRITISH ART (41°18'28.40"N, 72°55'51.27"W) *1080 Chapel St., High St.*  
 YALE UNIVERSITY ART GALLERY (41°18'30.68"N, 72°55'52.09"W) *1111 Chapel St. (at York St.)*  
 ART & ARCHITECTURE BUILDING (41°18'42.04"N, 72°55'38.15"W) *180 York St.*  
 BEINECKE RARE BOOK & MANUSCRIPT LIBRARY (41°18'42.04"N, 72°55'38.15"W) *121 Wall St.*  
 DAVID S. INGALLS HOCKEY RINK (41°18'58.90"N, 72°55'30.29"W) *73 Sachse St.*  
 SAMUEL MORSE & EZRA STILES RESIDENTIAL COLLEGES (41°18'46.39"N, 72°55'49.88"W) *Broadway & Tower Parkway*  
**15:30:** BUS PICK UP: YALE UNIVERSITY *New Haven, CT*  
**18:00:** BUS DROP OFF: THE GEM HO TEL MIDTOWN WEST (40°45'20.71"N, 73°59'51.30"W) *449 W 36th St. NYC 10018 [www.thegemhotel.com/midtown](http://www.thegemhotel.com/midtown) (+1 (212) 967-7206)*  
 ACCOMODATION: THE GEM HOTEL MIDTOWN WEST

## WEDNESDAY MARCH 21:

**06:30:** BREAKFAST START: THE COMFORT INN MIDTOWN WEST (40°45'19.34"N, 73°59'50.36"W) *442 West 36th St. between Ninth & Tenth Avenue, NY 10018 [www.comfortnyc.com](http://www.comfortnyc.com) (+1 (212) 714-6699)*  
 08:15: DEP. THE COMFORT INN MIDTOWN WEST  
**08:45:** MEETINGPOINT: EMPIRE STATE BUILDING (40°44'54.15"N, 73°59'8.58"W) *350 Fifth Ave. between 33rd & 34th Streets, NY [www.esbnyc.com](http://www.esbnyc.com)*  
 10:15: DEP: EMPIRE STATE BUILDING  
**11:15:** MEETINGPOINT: CIRCLE LINE (40°45'45.68"N, 74°0'5.40"W) *Pier 83 at 42nd St. [www.circleline42.com](http://www.circleline42.com)*  
**11:30:** CRUISE AROUND MANHATTAN: CIRCLE LINE (3 Hours)  
 14:30: NYC MIDTOWN ON YOUR OWN:  
 MOMA (40°45'40.68"N, 73°58'42.91"W) *11 West 53. St. New York NY 10019 [www.moma.org](http://www.moma.org) (Museum closes at 17:30).*  
 SEAGRAM BUILDING (40°45'30.94"N, 73°58'19.80"W) *375 Park Avenue, between 52nd & 53rd Streets, NY*  
 LEVER HOUSE (40°45'33.70"N, 73°58'21.99"W) *390 Park Avenue, 53rd to 54th Streets, NY*  
**20:00:** GROUP DINNER AT: CARMINE'S RESTAURANT (40°45'26.78"N, 73°59'11.73"W) *200 West 44th St*  
 ACCOMODATION: THE GEM HOTEL MIDTOWN WEST

## THURSDAY MARCH 22:

**06:30:** BREAKFAST START: THE COMFORT INN MIDTOWN WEST  
 09:30: DEP. THE COMFORT INN MIDTOWN WEST  
 A OR C FROM *Penn Station* TO *Fulton St.*

**10:30:** MEETING POINT: GROUND ZERO (40°44'22.15"N, 74°0'29.75"W) *Corner of Albany St. & Greenwich St. [www.911memorial.org](http://www.911memorial.org)*  
 GUIDED TOUR: GROUND ZERO  
 11:30: NYC DOWNTOWN ON YOUR OWN:  
 HIGH LINE (40°44'22.15"N, 74°0'29.75"W)  
**18:00:** MEETING POINT: COOPER UNION (40°43'42.75"N, 73°59'25.39"W) *41 Cooper Square*  
 NEW MUSEUM (40°43'20.48"N, 73°59'34.81"W) *235 Bowery. [www.newmuseum.org](http://www.newmuseum.org) Museum closes at 21:00. Free entrance: 19:00-21:00*  
 ACCOMODATION: THE GEM HOTEL MIDTOWN WEST

## FRIDAY MARCH 23:

**06:30:** BREAKFAST START: THE COMFORT INN MIDTOWN WEST  
 09:00: DEP. THE COMFORT INN MIDTOWN WEST  
 A OR C FROM *Penn Station* TO *Fulton St.*  
**10:00:** VISIT AT: THE ARCHITECTS OFFICE: SKIDMORE, OWINGS AND MERRILL (SOM) (40°42'27.73"N, 74°0'41.42"W) *14 Wall St. [www.som.com](http://www.som.com)*  
 2 FROM *Wall St. TO 66 St., Lincoln Center*  
**12:30:** MEETING POINT: LINCOLN CENTER (40°46'23.04"N, 73°58'57.09"W) *Corner of Broadway & 65th St. [lc.lincolncenter.org](http://lc.lincolncenter.org)*  
 GUIDED TOUR: LINCOLN CENTER  
 1 FROM *66 St., Lincoln Center* TO *116 St., Colombia*  
**14:30:** MEETING POINT: COLOMBIA UNIVERSITY (40°48'27.14"N, 73°57'44.36"W) *College Walk*  
 15:30: NYC UPTOWN ON YOUR OWN:  
 GUGGENHEIM MUSEUM (40°46'59.10"N, 73°57'32.84"W) *1071 Fifth Avenue, between 88th & 89th Streets. [www.guggenheim.org](http://www.guggenheim.org) Museum closes at 17:45.*  
 WHITNEY MUSEUM OF AMERICAN ART (40°46'24.45"N, 73°57'49.97"W) *945 Madison Avenue at 75th St. [www.whitney.org](http://www.whitney.org) Museum closes at 21:00. Pay what you wish: 18:00-21:00*  
 ACCOMODATION: THE GEM HOTEL MIDTOWN WEST

## SATURDAY MARCH 24:

**07:30:** BREAKFAST: THE COMFORT INN MIDTOWN WEST  
**10:00:** ACCOMODATION: THE GEM HOTEL MIDTOWN WEST

## SUNDAY MARCH 25:

**07:30:** BREAKFAST START: THE COMFORT INN MIDTOWN WEST  
**08:00:** BUSPACKING: THE GEM HOTEL MIDTOWN WEST  
**08:30:** BUS PICK UP: THE GEM HOTEL MIDTOWN WEST  
 NORMAN FISCHER HOUSE *197 East Mill Road, Hatboro*  
 ESCHERICK HOUSE *204 Sunrise Lane, Chestnut Hill*  
 VANNA VENTURI'S HOUSE *Millman Street 8330, Chestnut Hill*  
 12:30: BUS DROP OFF: ELEANOR DONNELLEY ERDMAN HALL (40°1'30.93"N, 75°18'43.13"W) *Morris Avenue, Bryn Mawr, Greater Philadelphia PA*  
**13:30:** BUS PICK UP: ELEANOR DONNELLEY ERDMAN HALL  
 14:00: BUS DROP OFF: A. N. RICHARDS MEDICAL RESEARCH BUILDING (39°56'58.97"N, 75°11'54.03"W) *3700 Hamilton Walk, University of Pennsylvania, Philadelphia PA*  
**15:30:** BUS PICK UP: A. N. RICHARDS MEDICAL RESEARCH BUILDING  
 16:00: BUS DROP OFF & CHECK INN: COMFORT INN HISTORIC

DISTRICT (39°57'9.51"N, 75°8'25.61"W) *100 Columbus Blvd. Philadelphia PA 19106 [www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405](http://www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405) (+1 (215) 627-7900)*  
**17:00:** MEETING POINT: RACE STREET PIER (39°57'11.41"N, 75°8'22.32"W) *Pier 11, Philadelphia PA*  
 ACCOMODATION: COMFORT INN HISTORIC DISTRICT

## MONDAY MARCH 26:

**07:00:** BREAKFAST START: COMFORT INN HISTORIC DISTRICT  
**07:00:** BUSPACKING: COMFORT INN HISTORIC DISTRICT  
**07:30:** BUS PICK UP: COMFORT INN HISTORIC DISTRICT  
 11:00: BUS DROP OFF: COMFORT INN & SUITES NEAR UNION STATION (38°55'2.63"N, 76°58'48.15"W) *1600 New York Avenue, NE Washington DC 20002 [www.comfortinn.com/hotel-washington-district-of-columbia-DC012](http://www.comfortinn.com/hotel-washington-district-of-columbia-DC012) (+1 (202) 832-3200)*  
**11:30:** BUS PICK UP: COMFORT INN & SUITES NEAR UNION ST  
 12:00: BUS DROP OFF: NATIONAL MALL (38°53'21.93"N, 77°2'6.98"W)  
 THE NATIONAL MALL ON YOUR OWN:  
**18:00:** SHUTTLE BUS PICK UP: UNION STATION (38°53'48.65"N, 77°0'23.10"W)  
 ACCOMODATION: COMFORT INN & SUITES NEAR UNION ST

## TUESDAY MARCH 27:

**06:30:** BREAKFAST START: COMFORT INN & SUITES NEAR UNION ST  
**08:30:** MEETING: COMFORT INN & SUITES NEAR UNION ST  
**09:00:** BUSPACKING: COMFORT INN & SUITES NEAR UNION ST  
**09:30:** BUS PICK UP: COMFORT INN & SUITES NEAR UNION ST

## BUS 1:

10:00: BUS DROP OFF: NATIONAL MALL  
**13:00:** BUS PICK UP: NATIONAL MALL  
 BUS 2:  
 10:00: BUS DROP OFF: NATIONAL BUILDING MUSEUM (38°53'52.00"N, 77°1'3.55"W) *401 F Street NW [www.nbm.org](http://www.nbm.org)*  
 ARLINGTON NATIONAL CEMETERY (38°52'57.43"N, 77°4'6.15"W) *Arlington VA [www.arlingtoncemetery.org](http://www.arlingtoncemetery.org)*  
**13:00:** BUS PICK UP: ARLINGTON NATIONAL CEMETERY

13:15: BUS DROP OFF: EMBASSY OF DENMARK (38°55'2.53"N, 77°3'48.32"W) *3200 Whitehaven St. NW*

**14:30:** BUS PICK UP: EMBASSY OF DENMARK  
 14:45: BUS DROP OFF: EMBASSY OF FINLAND (38°55'27.64"N, 77°3'54.90"W) *3301 Massachusetts Avenue NW*  
**16:00:** BUS PICK UP: EMBASSY OF FINLAND  
 16:30: BUS DROP OFF: WASHINGTON DULLES AIRPORT (38°57'11.64"N, 77°26'51.99"W) *IAD Chantilly VA*  
**21:05:** DEP. WITH BA264: WASHINGTON DULLES AIRPORT *IAD*  
**22:20:** DEP. WITH BA292: WASHINGTON DULLES AIRPORT *IAD*

## WEDNESDAY MARCH 28:

09:25: ARR. WITH BA264: LONDON HEATHROW AIRPORT *LHR*  
 10:25: ARR. WITH BA292: LONDON HEATHROW AIRPORT *LHR*  
**12:50:** DEP. WITH BA816: LONDON HEATHROW AIRPORT *LHR*  
**14:20:** DEP. WITH BA818: LONDON HEATHROW AIRPORT *LHR*  
 15:45: ARR. WITH BA816: KASTRUP AIRPORT *CPH*  
 17:10: ARR. WITH BA818: KASTRUP AIRPORT *CPH*

R O U T E

FIRST YEAR:

- 01: ANDREAS
- 02: BEINTA
- 03: CASPER
- 04: CHRISTINA
- 05: DANIEL
- 06: EVA M.
- 07: HELGA
- 08: IDA
- 09: INA
- 10: JAKOB Ø.
- 11: JESPER
- 12: KATRINE
- 13: NANNA L.
- 14: REGINE
- 15: RUBEN
- 16: SALLY
- 17: SIMON

SECOND YEAR:

- 18: ALEXANDER
- 19: ANDERS
- 20: ANNA
- 21: BJARTUR
- 22: CLARA
- 23: EMIL
- 24: IDA P.
- 25: JAKOB S.
- 26: JOHN
- 27: JULIUS
- 28: LOU
- 29: MICHALA
- 30: NANNA K.
- 31: NYNNE
- 32: PETER
- 33: RASMUS
- 34: SIMON
- 35: SOPHIE
- 36: TROELS
- 37: VICTOR
- 38: ØYVIND

THIRD YEAR:

- 39: JEPPE
- 40: MATHIAS
- 41: NIS
- 42: THEIS
- 43: TIM
- 44: TORBEN

CANDIDATE PROGRAM:

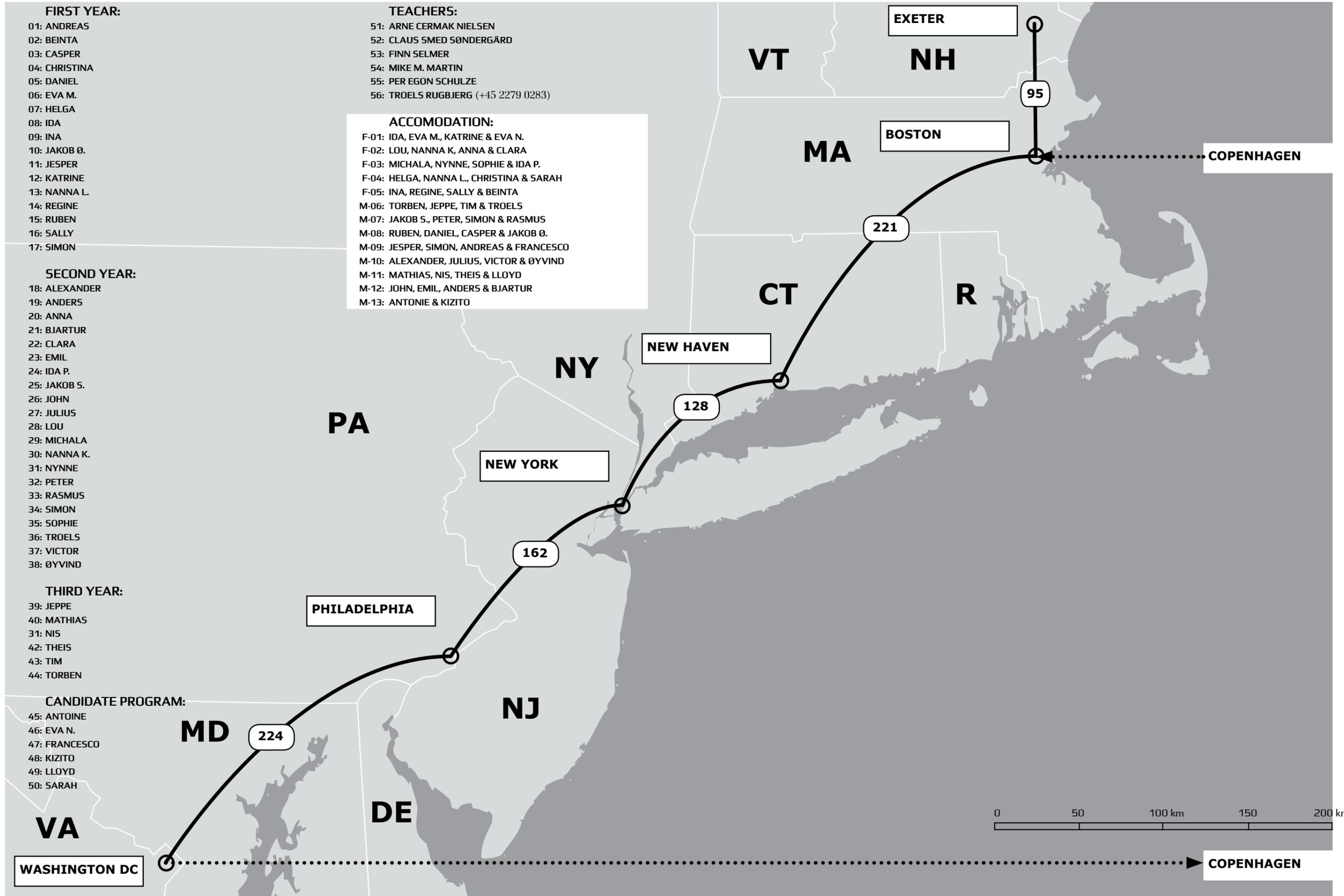
- 45: ANTOINE
- 46: EVA N.
- 47: FRANCESCO
- 48: KIZITO
- 49: LLOYD
- 50: SARAH

TEACHERS:

- 51: ARNE CERMAK NIELSEN
- 52: CLAU S MED SØNDERGÅRD
- 53: FINN SELMER
- 54: MIKE M. MARTIN
- 55: PER EGON SCHULZE
- 56: TROELS RUGBJERG (+45 2279 0283)

ACCOMODATION:

- F-01: IDA, EVA M., KATRINE & EVA N.
- F-02: LOU, NANNA K, ANNA & CLARA
- F-03: MICHALA, NYNNE, SOPHIE & IDA P.
- F-04: HELGA, NANNA L., CHRISTINA & SARAH
- F-05: INA, REGINE, SALLY & BEINTA
- M-06: TORBEN, JEPPE, TIM & TROELS
- M-07: JAKOB S., PETER, SIMON & RASMUS
- M-08: RUBEN, DANIEL, CASPER & JAKOB Ø.
- M-09: JESPER, SIMON, ANDREAS & FRANCESCO
- M-10: ALEXANDER, JULIUS, VICTOR & ØYVIND
- M-11: MATHIAS, NIS, THEIS & LLOYD
- M-12: JOHN, EMIL, ANDERS & BJARTUR
- M-13: ANTONIE & KIZITO



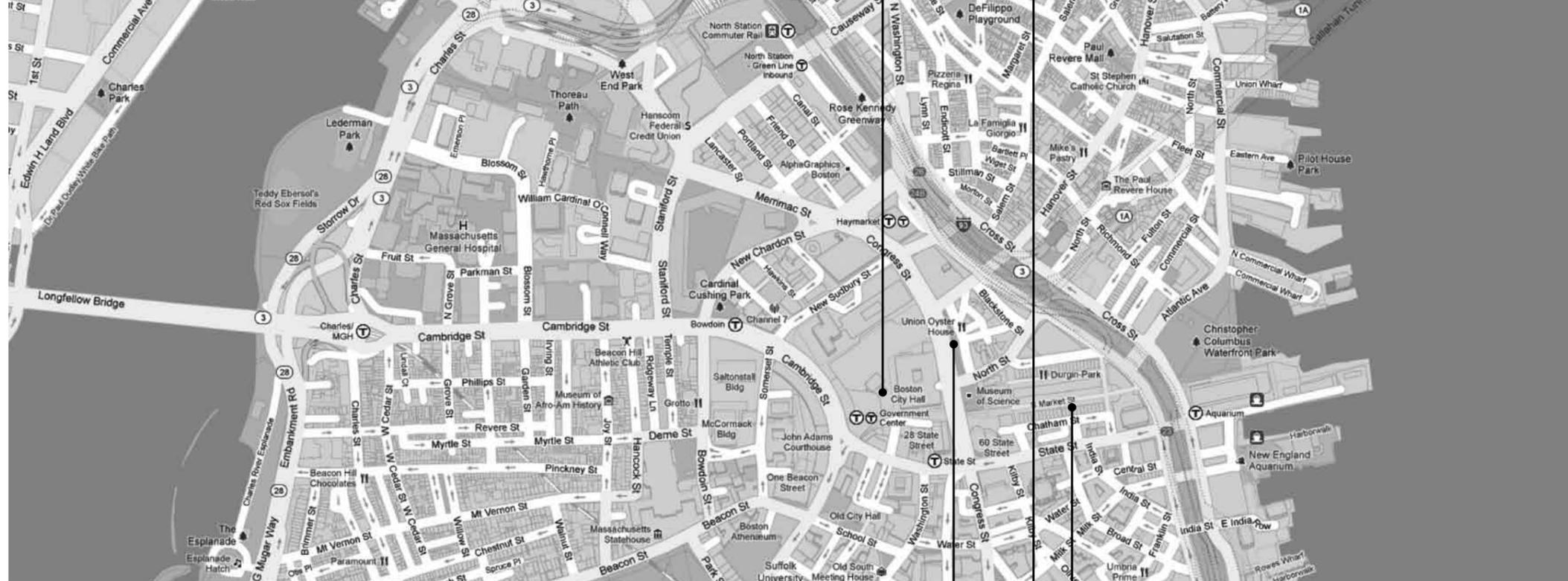
# STUDY TOUR U.S. EAST COAST 2012

## SATURDAY MARCH 17 (1)

- 07:00:** BREAKFAST START: HOLIDAY INN EXPRESS BOSTON  
69 Boston St. Boston MA 02125 [www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail](http://www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail) (+1 (617) 288-3030)
- 08:00:** DEP. HOLIDAY INN EXPRESS BOSTON  
WITH RED LINE FROM Andrew To Park St.
- 08:30:** MEETINGPOINT FOR THE FIRST GROUP: THE CORNER OF PARK & TREMONT STREETS: GUIDED TOUR: CITY WALK  
(2 hours for room: F-01, F-03, F-05, M-07, M-09, M-11, M-13)
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- 14:00:** MEETINGPOINT: HARVARD YARD (42°22'26.21"N, 71°6'58.84"W) & VISIT TO: CARPENTER CENTER FOR THE VISUAL ARTS (42°22'24.86"N, 71°6'51.34"W) 24 Quincy Street, Cambridge MA 02138,  
HARVARD CAMPUS ON YOUR OWN: HARVARD GRADUATE SCHOOL OF DESIGN (42°22'33.09"N, 71°6'50.01"W) 48 Quincy Street, Gund Hall, Cambridge MA 02138,  
HARVARD GRADUATE CENTER (42°22'47.17"N, 71°7'5.11"W) Harvard University  
ACCOMODATION: HOLIDAY INN EXPRESS BOSTON



**BOSTON CITY HALL ONE CITY HALL SQUARE, BOSTON MA (1969) KALLMANN MCKINNELL & KNOWLES**



**08:30: MEETING POINT FOR THE FIRST GUIDED TOUR: PARK & TREMONT STREETS**



**BOSTON PUBLIC LIBRARY (1895) MCKIM, MEADE & WHITE**  
**TRINITY CHURCH (1872) H.H. RICHARDSON**



**JOHN HANCOCK TOWER 200 CLARENDON STREET, BOSTON MA (1976) I.M PEI/COBB**



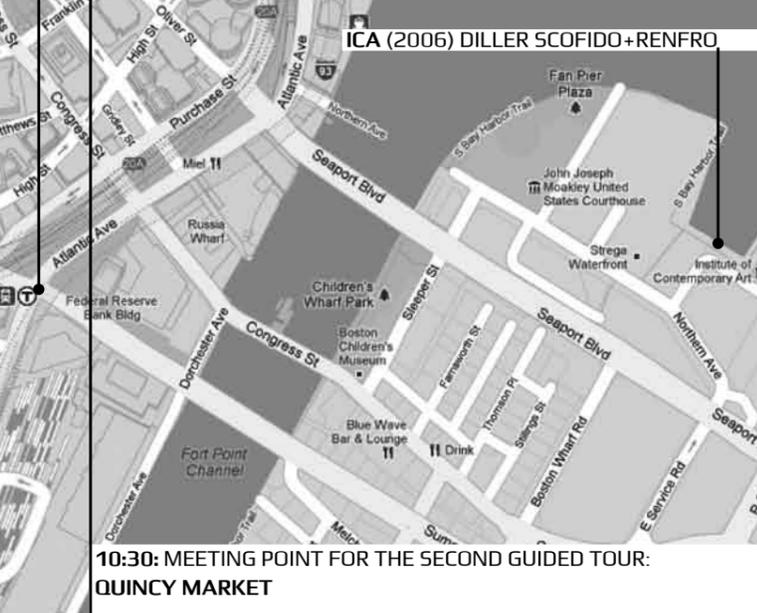
**NEW ENGLAND HOLOCAUST MEMORIAL CARMEN PARK, CONGRESS STREET (1995) STANLEY SALTOWITZ**



**QUINCY MARKET (1824-77) BEN THOMPSON/ROUSE**



**10:30: MEETING POINT FOR THE SECOND GUIDED TOUR: QUINCY MARKET**



**QUINCY MARKET (1824-77) BEN THOMPSON/ROUSE**

Visit [mbta.com](http://mbta.com) or call us to find a retail location where you can obtain CharlieCards and purchase MBTA passes and stored value.

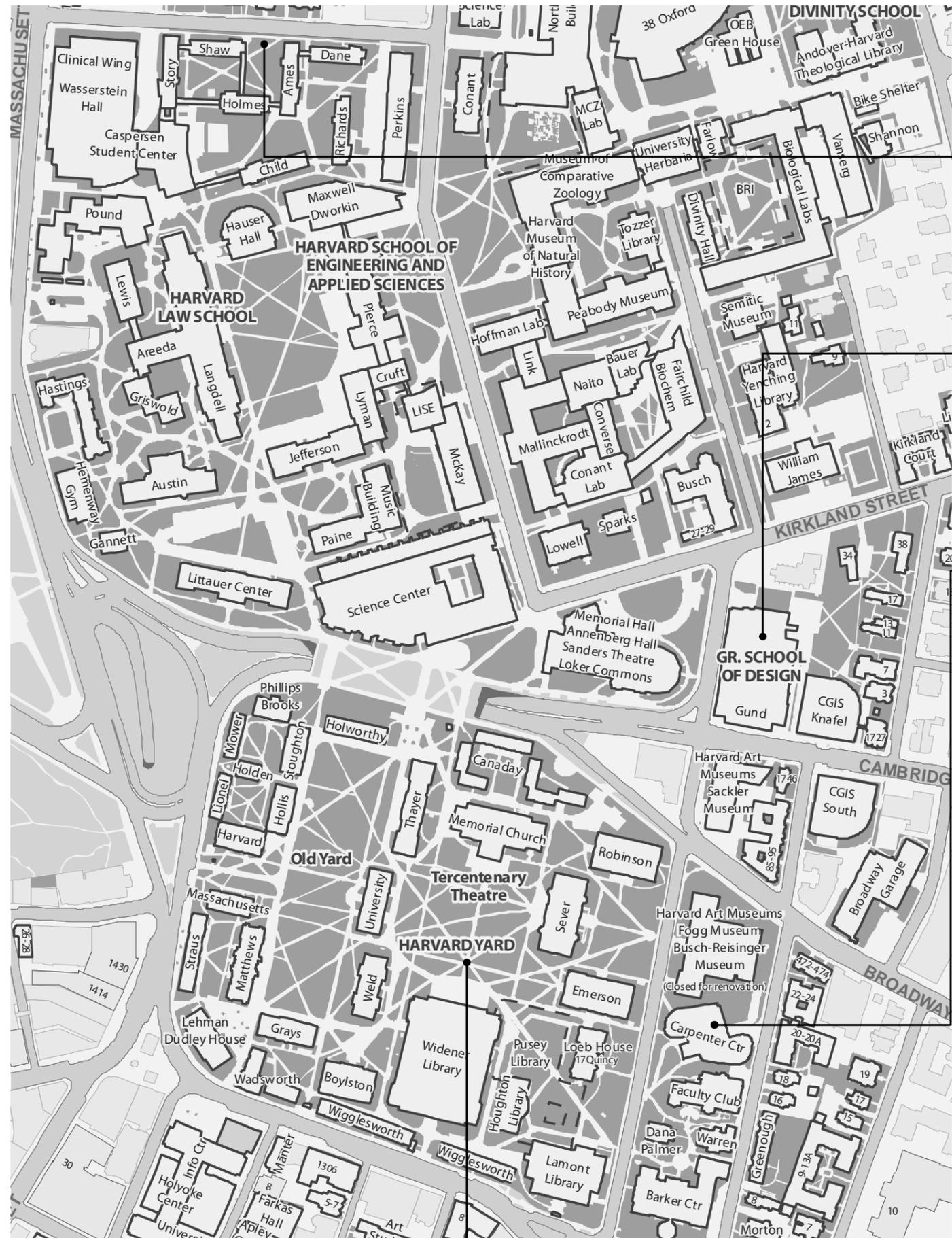
**LEGEND**

- Terminal Station
- Transit Station
- Transfer Station
- Transfer to Commuter Rail
- Wheelchair Accessible
- Parking

**Boylston:** Accessible for Silver Line Washington Street only.  
**State:** Blue line wheelchair access outbound side only. Inbound riders transfer to outbound train at Government Center. Exit State outbound.

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For MBTA Transit Police call 617-222-1212



**HARVARD GRADUATE CENTER HARVARD UNIVERSITY (1950)**  
WALTER GROPIUS



**HARVARD GRADUATE SCHOOL OF DESIGN 48 QUINCY STREET, GUND HALL, CAMBRIDGE MA 02138 (1972)** JOHN ANDREWS



**CARPENTER CENTER FOR THE VISUAL ARTS, HARVARD UNIVERSITY 24 QUINCY STREET, CAMBRIDGE MA 02138 (1963)** LE CORBUSIER WITH ASSOCIATED FIRM JOSE-LUIS SERT AND ASSOC.

Le Corbusier acknowledged his desire to make Carpenter Center, his only work in North America, a didactic statement of principle. The building reads as a revisionist history of many of his basic ideas. Therefore, the vague building program emphasizing the Center as a vessel for communication among the arts encouraged him in this intent. Throughout his life Le Corbusier constantly reinterpreted and transformed his own architectural language. Already, in his Shodhan House and Millowners Building in India, he had reinvested his late style, characterized by rough concrete and primitivism, with some of the forms and spirit of his early, purist architecture. At Carpenter Center he continued that exploration, combining familiar elements with unexpected spatial effect.

Le Corbusier's late interest in natural forms and forces is evident here. The windows derive from a three-part system of glazing, brise-soleil, and ventilating panels he developed for India in order to architecturally control climate (see entry for Secretariat). Some critics interpret the building as an organic metaphor, seeing the two curved studios as lungs or ventricles on either side of the central circulation system of ramp and stair.

In order that Carpenter Center be consonant with the advanced technological culture of America, Le Corbusier adopted purist elements to correct what he considered any "artificial primitivism." He abandoned the rough, flawed skin of *béton brut* for the machined, polished look associated with his early architecture. At great expense, he insisted that the concrete's finish be absolutely smooth, without even the raised impression of lines from the sonotube formwork. Together, the cantilevered slabs and pilotis define, once more, his first image of the Dom-ino structural skeleton.

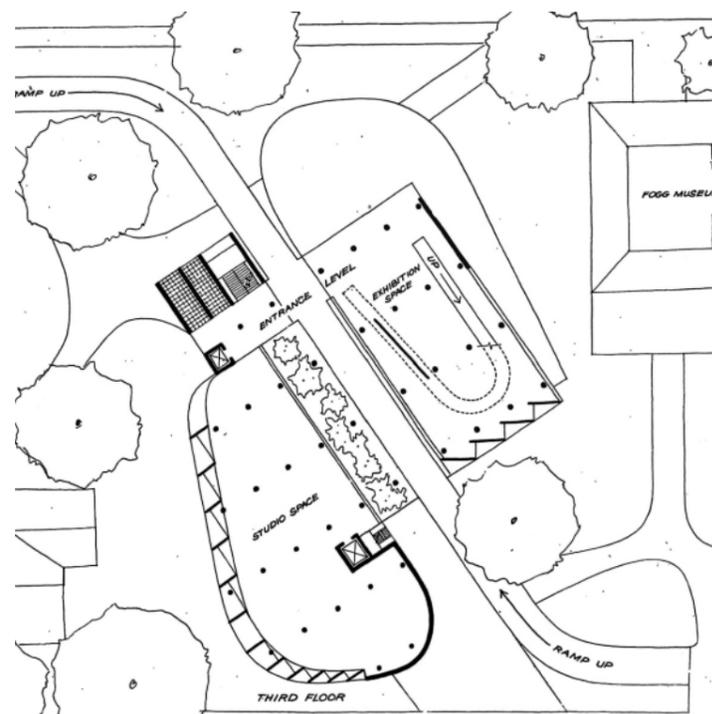
In the combination of vocabularies there arise certain conflicts, which Le Corbusier acknowledged in the architecture. The confrontation of the earthbound sense of his late work with seemingly weightless forms of Purism appears, for example, in the siting of the pilotis. Even as the pilotis lift the studios up, they sink below ground level so that, despite

their extreme height at some points, in the building forecourt they generate a low, almost subterranean space. Where the thick walls of brise-soleil typically reach the ground or are supported on gigantic pilotis, here they stop short of the first floor or appear suspended above the ground on slender posts. This tension in the role of the wall appears also in the ordering of the facades as frontal planes on the one hand and as exuberant sculptural form on the other.

The revealed sculptural play of overlapping volumes is unique to Le Corbusier's last works. Never before had he allowed such large organic shapes to appear on the exterior of a building as a challenge to the power of an interior grid. In this case, the box that canonically contains these shapes is the site itself—the cubic volume of space defined by the buildings on either side. In a departure from its early role as unifier of the plan, the ramp penetrates the visual center of the building from front to back along a primarily exterior route. The interior architectural promenade occurs along an alternate route, which descends among the pilotis and up the stair. A third, visual line of motion connects the layers of studios in an ascending spiral. Thus the building is understood as a complex combination of various paths that weave together the interior and exterior space.

Le Corbusier explained, in reference to the Center, that a difficult site generates a "hermetic solution giving pleasure to somebody who knows what underlies it." Perhaps he anticipated the criticism of his self-referential architectural dialogue and sculptural gymnastics as anti-contextual. What underlies his solution is a reexamination of his own vocabulary and lifelong urban vision. He called the building a gateway and imagined it as a popular route from old Harvard Yard to future university buildings beyond Prescott Street, through an elevated realm of gardens. He wanted the summit of the ramp to be the Center's primary entrance, flanked by administrative offices and a gallery. The building seems, then, a diagram of the terraced dwellings and multitiered circulation routes he had always envisioned as the salubrious alternative to the existing city. The organic lungs of the studios with roof gardens rotate the building off the constricting grid of the street and Yard. The cubic box as man's orthogonal edifice stands at the building's center, oriented to the compass points. The ramp, half freeway, half path of the sun, rises and passes through.

(From: GANS, Deborah (1987): *The Le Corbusier Guide*. New York: Princeton Architectural Press)



# STUDY TOUR U.S. EAST COAST 2012

## SUNDAY MARCH 18 (1)

**07:00:** BREAKFAST START: **HOLIDAY INN EXPRESS BOSTON**  
 69 Boston St. Boston MA 02125 [www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail](http://www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail) (+1 (617) 288-3030)

**09:00:** MEETING AT: **BOSTON ROOM Holiday Inn Express Boston**

**09:20:** DEP. **HOLIDAY INN EXPRESS BOSTON**  
 WITH RED LINE FROM *Andrew* TO *South Station*

**10:00:** ARR. **ICA (THE INSTITUTE OF CONTEMPORARY ART)**  
 (42°21'10.16"N, 71° 2'35.01"W) 100 Northern Ave. Boston MA 02210 [www.icaboston.org](http://www.icaboston.org)

GUIDED TOUR: **ICA** (4 groups. Group 1: F-01, F-02 & F-03. Group 2: F-04, F-05 & M-06, Group 3: M-07, M-08, M-09, Group 4: M-10, M-11, M-12 & M-13)

BOSTON ON YOUR OWN WITH MUST SEES: **BOSTON CITY HALL** (42°21'36.40"N, 71° 3'29.69"W) *One City Hall Square* **NEW ENGLAND HOLOCAUST MEMORIAL** (42°21'40.74"N, 71° 3'26.16"W) *Carmen Park, Congress Street near Faneuil Hall* **JOHN HANCOCK TOWER** (42°20'57.47"N, 71° 4'32.75"W) 200 Clarendon Street **QUINCY MARKET** (42°21'36.69"N, 71° 3'17.21"W)

ACCOMMODATION: **HOLIDAY INN EXPRESS BOSTON**



**ICA (THE INSTITUTE OF CONTEMPORARY ART) (2006) DILLER SCOFIDIO + RENFRO**

It seems remarkable that architects Elizabeth Diller and Ricardo Scofidio - longtime irreverent skeptics of the very idea of the art museum - ever won the commission to design the recently completed home of the Institute of Contemporary Art (ICA), in Boston. But ICA director Jill Medvedow - whose short list ran from Diller+Scofidio, of New York, to Peter Zumthor, of Switzerland; Office dA, of Boston; and Studio Granda, of Iceland - was more than willing to take risks. In fact, she sought out architects who had never realized a major building in the United States before. To meet that criteria, Diller and Scofidio had no need to reinvent their resume: In more than two decades of practice, they had lingered provocatively on the theoretical fringes of architecture, completing only one actual building (Slither housing [2000], in Gifu, Japan) and one interior (the Brasserie restaurant [2000], in New York's Seagram Building).

Ever since the firm's founding in 1979, Diller+Scofidio (which formed Diller Scofidio + Renfro, with Charles Renfro, in 2004) challenged the rituals and spatial constructs of everyday life, upending such culturally embedded icons as the picture window, the tourist suitcase, and the great American lawn. Its discourses, engaging electronic technologies and sparked with ironic visual and linguistic puns, largely inhabited the arenas of installation and conceptual art, video, or dance, rather than architecture per se. The strategy typically relied on an amusingly clever device that viewers quickly realized was altering their perceptions or choreographing their moves and, in so doing, delivering a pointed social or institutional critique.

Even in the Diller+Scofidio retrospective at the Whitney Museum in 2003, the duo deployed a playfully undermining device: robotic drills on tracks that scuttled about the exhibition, randomly driving messy holes into the museum's pristine walls. While Diller and Scofidio were complicit with the museum in producing a grand show of their work, their staged (institutionally sanctioned) "disobedience" seemed to insist: But you see, we're still provocative outsiders - we're not *really* part of The Establishment.

With the ICA, the architects still seem to be casting themselves as cerebral titillators or intellectual guerrillas. But in contrast to their Blur

Building (2002) - a temporary pavilion in the form of a self-generating cloud, housing virtually nothing but fleeting experience and a fog-creating mechanism - the 65,000-square-foot ICA definitely needed enclosure and solutions to the nitty-gritty of program and site constraints. In moving the 70-year-old museum across town from a cramped former police station in Back Bay to Fan Pier, a desolate, 21-acre site on South Boston's waterfront poised for development, director Medvedow had a top requirement: to put the galleries on a single floor. The catch was, she needed 17,000 square feet of exhibition space (for temporary shows and the newly forming permanent collection), but the parcel allowed a footprint of only 16,000 square feet.

With the architects' characteristic deluge of ideas, they proposed four schemes, one with a barge letting exhibition space break away and travel to other waterfront neighborhoods. Determined to maximize the galleries' overhead daylight, Diller Scofidio + Renfro engineered a trade-off with the Boston Redevelopment Authority (BRA). The ICA would retract its footprint to the north, on the water side-widening a stretch of the city's future 47-mile HarborWalk-in exchange for the right to overhang the coastal path. Hence the genesis of the museum's top (fourth) floor, a luminously translucent, "floating" box of skylit galleries, surging toward the harbor on an extreme cantilever, 80 feet long, with four, 24-foot-deep steel megatrusses.

The ICA rises like a giant periscope, its lens hovering tantalizingly at the brink. Engaging the water is so key to the scheme that the structure's landside - its main approach - almost feels like its rear. Most people, unless in a water taxi, arrive across a sea of parking lots (future hotel, residential, and mixed-use sites, now in development) to an apertureless, banded composition of channel and clear glass with matte-aluminum panels. The entry, understated as a back door, slips visitors in obliquely at the southwest corner.

On the waterside, the \$41 million building reveals its most open and dynamic face. In the trade-off with the BRA, the architects were not merely broadening the HarborWalk and gaining gallery space. They envisioned the path extending up metaphorically into the building, like a single undulant ribbon "unfolding public and private realms," as Diller puts it. With one continuous surface material-Santa Maria, a hardwood used in boatbuilding - the boardwalk "flows" up to form stadium steps (a see-and-be-seen venue) overlooking the water. The deck then morphs into the stage floor and raked seating inside the museum's theater, only to curl back, wrapping the auditorium ceiling and rolling outdoors again as the cantilever's underbelly above the grandstand. Revealing the wood's course, the east and west elevations are essentially section cuts. "The Fold," hardly a new idea, was all the rage in the 1990s, inspired by writings of Gilles Deleuze and the proclivities of emerging computer software. Despite that decade's prodigious outflow of "folded" schemes from architecture schools and theoretical practices, only a few (from UN Studio and several other firms) actually got built.

While the ICAs fold flows dynamically down the building's west side, the curve becomes more rigid, far less expressive on the east face, where it seems almost a conceit superimposed on more straightforward, rectilinear forms. Diller suggests that where it unfurls into a grandstand, the form subverts the traditional notion of monumental front steps rising to a rarified domain of art. Whether or not the ICAs understated entrance and transposed "front steps" really buck The Establishment (and that's arguable), the building responds, most of all, to the aqueous edge.

The architects saw the harborscape simultaneously as a "draw and a liability or distraction from the artwork," says Diller. "Opening up the views all at once seemed too much - almost pornographic, totally exposed." Instead, the architects envisioned the building as a view-altering apparatus, or what Diller calls a "valve turning on and off the context." With a relatively simple program-a lobby, museum shop, cafe, 325-seat theater, administrative offices, and galleries - the architects "choreographed," as they put it, the journey through the ICA, consciously controlling the focus along the way, much as their conceptual work toyed explicitly with perception. From the spatial compression of an entry zone under the slope of the theater's rake, offering an oblique glimpse of the harbor, visitors ascend in a room-size elevator, scanning views out through its glass walls and supporting trusswork. With these visual teasers as constructive distraction, the elevator slips by the barely noticed, largely administrative

second and third floors to an introspective, windowless zone: two neutral, well-proportioned galleries, illuminated by daylight (or electricity at night) filtering through a stretched-fabric ceiling under a north-facing sawtooth.

Soon the view comes back with a splash (almost literally) in the Founders' Gallery, a passageway connecting the paired exhibition spaces. This panoramic perch is enclosed to the north by a 128-foot-long, floor-to-ceiling, mullionless window (the lens of the great periscope) and conveys the breathtaking sense of floating above the water in a hall virtually inhabited by the bay and urban skyline. But this was not the architects' original intent.

They had planned to apply to the glass a lenticular film that would allow only perpendicular views out (appearing blurry from oblique angles), giving you the sensation of being stalked by vistas as you walk along. But when the museum board and staff toured the construction site, they were so wowed by the va-va-voom view, they insisted the glass remain clear. So the full-frontal "pornographic" panorama exposes itself sooner than first envisioned (a dramatic out-of-sequence move Diller still wistfully bemoans).

From here, the viewing "valve" closes down considerably in the Mediatheque, a cascade of flat-screen computers, with raked seating, descending to the biggest screen of all, a 21-by-9.5-foot, downward-canted window, framing a horizonless, dizzyingly abstracted "swatch" of the water's wavy surface. The means are simple, and the effect mesmerizing. The computers let the visitors who can tear themselves away from the spectacularly manipulated view research the ICA collection. From the exterior, the Mediatheque appears as a projection booth or huge trap door, flapping down from the cantilever's underside. Inside, this space-a conceptual art piece in and of itself-is arguably the most extraordinary part of the ICA, akin to James Turrell's work in transforming vast natural expanses into framed, viewable planes of pure light or color. The Mediatheque also recalls Diller+Scofidio's unbuilt Slow House (1991), which was essentially a door along a curve leading to a picture window with ocean views partly blocked by a monitor showing a video of the ocean-one controlling device leading to another-rigged to keep the viewer from ever lining up the horizon lines in and outside the monitor. The Mediatheque, like Slow House, suggests that architecture mediates perception as much as, say, video does.

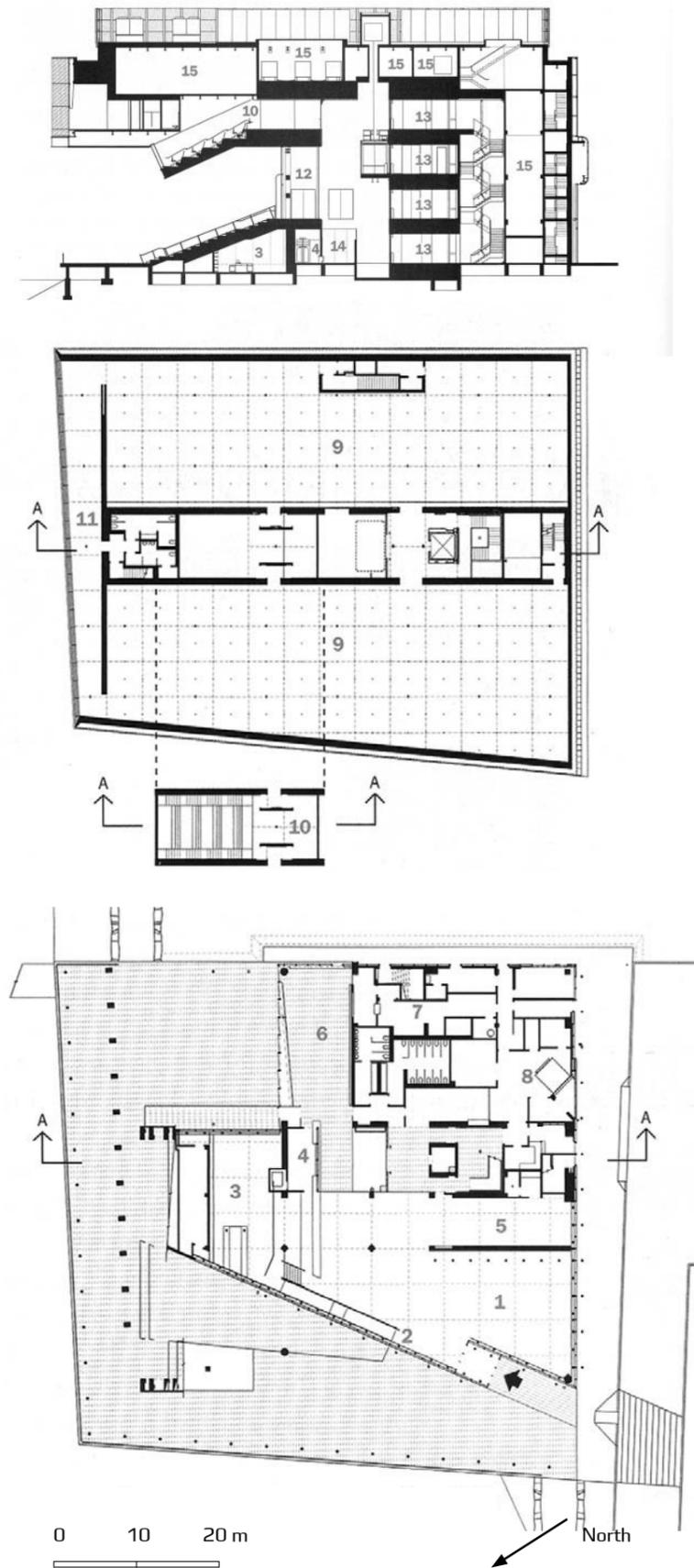
If visitors pass from the Mediatheque into the theater, entered one floor down, atop its rake, they regain full harbor views, this time through the stage's backdrop: two glazed, perpendicular curtain walls. Here, the outdoor stadium steps appear as a lower tier of theater seats, descending toward the real stage, the water. Again, the skyline's civic presence becomes almost palpable. (The giant picture window also has screening and black-out blinds.)

While the Founders' Gallery panorama is at least as stunning as the stage's backdrop, the experience of being stalked by views through lenticular film might have offered a phenomenal counterpoint to both the theater and Mediatheque, clarifying the spatial sequence and heightening the sense of the building as a view-controlling valve. But the lenticular addition might have transformed the ICA entirely into a self-conscious cerebral game, a museum as a series of intellectual art pieces, by the architects, competing with (and blowing out of the proverbial water) the work in the "regular" galleries.

Certainly, as realized, this box of visual tricks raises questions about what controls our readings of what we see-with a nod to the familiar 20th-century conundrum of what is art. But when it comes to displaying actual exhibitions, the new ICA building takes a far tamer approach. "Having spent our lives on the other side of the wall, making art and feeling frustrated by spaces," says Diller, "we wanted the galleries to be neutral, reprogrammable, unscripted." So they relegated the official art to good, handsomely proportioned, evenly luminous spaces that are, in the end, conventional.

Without radically shifting our experience of seeing art or our understanding of what a museum is, the ICA achieves a light-filled architecture with compelling connections to the water and the city. In some sense a retrospective of the firm's conceptual ideas, the building is more a viewing machine poised at an edge than a cutting-edge machine for viewing art.

(From: AMELAR, Sarah in: Architectural Record 03, 2007)



*Section A-A through Mediatheque & outdoor grandstand, First Floor & Fourth Floor*

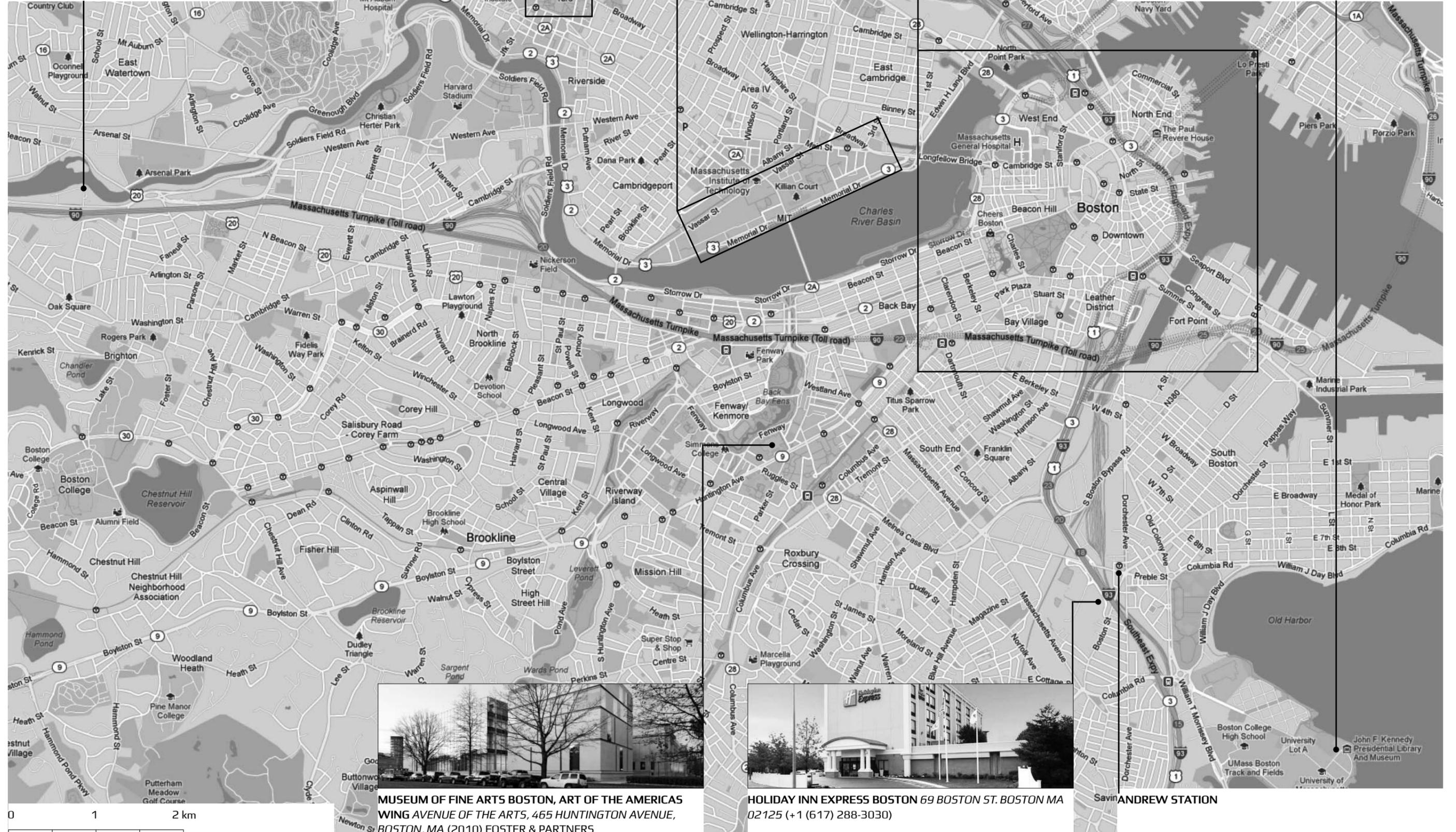
- 1: Lobby, 2: Ramp, 3: Bookstore, 4: Coats, 5: Art education lab, 6: Café, 7: Food Preparation, 8: Loading Dock, 9: Gallery, 10: Mediatheque, 11: Founders' Gallery, 12: Bridge, 13: Elevator Lobby, 14: Atrium, 15: Mechanical



COMMUNITY ROWING BOATHOUSE 20 NONANTUM ROAD, BRIGHTON, MA. (2008) ANMAHIAN WINTON ARCHITECTS



JOHN F. KENNEDY PRESIDENTIAL LIBRARY AND MUSEUM BOSTON, SUFFOLK COUNTY MA (1977) I. M. PEI



MUSEUM OF FINE ARTS BOSTON, ART OF THE AMERICAS WING AVENUE OF THE ARTS, 465 HUNTINGTON AVENUE, BOSTON, MA (2010) FOSTER & PARTNERS



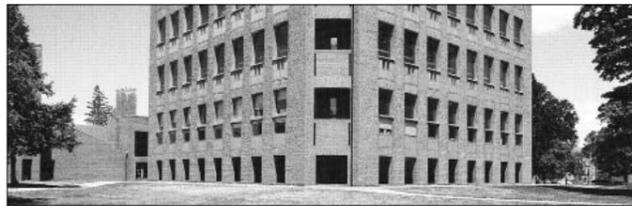
HOLIDAY INN EXPRESS BOSTON 69 BOSTON ST. BOSTON MA 02125 (+1 (617) 288-3030)



ANDREW STATION

# STUDY TOUR U.S. EAST COAST 2012 MONDAY MARCH 19 (1)

- 06:00:** BREAKFAST START: **HOLIDAY INN EXPRESS BOSTON 69 Boston St. Boston MA 02125** [www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail](http://www.hiexpress.com/hotels/us/en/boston/boshj/hoteldetail) (+1 (617) 288-3030)
- 08:30:** BUS PICK UP: **HOLIDAY INN EXPRESS BOSTON**
- 09:30:** BUS DROP OFF: **LIBRARY & DINING HALL, P. EXETER ACADEMY** (42°58'43.54"N, 70°56'58.05"W) *20 Main Street, Exeter NH*
- 11:30:** BUS PICK UP: **LIBRARY & DINING HALL, P. EXETER ACADEMY**
- 12:30:** BUS DROP OFF: **MIT CAMPUS**
- 14:00:** GUIDED TOUR BY GREG TUCKER: **MIT MEDIA LAB** (42°21'37.63"N, 71° 5'14.84"W) *Building E14, Cambridge MA*
- 15:00:** MIT ON YOUR OWN: **RAY & MARIA STATA CENTER** *Building 32, 32 Vassar Street, Cambridge MA, KRESGE AUDITORIUM & CHAPEL Building W15 & W16, 48 Massachusetts Ave. (Rear), Cambridge MA, BAKER HOUSE Building W7, 362 Memorial Drive, Cambridge MA, SIMMONS HALL Building W79, 229 Vassar Street, Cambridge MA*  
ACCOMMODATION: **HOLIDAY INN EXPRESS BOSTON**



**LIBRARY & DINING HALL, PHILLIPS EXETER ACADEMY 20 MAIN STREET, EXETER NH (1965-72) LOUIS KAHN**

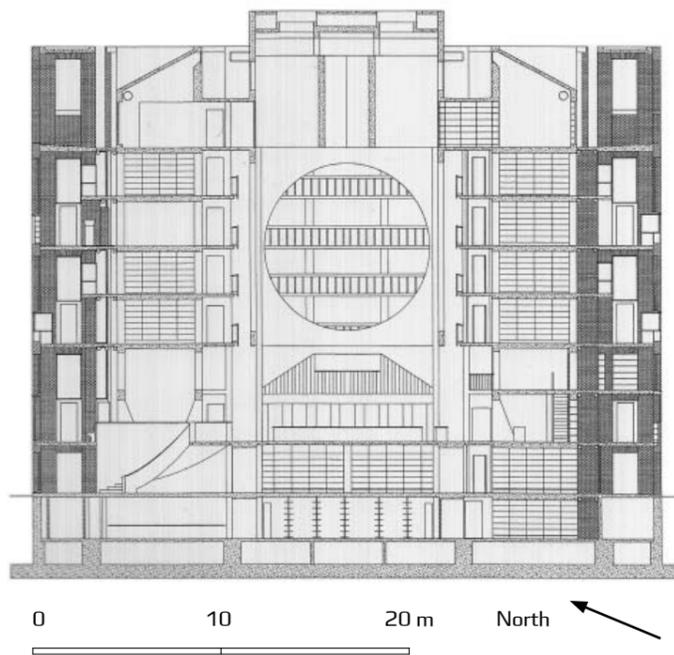
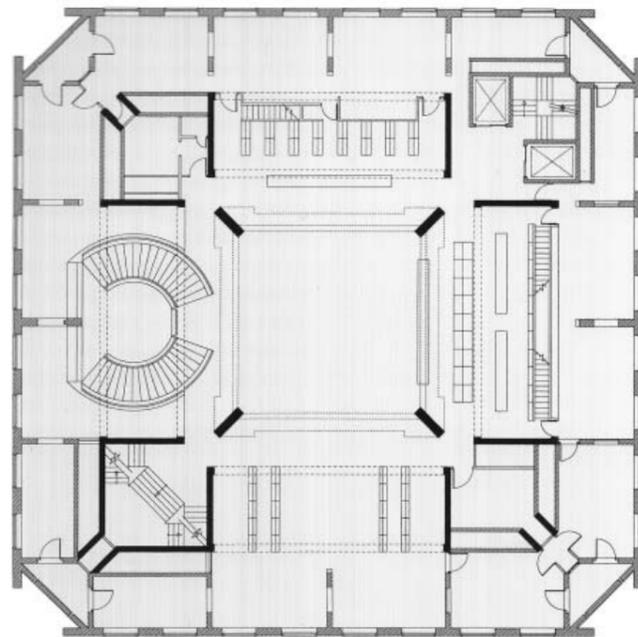
The Phillips Exeter Library is one of Kahn's most visually austere and important buildings for an American educational institution. While the facades are almost elemental in character, the interior volumes, massing, and overall geometries reveal the influence of Kahn's design for the National Assembly Building in Dhaka, Bangladesh (which was commissioned in 1962 and finished after his death in 1974).

Kahn's track record for successful new buildings situated within existing campus settings, such as those at Yale University, the University of Pennsylvania, the Salk Institute, and Bryn Mawr College as well as his unbuilt proposals for Rice University, the Maryland Institute College of Art, and the Philadelphia College of Art, made him one of the most sought-after and prominent architects for this type of commission. As with many of Kahn's earlier campus commissions, the new principal at Phillips Exeter Academy, Richard W. Day, wanted a modern building that would offset the historical character of the other campus buildings, thus making a significant contribution to the campus's architectural landscape. A shortlist of possible candidates was compiled, which included Kahn, Edward Larrabee Barnes, Paul Rudolph, and Philip Johnson. After the committee visited the offices of these architects and inspected some of their built work, Kahn was offered the commission. The projected cost of building Kahn's design exceeded the initial budget of \$2.5 million, which required that the design be altered rather radically-the entire top floor had to be omitted. After numerous meetings with and letters to the committee in which the architect persuasively warned that such a change would significantly alter the overall scale of the design, the committee agreed to raise additional funds; and in the final round of modifications to the working drawings, the top floor was reinstated. The resulting design is one of exact and elegant proportions that is timeless in character and one of the Academy's most beautiful campus buildings. The exterior brick screen-like walls-which visually demarcate this seemingly simple building mass-comprise brick piers that rise from floor to floor. On the second, third, and fourth floors are private reading carrels (which are arranged around the perimeter of the building) that are located within these spaces between the brick piers and are articulated on the facade as

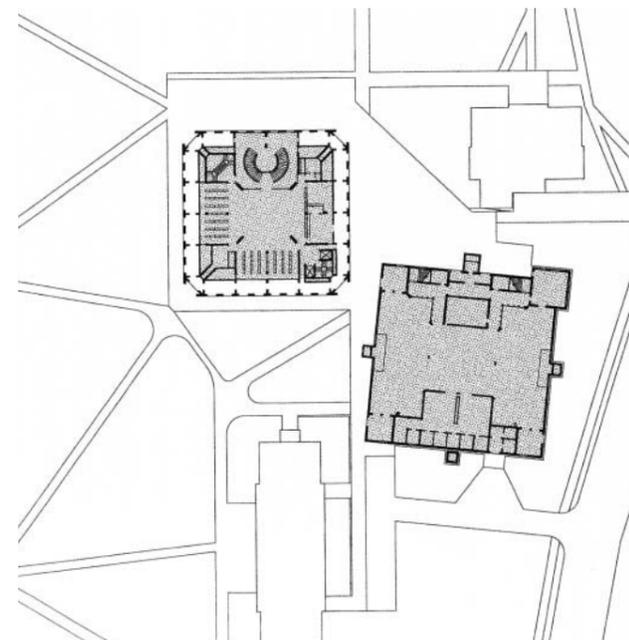
an intermediate horizontal datum of wood paneling with a small window in each carrel.

The Exeter Library boasts one of the most extraordinary interior spaces created by Kahn in the United States-a large volumetric void. While this empty space might appear cavernous in the plan and sectional drawings, in reality the spatial complexity of this interior space, ranging from the circular cutouts of the four wall surfaces to the ceiling, which terminates with large diagonal concrete cross-beams, is reminiscent of earlier library designs celebrating vast central spaces, such as Etienne-Louis Boullée's 1785 project for a Royal Library, or Erik Gunnar Asplund's 1927 Public Library in Stockholm.

(From: ROSA, Joseph (2006): *Louis I. Kahn 1901-1974 Enlightened Space*. Germany: Taschen)



*Second or main floor plan showing the central hall & Final section*



*Siteplan with the Library on the left and the Dining Hall on the right*



**MIT MEDIA LAB BUILDING E14, CAMBRIDGE MA (1985) I.M. PEI (2009) FUMIHIKO MAKI**

The Media Arts and Sciences Building will provide a prominent, functionally advanced, architecturally distinguished home for technological innovation, design, and the arts at MIT. It will house a unique, cross-disciplinary intellectual community consisting of the Media Laboratory, the Center for Bits and Atoms, the Media Arts and Sciences academic program, and other related groups. The range of activities will extend from quantum computing to opera. It will consist of seven research laboratories organized around a spectacular central atrium, together with top-floor event and display spaces, lecture and conference rooms, and a cafe - all overlooking the Charles River and the Boston skyline.

(from: [www.maki-and-associates.co.jp/e/project/46.html](http://www.maki-and-associates.co.jp/e/project/46.html))

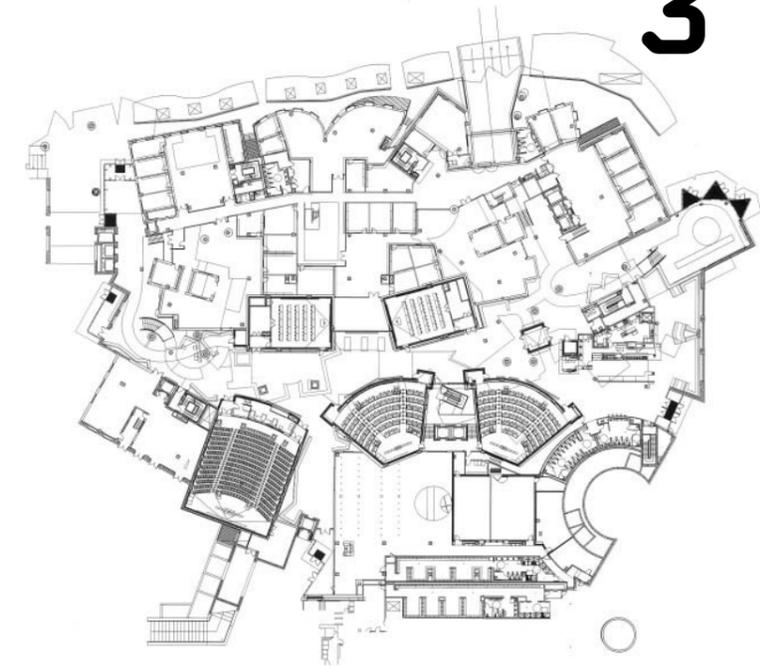


**RAY & MARIA STATA CENTER BUILDING 32, 32 VASSAR STREET, CAMBRIDGE MA (2004) FRANK GEHRY**

"The Stata Center is a collage; I could go around Cambridge and show you a precedent for everything in it. We don't think of buildings as individual buildings; if you look around, you will see that they're really pieces of buildings collaged together. In fact, you usually don't see whole buildings-that's what creates a kind of urbanism, and I'm just continuing that."

"The interiors are not finished or even finite; it's very open-ended system. The idea is that the rugged individualists who are inhabiting the building are going to intervene; they're going to bring in their stuff. They already have, and over time this building will change and become theirs. I believe it's strong enough to survive that, but we'll see."

(F. Gehry in: MITCHELL, William J. (2007): *Imagining MIT*. Cambridge MA: The MIT Press)



*Groundfloor Plan showing the Student Street and accompanying public functions*



**KRESGE AUDITORIUM & CHAPEL BUILDING W15 & W16, 48 MASSACHUSETTS AVENUE (REAR), CAMBRIDGE MA (1950-5) EERO SAARINEN**

Here, the site, in the middle of a crowded city campus, was surrounded by 'manmade' nature of buildings about six storeys high, buildings which were essentially boxes with holes pierced in them all around. The question was how to relate the auditorium to these buildings. Should we relate by blending with them or by making a contrast to them? We felt that a box-like structure in these surroundings, differing from the adjacent dormitories and apartment buildings only by the absence of windows, would be an undistinguished anticlimax. We believed that what was required was a contrasting silhouette, a form which started from the ground and went up, carrying the eye around its sweeping shape. Thus, a domed structure seemed right.

The chapel presented quite a different problem. After many experiments, exploring different shapes in the site plan, the round cylindrical form seemed right.

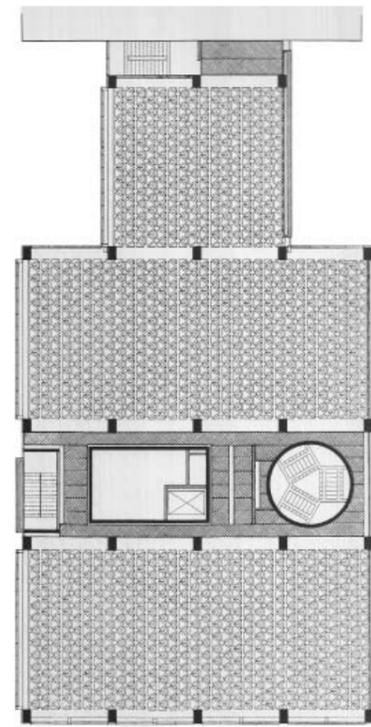
The challenge of the interior was to create an atmosphere conducive to individual prayer. Since this is, uniquely, a non-denominational chapel, it was essential to create an atmosphere which was not derived from a particular religion, but from basic spiritual feelings. A dark interior seemed right - an interior completely separated from the outside world (to which the narthex passage would serve as a sort of decompression chamber). I have always remembered one night on my travels as a student when I sat in a mountain village in Sparta. There was bright moonlight over head and then there was a soft, hushed secondary light around the horizon. That sort of bilateral lighting seemed best to achieve this other-worldly sense. Thus, the central light would come from above the altar - dramatized by the shimmering golden screen by Harry Bertioia - and the secondary light would be light reflected up from the surrounding moat through the arches.

(Excerpts from: SAARINEN, Aline B. (1968): *Eero Saarinen on his work*. New Haven and London: Yale University Press.)

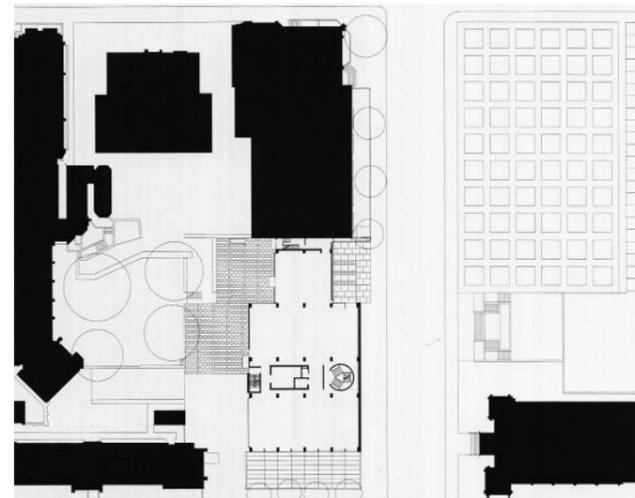


# STUDY TOUR U.S. EAST COAST 2012 TUESDAY MARCH 20 (1)

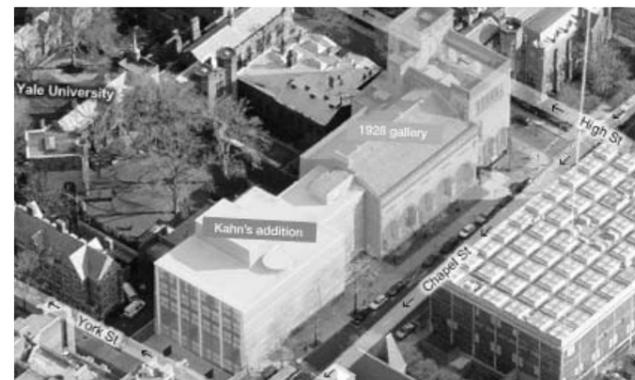
- 06:00: BREAKFAST START: HOLIDAY INN EXPRESS BOSTON
- 07:30: BUSPACKING: HOLIDAY INN EXPRESS BOSTON
- 08:00: BUS PICK UP: HOLIDAY INN EXPRESS BOSTON
- 11:00: BUS DROP OFF: YALE UNIVERSITY *New Haven, CT*  
**YALE CENTER FOR BRITISH ART** (41°18'28.40"N, 72°55'51.27"W) *1080 Chapel St., High St.*  
**YALE UNIVERSITY ART GALLERY** (41°18'30.68"N, 72°55'52.09"W) *1111 Chapel St. (at York St.)*  
**ART & ARCHITECTURE BUILDING** (41°18'42.04"N, 72°55'38.15"W) *180 York St.*  
**BEINECKE RARE BOOK & MANUSCRIPT LIBRARY** (41°18'42.04"N, 72°55'38.15"W) *121 Wall St.*  
**DAVID S. INGALLS HOCKEY RINK** (41°18'58.90"N, 72°55'30.29"W) *73 Sachen St.*  
**SAMUEL MORSE & EZRA STILES RESIDENTIAL COLLEGES** (41°18'46.39"N, 72°55'49.88"W) *Broadway & Tower Parkway*
- 15:30: BUS PICK UP: YALE UNIVERSITY *New Haven, CT*
- 18:00: BUS DROP OFF: THE GEM HOTEL MIDTOWN WEST (40°45'20.71"N, 73°59'51.30"W) *449 W 36th St. NYC 10018*  
[www.thegemhotel.com/midtown](http://www.thegemhotel.com/midtown) (+1 (212) 967-7206)  
 ACCOMODATION: THE GEM HOTEL MIDTOWN WEST



Reflected sealink plan of Yale University Art Gallery

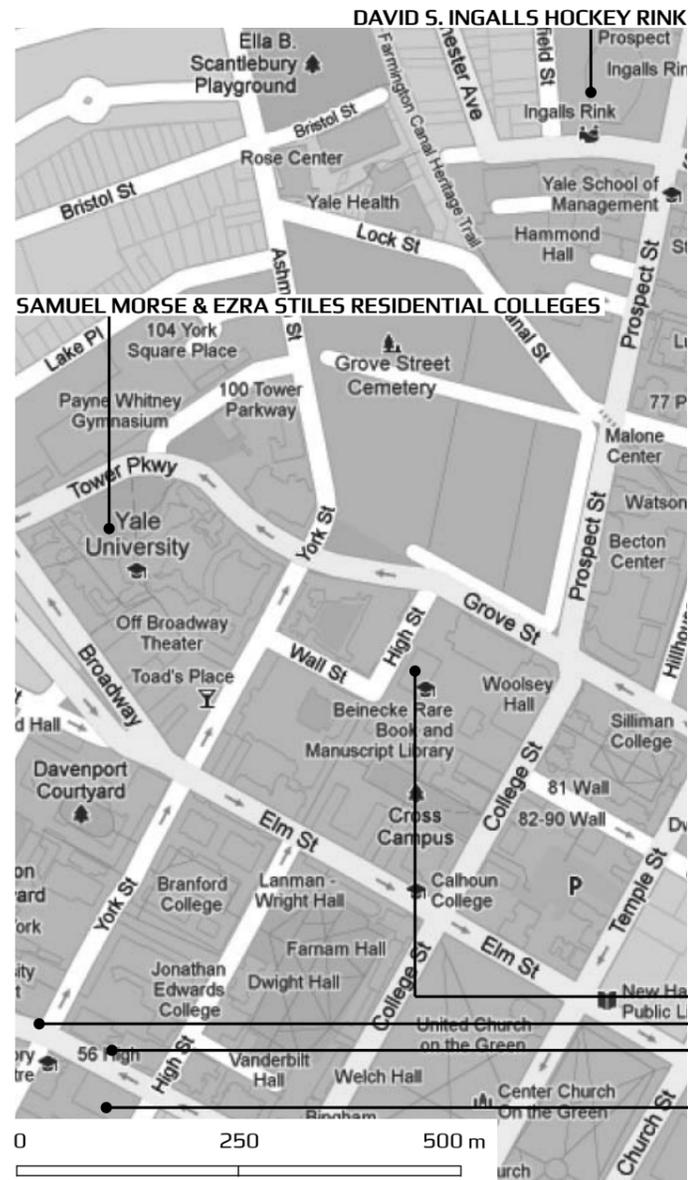


Siteplan of Yale University Art Gallery & Yale Center for British Art



Aerial view of Yale University Art Gallery & Yale Center for British Art

- BEINECKE RARE BOOK & MANUSCRIPT LIBRARY
- ART & ARCHITECTURE BUILDING
- YALE UNIVERSITY ART GALLERY
- YALE CENTER FOR BRITISH ART



YALE UNIVERSITY ART GALLERY 1111 CHAPEL STREET (AT YORK STREET), NEW HAVEN CT (1951-3) LOUIS KAHN

Kahn was asked to extend Yale University's existing gallery and museum, which had been designed by Edgerton Swartwout in 1927-28 and was the oldest college art museum in the United States. His building was also to accommodate the school of architecture and planning until it could be moved to a building that a younger architect, Paul Rudolph, was designing on a site across from it, on York Street. Kahn's envelope is rather bland - the plain brick walls are relieved by string courses that mark the floor divisions, while the glass curtain-walls are thinly mullioned in a repetitive pattern. This envelope encloses a main volume articulated into two halls, each double square in plan, separated by a narrower service area, much of it occupied by a rectangular zone for elevators, plumbing, and storage; there is also the separate regulation fire-stair. Its most conspicuous feature, however, is the concrete cylinder into which the main steel staircase is inscribed as an equilateral triangle. A link to the old building is established through a block that is a single square in plan, and is centered on the main volume. The principal entrance is tucked into the interval between the single and the double cube.

In the Yale gallery there is already a clear, almost diagrammatic distinction between the served and the servant spaces, which would become an important aspect of all Kahn's planning. It is one of his inversions of Beaux-Arts practice, which recommended that both plans and sections show blank areas into which the "construction" and the "services" could be filled. They were conventionally tinted gray or pink, while wall surfaces of the served areas were drawn in the greatest detail and rendered in brilliant color. Asserting the formal dignity of the service elements of a building while respecting the hierarchy of spaces in the plan is Kahn's deliberate challenge to the academic design method.

An early sketch shows a whole three-dimensional structure composed of tetrahedral elements, both columns and floors; as Kahn put it, these slabs "deserved" such a supporting structure, though in fact the columns and beams remained rectangular, and the string courses on the

facade marked the stages in the casting of those slabs. It is perhaps the first of Kahn's works in which concrete cast in smooth plywood shuttering becomes the dominant material of the building, while the two directions of the structure allow an orthogonal as well as a diagonal arrangement of displays. The brilliant, crystalline effect of the gallery was produced by the play of light on the tetrahedra, of which the curtain wall offered a clear view-all of it now unfortunately obscured by insensitive "remodelling."

(From: RYKWERT, JosephDeborah (2001): *Louis Kahn*. New York: Harry N. Abrams, Inc.)



YALE CENTER FOR BRITISH ART 1080 CHAPEL ST., HIGH ST. NEW HAVEN CT (1969-77) LOUIS KAHN

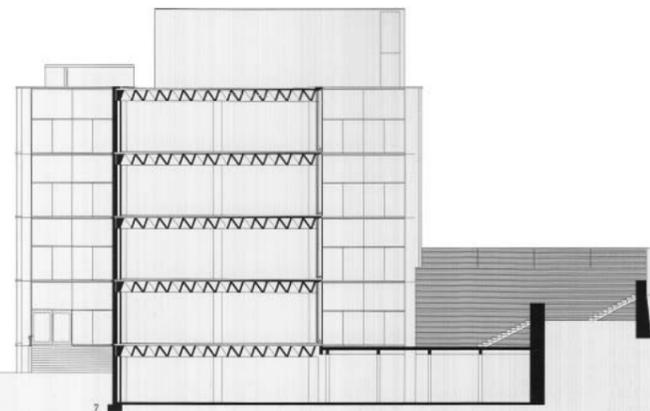
Paul Mellon, steel magnate and benefactor of (among other institutions) the National Gallery in Washington, D.C., chose to give his collection of British art and the library formed around it to Yale, his alma mater. The university decided after some debate to build a special gallery to house it, and after further deliberation commissioned Kahn in 1969. Problems arose when the university bought a site on Chapel Street, directly across from the Yale University Art Gallery, which Kahn had designed in 1951, and he envisaged the two buildings joined by a bridge. This plan brought objections from the city, which saw in it the loss of taxable commercial space (shops and lodgings) to the untaxable museum; as a compromise a number of shops facing the street were incorporated into the program.

Kahn's initial design was for a rectangle pierced by two courts. But as the plan developed, the two courts seem to have generated two separate entrances and virtually two adjoining buildings, each covered by very long, slightly curved Vierendeel trusses, with long but narrow barrel vaults spanning between them. However, even the area covered by the first scheme (and exceeded in Kahn's early and more ambitious designs) made the project too expensive, while the nature of the collection (British artists produced a great many portraits and then, from 1750 onward, an increasing number of landscapes) seemed to suggest a building designed to a smaller scale than Kahn initially had in mind.

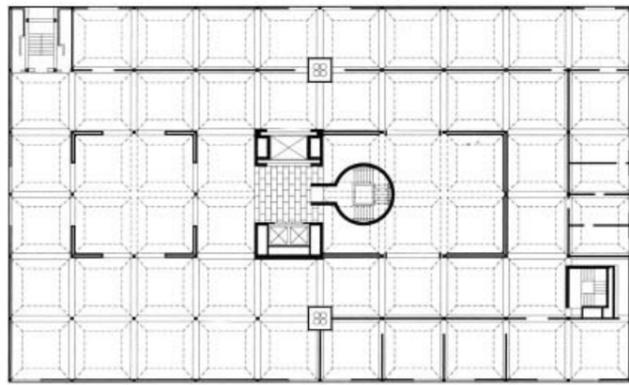
The final, built scheme called for a single block, still pierced by two courts. One is square and rises through the four floors of the building as a light well; it is entered diagonally from the entrance terrace at ground level. The other is oblong and begins at the second floor since there is a lecture theater at ground level; within this oblong area the main stairway is enclosed in a smooth concrete cylinder, as at the Yale Art Gallery, though at the Center for British Art the stairway is square in plan, not triangular. The exterior of the building is reticulated by the smooth concrete structure, the columns growing more slender as they rise and the infill walls faced in matte stainless steel to look (or at least Kahn thought so) like pewter. Most of the light in the building is filtered through deep skylights into the courts, onto which all the galleries open. This meant that the street windows could be relatively small so that virtually no direct light need ever fall on a painting.

The structure was up and the precast beams on site when Kahn died. His wishes about the interior were well known, and he left clear instructions and drawings. Marshall Meyers (who had been Kahn's assistant at Fort Worth) and his partner, Anthony Pellecchia, finished the building, which included installing the movable, warm-colored wooden screens that give the galleries exactly the domestic feel Kahn thought appropriate to the Mellon collection.

(From: RYKWERT, JosephDeborah (2001): *Louis Kahn*. New York: Harry N. Abrams, Inc.)



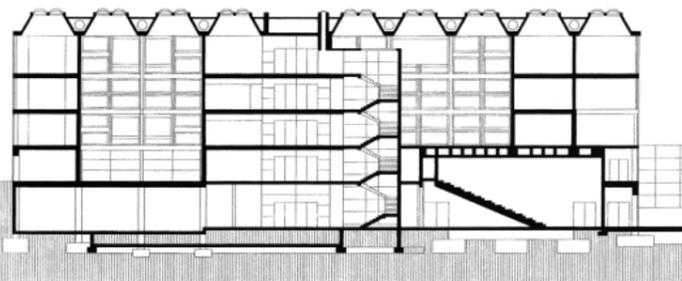
Section of Yale University Art Gallery



Upper Gallery Level Plan. Yale Center for British Art



Ground or Entry Floor Plan. Yale Center for British Art



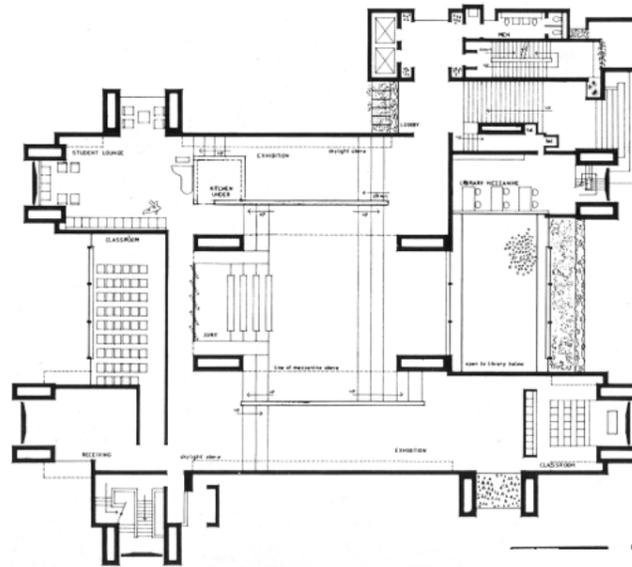
East-West Section looking South. Yale Center for British Art



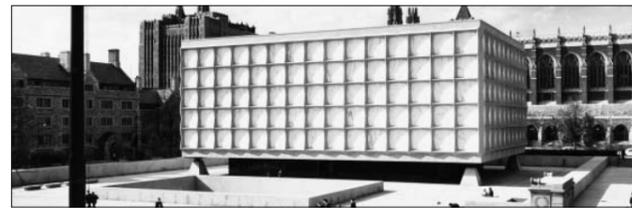
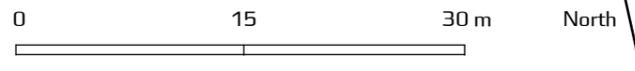
ART AND ARCHITECTURE BUILDING 180 YORK STREET, NEW HAVEN CT (1959-63) PAUL RUDOLPH

The Yale School of Art and Architecture is occupied by the graduate departments of painting, city planning, architecture, graphic design, and sculpture. Organized around four massive interior columns, its nine stories are broken into over thirty different levels. A basically open plan allows spaces to compress and explode dramatically as the heights from floor to ceiling change from seven to thirty feet. The rough, ribbed texture of the exterior walls is continued inside, where it is played against orange carpets and smooth partition walls.

(From: Metz, Don (1966): *New Architecture in New Haven*. Cambridge MA: The M.I.T Press)



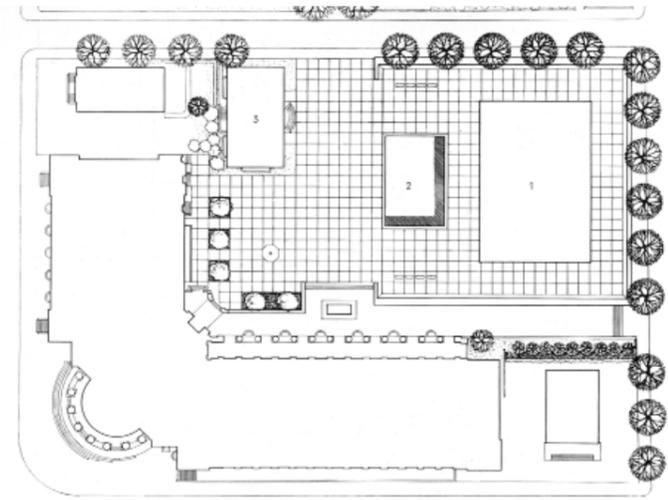
Plan. Art & Architecture building



BEINECKE RARE BOOK & MANUSCRIPT LIBRARY 121 WALL STREET, NEW HAVEN CT (1963) SOM

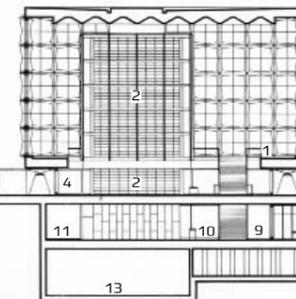
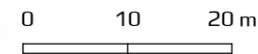
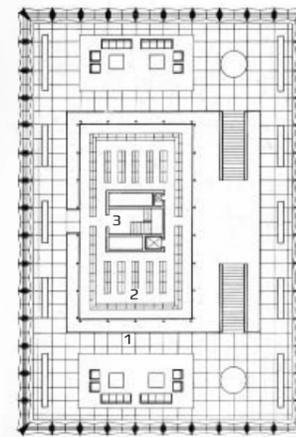
This new library building for Yale University is to house rare books, manuscripts and special book collections, and to serve as a research center. The level site, measuring 200'x350', is surrounded by existing buildings of Classical and pseudo-Gothic styles. The two components of the project are the extensive underground research center and the spacious elevated exhibition hall. A gray-tinted glass-enclosed entrance lobby is on the ground level. Two wide bronze stairs lead to the mezzanine, above which the 80'x130' hall rises 50'. The centrally located book tower is a system of stacks with a capacity for 180,000 volumes, climatically separated from the hall by a glass curtain wall, and contains illuminated shelving for display of rare editions, and a core with passenger elevators, book lifts and various other mechanical facilities. The hung ceiling is coffered. Directly beneath the stairs which lead to the mezzanine are stairs connecting the exhibition hall with the research center, with its control desk, cataloging room, librarians' and curators' offices and reading room overlooking a sculpture court. The lower level, except for a small mechanical space, is designated for book storage. The total capacity of the library will be 800,000 volumes. Apart from its functionally effective layout, this project presents an interesting structural feature. Each facade of the exhibition hall consists of a single steel truss, transmitting roof loads and its own weight to the reinforced steel girders which in turn transfer the loads through pin connections to four heavy reinforced concrete corner columns. The steel trusses, 50' high, 131' in length on the east and west elevations and 88' on the north and south elevations, consist of 8'8" prefabricated tapered steel crosses, welded together at the time of erection. Steel beams support the roof. All other columns, walls and floors are reinforced concrete.

(From: DANZ, Ernst (1962): *Architecture of SOM, 1950-62*. London: The Architectural Press)



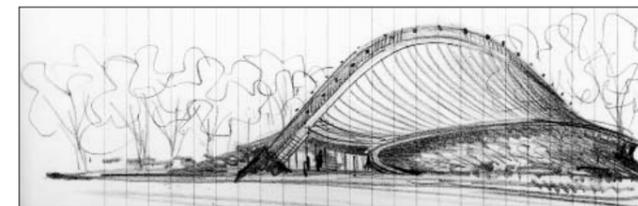
Siteplan

1: Beinecke Rare Book and Manuscript Library, 2: Sculpture Court, 3: Woodbridge Hall



Plan & Longitudinal Section

1: Mezzanine floor, 2: Book Tower, 3: Service Core, 4: Entrance Lobby, 5: Plaza, 6: Sculpture Court, 7: Reading Room, 8: Office, 9: Stair Hall, 10: Control Desk, 11: Work Area, 12: Book Storage, 13: Mechanical Equipment, 14: Cataloging Room, 15: Lounge



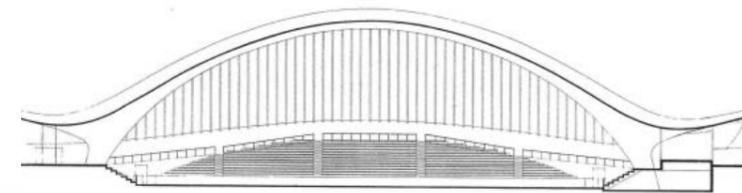
DAVID S. INGALLS HOCKEY RINK 73 SACHEN STREET, NEW HAVEN CT (1953-9) EERO SAARINEN

With the hockey rink at Yale, Saarinen entered a new phase of his design trajectory: the exploration of organic forms by taking advantage of the structural possibilities of reinforced concrete. This sports facility, one of his first long-span structures, covers an area measuring 85 by 200 feet and features a seating capacity of 3,000. His goal was to find a distinctive

architectural expression for the client's requirements. While its primary function was to host hockey games, the building also had to be flexible enough for other uses. Working closely with Fred Severud, structural engineer of the Arch of the Jefferson National Expansion Memorial, the architect outlined a sweeping roofline that offered a contrast to the typical massing of the other buildings in its immediate vicinity. An arched ridge beam in reinforced concrete with reverse curvature at its ends is set on the long side of the rink. From this concrete spine, one-inch thick transverse cables are anchored at six-foot intervals and tied at the bottom to two concrete beams of similar profile.

Shortly after Saarinen's death, his design associate Kevin Roche appeared on a documentary commemorating the work of the architect. Standing in front of the hockey rink, Roche commented, "The great lesson here is how Eero had the ability to control the line and the form. If you take a straight line in space, there is no direction, but when you bend it, it tends to get a dynamic thing. Now the great problem is how to control this and how you use it to make a building." The adventurous geometry adopted in this project will resonate later in the sculptural shells of the TWA terminal in New York. Sculptor Oliver Andrews of Santa Monica, California was the author of the lighting fixture installed at the top of one of the counter-curves, which extends the uplifting effect of the roof geometry outward and marks the main entrance. The hockey rink is still actively used for its original purpose.

(From: SERRAINO, Pierluigi (1962): *Saarinen*. Köln: Taschen)



Section & Elevation of the Hockey Rink



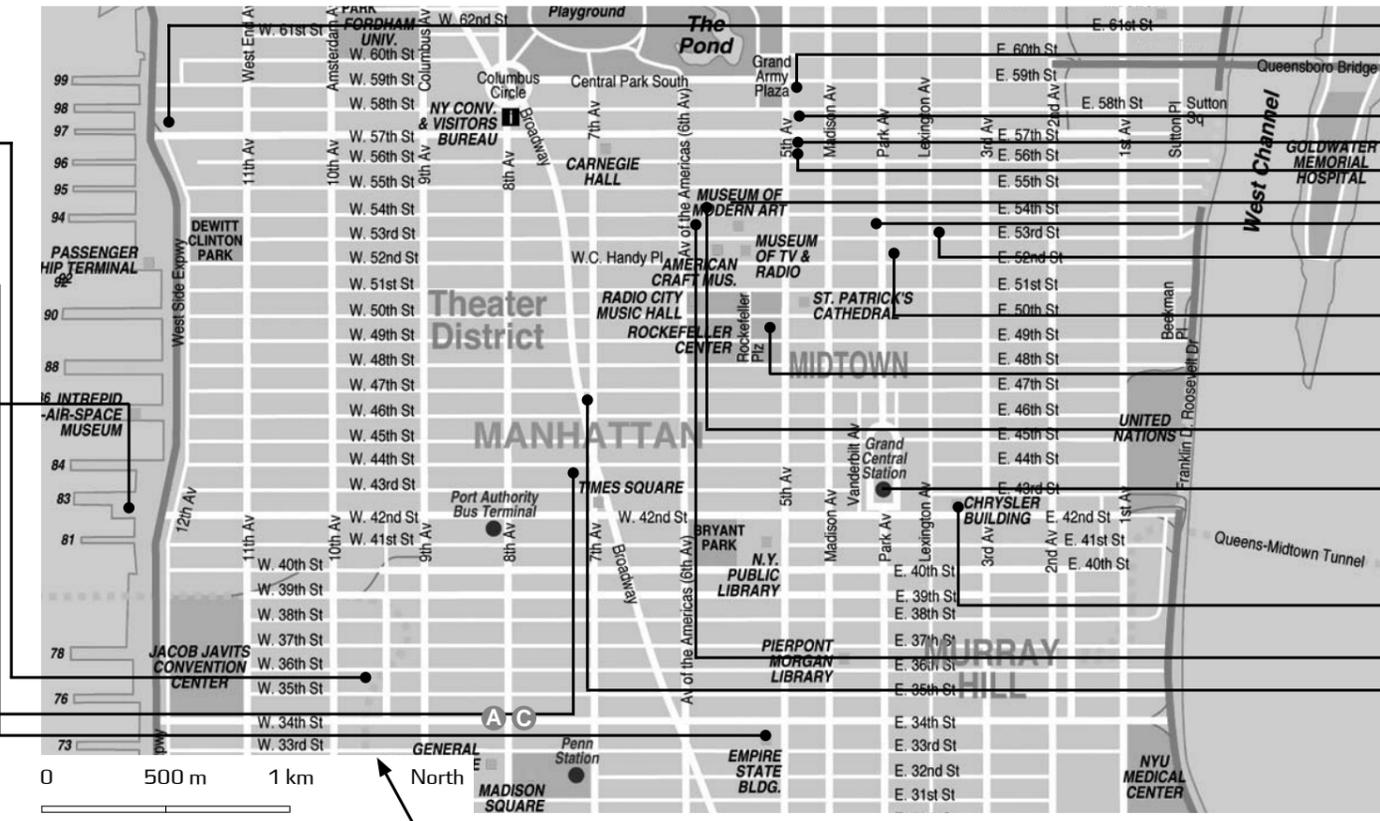
SAMUEL MORSE & EZRA STILES RESIDENTIAL COLLEGES BROADWAY & TOWER PARKWAY (1958-62) EERO SAARINEN

The first addition to Yale's residential college system since the 1930's, Morse and Stiles demonstrate a calculated respect for their neo-Gothic neighbors. Gateways, walks, and courtyards establish an effective sequence of spaces between and around the colleges. Ranging in heights from one to thirteen stories, each component of the plan maintains a consistent scale. The carefully integrated sculpture of Constantine Nivola accentuates the project's compelling, geometric quality. This quality is continued inside, where polygonal floor plans create a wide variety of residential units.

(From: Metz, Don (1966): *New Architecture in New Haven*. Cambridge MA: The M.I.T Press)

# STUDY TOUR U.S. EAST COAST 2012 WEDNESDAY MARCH 21 (1)

- 06:30: BREAKFAST START: **THE COMFORT INN MIDTOWN WEST** (40°45'19.34"N, 73°59'50.36"W) 442 West 36th St. between Ninth & Tenth Avenue, NY 10018 [www.comfortnyc.com](http://www.comfortnyc.com) (+1 (212) 714-6699)
- 08:15: DEP. **THE COMFORT INN MIDTOWN WEST**
- 08:45: MEETINGPOINT: **EMPIRE STATE BUILDING** (40°44'54.15"N, 73°59'8.58"W) 350 Fifth Avenue between 33rd & 34th Streets, NY [www.esbnyc.com](http://www.esbnyc.com)
- 10:15: DEP: **EMPIRE STATE BUILDING**
- 11:15: MEETINGPOINT: **CIRCLE LINE** (40°45'45.68"N, 74° 0'5.40"W) Pier 83 at 42nd St. [www.circleline42.com](http://www.circleline42.com)
- 11:30: CRUISE AROUND MANHATTAN: **CIRCLE LINE** (3 Hours)
- 14:30: NYC MIDTOWN ON YOUR OWN:  
**MOMA** (40°45'40.68"N, 73°58'42.91"W) 11 West 53. St. New York NY 10019 [www.moma.org](http://www.moma.org) (Museum closes at 17:30).  
**SEAGRAM BUILDING** (40°45'30.94"N, 73°58'19.80"W) 375 Park Avenue, between 52nd & 53rd Streets, NY  
**LEVER HOUSE** (40°45'33.70"N, 73°58'21.99"W) 390 Park Avenue, 53rd to 54th Streets, NY
- 20:00: GROUP DINNER AT: **CARMINE'S RESTAURANT** (40°45'26.78"N, 73°59'11.73"W) 200 West 44th St  
 ACCOMODATION: **THE GEM HOTEL MIDTOWN WEST** (40°45'20.71"N, 73°59'51.30"W) 449 W 36th St. NYC 10018 [www.thegemhotel.com/midtown](http://www.thegemhotel.com/midtown) (+1 (212) 967-7206)



- BIG BUILDING SITE**
- APPLE STORE** 767 FIFTH AVENUE (2006)
- BOHLIN CYWINSKI JACKSON**
- LOUIS VUITTON** ONE EAST 57TH ST. (2004) JUN AOKI
- TIFFANY & CO** 727 FIFTH AVENUE AT 57TH ST. (1940) CROSS & CROSS
- ARMANI** 717 FIFTH AVENUE (2009) FUKSAS
- MUSEUM OF MODERN ART**
- LEVER HOUSE**
- CITICORP** LEXINGTON AVENUE, 53RD TO 54TH STREETS (1977) HUGH STUBBINS & ASS.
- SEAGRAM. THE BRASSERIE** 100 EAST 53ST (2000) DILLER SCOFIDIO + RENFRO
- ROCKEFELLER CENTER** FIFTH TO SIXTH AVENUE, 48 & 50 STREETS (1932-40) ASS. ARCHITECTS: R. HOOD
- MUSEUM OF AMERICAN FOLK ART** 54 WEST 53RD ST. (2001) TOD WILLIAMS & BILLIE TSIEH (BUILDING IS CLOSED)
- GRAND CENTRAL TERMINAL** 42 ST AT PARK AVENUE (1913) REED, STERN, WARREN & WETMORE
- PAN AM BUILDING (NOW: METLIFE BUILDING)** 200 PARK AVENUE (1963) EMERY ROTH & SONS, P. BELLUSCHI & W. GROPIUS
- CHRYSLER BUILDING** 405 LEXINGTON AVENUE AT 42ND ST. (1930) WILLIAM VAN ALLEN
- CBS BUILDING** 51 W 52ND ST. (1960-64) EERO SAARINEN
- TKTS BOOTH** BROADWAY & 47TH ST. (2008) PERKINS EASTMAN



**EMPIRE STATE BUILDING 350 FIFTH AVENUE BETWEEN 33RD & 34TH STREETS, NY (1931) SHREVE, LAMB & HARMON**

Even before the time it was completed, in 1931, the Empire State Building has been caught in a kind of non-linear time, operating on a calendar different from the city around it. Planned, designed and started during an era of vast economic expansion, by the time the construction tape came down, only 410 days after it started, the USA had descended into its Great Depression. The ribbon-cutting ceremony was a remembrance of things in the past: political administrations had been replaced, economic conditions had changed very drastically, and the Art Deco style in which it had been fashioned was about to be challenged by others (MoMA's iconic International Style exhibition was to be staged 1 year later, in 1932).

Yet, at 102 stories, one thing was stable: its status as tallest building in New York, until the World Trade Center topped out in 1970. Once buildings get bumped from "tallest," the demotion is typically permanent, victims of advances in technology and engineering. Not so, tragically, for the Empire State Building, which seemed to defy the march of time by curiously reclaiming its status as New York's tallest on September 11, 2011 (a designation that it will soon lose again; once 1 World Trade Center is completed in 2013).

Now, once again, the building finds itself unhinged from relative time: the old, inefficient architecture becoming a vanguard of energy efficient design. A hulking structure, the Empire State Building, as so many of its contemporaries continue to be, was extravagantly wasteful, the kind of energy-intensive building that stood as a paean to the early 20th century idea of cheap resources and actions without ecological consequences. But in 2009, the Empire State Building Company, the property owner, set out to undergo a 500 million USD retrofit that would render the historic building energy efficient.

As it is well known, in the last decade, architecture, driven by

advances in environmental engineering and material science, has become remarkably more efficient, slashing the environmental burdens of construction and occupancy. The existing building stock, however, continues to rely on extensive mechanical systems to counteract inefficiencies. The conundrum: to raze these old structures in favor of new efficient that would represent a monumental environmental cost, significant financial commitment, and, in many cases, an affront to historic preservation. Property owners are now exploring the possibilities presented by retrofitting old buildings to mitigate environmental inefficiencies.

Setting out to provide a model for just how that gets done, the owners of the Empire State Building are embarking on an ambitious initiative to render the historic tower green. At the end of the process, they argue the building will be 38% more energy efficient, and it will be a replicable model for others to follow. Very nearby, for example, the U.N. Building is already underway on its own 1.9 million USD renovation, which includes an initiative to address efficiency. The curtain wall is iconic, but terribly wasteful. By replacing it with more efficient glass, the U.N. estimates the building will become 40% more energy efficient.

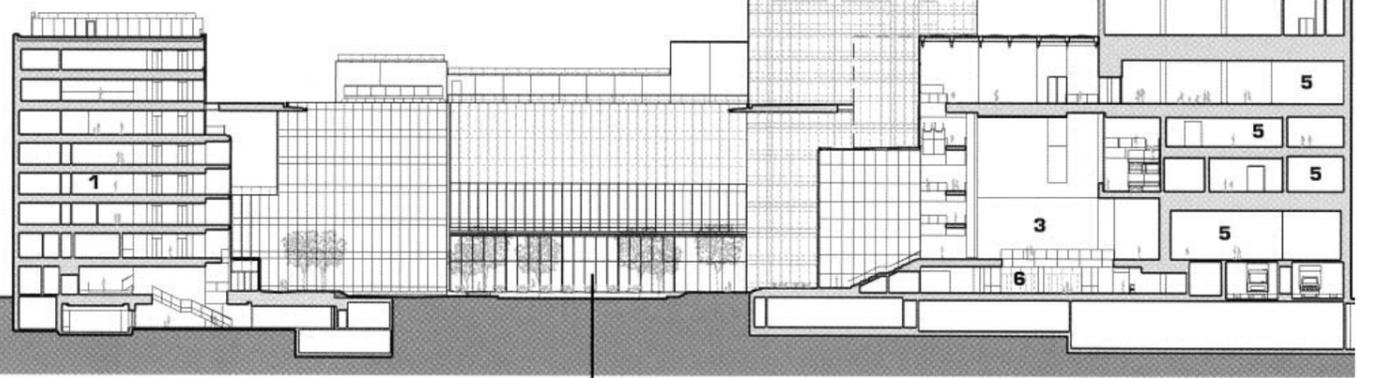
The Empire State Building's retrofit approach is tactical, addressing the most wasteful elements. The main culprit, like the U.N.: windows. The owners have refurbished the building's 6,514 windows with energy efficient alternatives, increasing the insulation value from R2 to R7. They were able to reuse 95% of the windows, adding an insulating film to minimize heat gain/loss. The owners also rebuilt the chiller plants to increase cooling efficiency while cutting operating costs. And by upgrading the Building Management System, tenants and property managers are able to tailor interior environments, which cuts wasteful energy use. "..."

For the owners, this is not simply an exercise in ethical behavior. With an estimated 4.4 million USD in estimated annual energy savings, the retrofit represents a step toward enhanced profitability. "..."

When Modernism set its agenda, at the turn of the 20th century, its utopian projections had one thing in common: a tabula rasa. By beginning with an open field, Modern architects were free to inscribe visions of the future free from context and existing conditions. The contemporary case is different. Now, architects can look to the future by building in the past. (Excerpts from: GENDAHL, John: "The Future is the past - Empire State Building Retrofit" in: a+u 2011:10 No. 493: Manhattan Grid)



**MOMA (MUSEUM OF MODERN ART) 350 FIFTH AVENUE BETWEEN 33RD & 34TH STREETS, NY 10019 (1938-9) P. S. GOODWIN & E. D. STONE (1963-7) P. JOHNSON (2001-4) Y. TANIGUCHI**



First, Third Floor Plan & East-West Section  
 1: Education building, 2: Sculpture Garden, 3: Atrium, 4: Offices, 5: Gallery, 6: Lobby, 7: Restaurant



**SEAGRAM BUILDING 375 PARK AVENUE, BETWEEN 52ND AND 53RD STREETS NEW YORK, NY (1958) LUDWIG MIES VAN DER ROHE WITH PHILIP JOHNSON**

Mies van der Rohe first gave expression to the tall building as a steel- or concrete-framed architecture of 'skin and bones' in his projects for glass skyscrapers of 1919 and 1923. In the Lake Shore Drive Apartments, completed in Chicago in 1950, he finally achieved the first definitive expression of the tower as a rectangular prism. Raising the accommodation on columns above a recessed ground floor, he used exposed steel I-beams to give rhythms to the facades and to act as 'signs' of the actual structure, which fire regulations required to be encased in concrete. With the Seagram Building, realized in collaboration with Philip Johnson, Mies deployed essentially the same system in defining an image for the prestige office building: it influenced architecture worldwide.

The client was the whisky manufacturer Joseph E. Seagram and Sons, whose president, Samuel Bronfman, had become concerned about the need for architecture to contribute to the lives of both the occupants and the city. The site, on New York's Park Avenue between 52nd and 53rd streets, was prestigious: McKim, Mead and White's neo-Renaissance Racquet and Tennis Club was directly across the avenue, and *Lever House* on the adjacent block to the north.

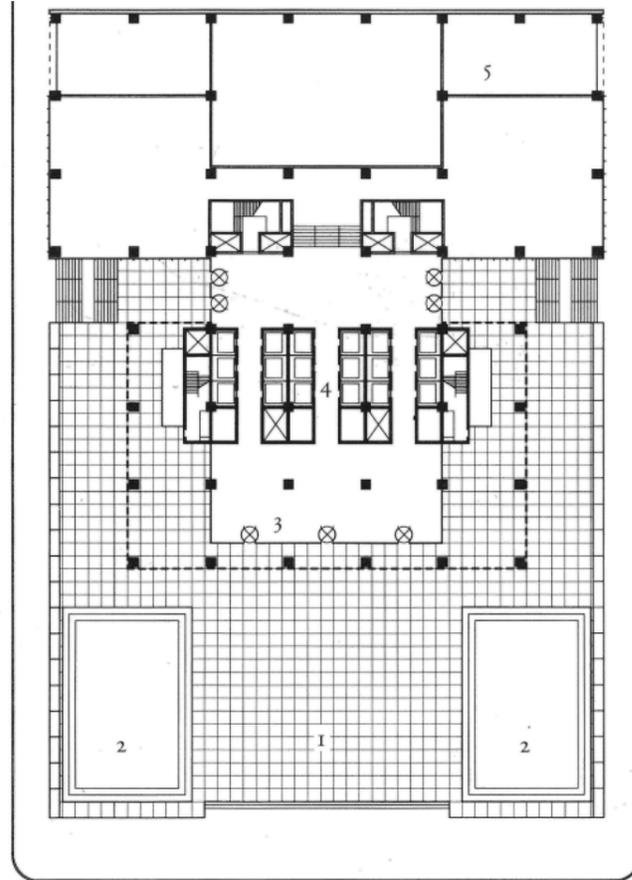
The New York City building regulations allowed a tower to occupy only 25 per cent of its site, so to set the building apart from its likely future neighbours - Park Avenue was undergoing a rapid transformation from residential to predominantly commercial uses - Mies decided to set the shaft back on all sides from the site boundaries. The tower rising sheer from an open plaza was unprecedented in New York and established a pattern that many would emulate elsewhere.

In response to the symmetrical Tennis and Racquet Club opposite, five-storey wings were added and, to meet the required area of accommodation, additional volumes were included to the rear, making the tower altogether more complex volumetrically than it first appears. The symmetry is echoed in the design of the travertine-covered plinth, with its paired rectangular pools flanked by marble sitting-ledges - a moment of cool and calm in New York that retains an extraordinary feeling of generosity.

In place of his previous palette of steel and clear glass, Mies chose bronze and amber-grey glass. As in the Lake Shore Drive apartments, the projecting I-beams emphasize the shaft's verticality and, by meeting on the corner column, visually wrap the planes around the corner. They also give the facade a density and, especially in oblique views, an opacity quite different to the far slicker skin of the curtain wall that Gordon Bunshaft used on the nearby Lever House.

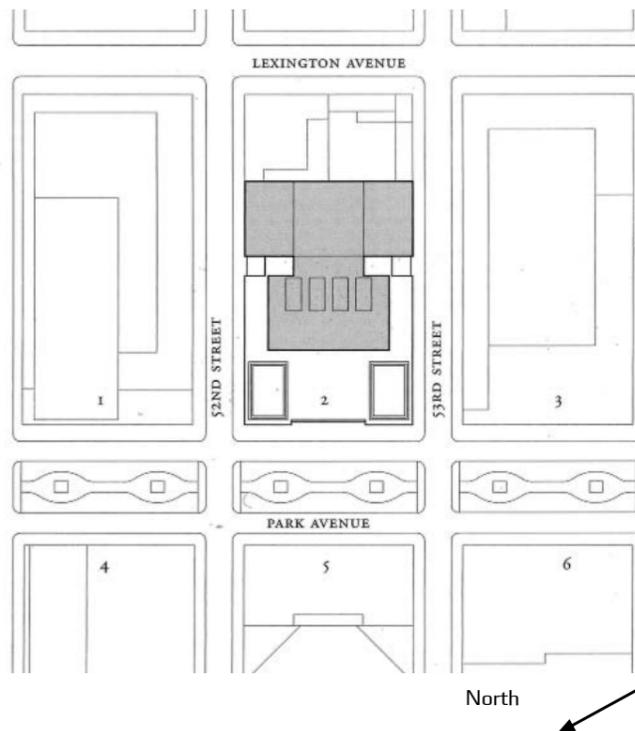
Although Mies frequently cited Augustine's aphoristic assertion that 'beauty is the splendour of truth', and believed in architecture as 'the art of building', the 'truths' he tells in the Seagram - as in all his work - are architectural rather than strictly constructional. The rectangular curtain wall has nothing to say about the diagonal wind bracing concealed within, just as its perfect, abstract form, rising sheer through 37 storeys, ignores the vastly higher loads experienced by the columns at its base. To Mies, the anonymity and abstraction achieved by the endless repetition of an identical module were apt expressions of the modern city. In the Seagram Building he pushed repetition to its limits, and achieved with it something bordering on the sublime.

(from: WESTON, R. (2004): *Plans, Sections and Elevations*. London: Laurence King Publishing)



**Ground Floor Plan**

1: Plaza, 2: Fountain, 3: Lobby, 4: Elevators, 5: Dining



**Siteplan**

1: First National City Bank (399 Park Ave.), 2: Seagram Building, 3: 345 Park Ave., 4: Lever House (390 Park Ave.), 5: Raquet and Tennis Club (370 Park Ave.) McKim Mead & White 1918, 6: Manufacturers Hannover Bank Building (350 Park Ave.)



**LEVER HOUSE 390 PARK AVENUE, 53RD TO 54TH STREETS NEW YORK, NY (1950-2) GORDON BUNSHAFT OF SKIDMORE, OWINGS AND MERRILL (SOM)**

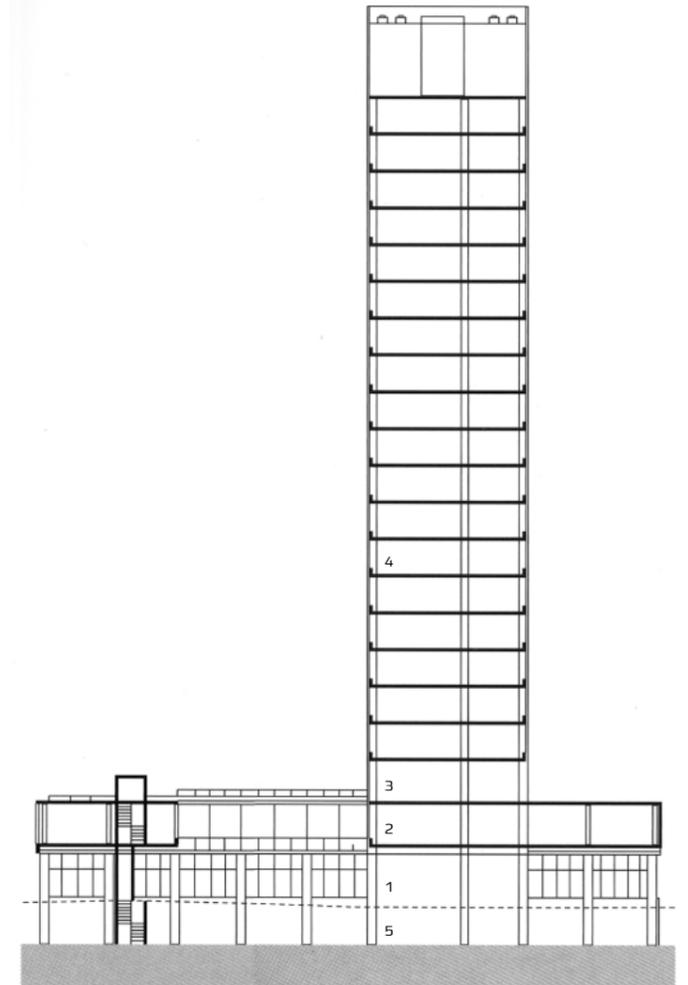
Founded in Chicago in 1936 by Louis Skidmore and Nathaniel Owings, the firm of Skidmore, Owings and Merrill (SOM) pioneered teamwork principles and introduced many other ideas from American business methods that were to transform the practice of architecture. It would eventually become the largest firm of architects in the world, and a key figure in this irresistible rise was Gordon Bunshaft, who joined the firm as partner in charge of design in 1945. Bunshaft's most influential single project was this, for Lever House on New York's Park Avenue - diagonally across from the site where Mies van der Rohe would later build the *Seagram Building*.

Lever House consists of two elements, a 21-storey office tower and a two-storey podium building raised on columns and crowned by a roof garden. The podium building was a rectangular donut of offices wrapped around an open court, and both this and the space under the narrow band of elevated accommodation doubled as a protected public open space and a quiet, dignified forecourt for the company's corporate headquarters. Although the columns that support the tower necessarily pass through the podium, visually they appear to spring from the roof garden, as if it were an elevated ground level. As in Mies van der Rohe's residential towers at 860-880 Lake Shore Drive, Chicago, and at the later Seagram Building, the columns at the base of the tower are exposed, with the glazing to the lobbies set back behind them. A cafeteria and restaurant were also provided at this level.

By setting the structural steel frame of the tower back slightly from the building edge, the whole exterior could be wrapped with a uniform curtain wall of glass. Tinted green to reduce the air-conditioning load due to solar gains, the transparent glass viewing panels and opaque spandrels - which hint at the floor levels - effectively conceal the internal arrangement of the building, maintaining visual and, implicitly, 'corporate' unity while allowing a high degree of flexibility in the subdivision of the floors. The two-storey-high plant-room that crowns the building is subtly differentiated by a change in the glazing pattern, and due to the relatively small footprint of the tower, the service core is kept at one end of the floorplates rather than in the middle, with an additional fire escape positioned to meet the regulations.

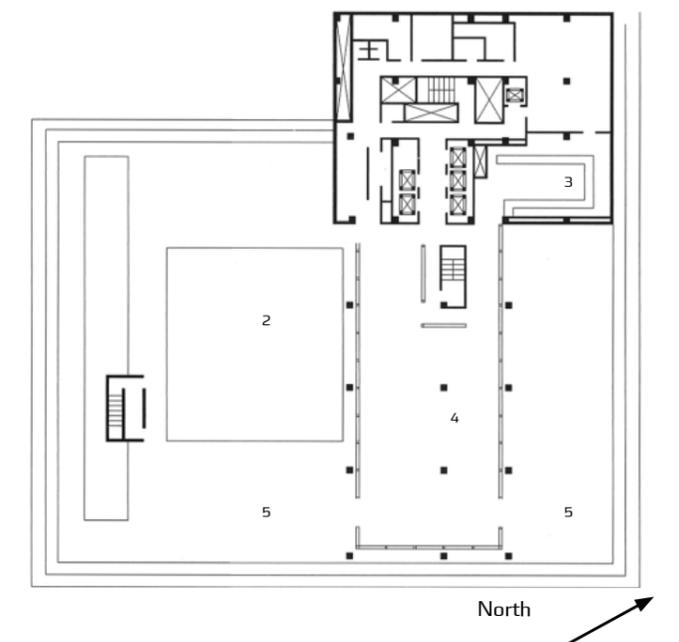
The tower-and-podium configuration and light curtain wall deployed for Lever House were emulated worldwide, and eventually such buildings came to epitomize the shortcomings of international corporate architecture - not least its refusal to make any but the most token concessions to local climate, let alone culture. This should not, however, detract from Bunshaft's achievement. The tower-and-podium form had partial antecedents in Le Corbusier's Swiss Pavilion and in Howe and Lescaze's PSFS building in Philadelphia, but as an urban strategy Lever House was new. Similarly the feeling of weightlessness and dematerialization Bunshaft achieved - all the more striking then amidst New York's ponderous, stone-clad 'stepback' skyscrapers - was the fulfilment of a century-old dream about a glass architecture for the new age, a carefully calculated result of the combination of wonderfully slender mullions, which appear as no more than lines externally, and the shimmering surface of the semi-reflective glass.

(from: WESTON, R. (2004): *Plans, Sections and Elevations*. London: Laurence King Publishing)



**Section**

1. Entrance floor, 2. First level, 3. Second level, 4. Office floors, 5. Basement floor



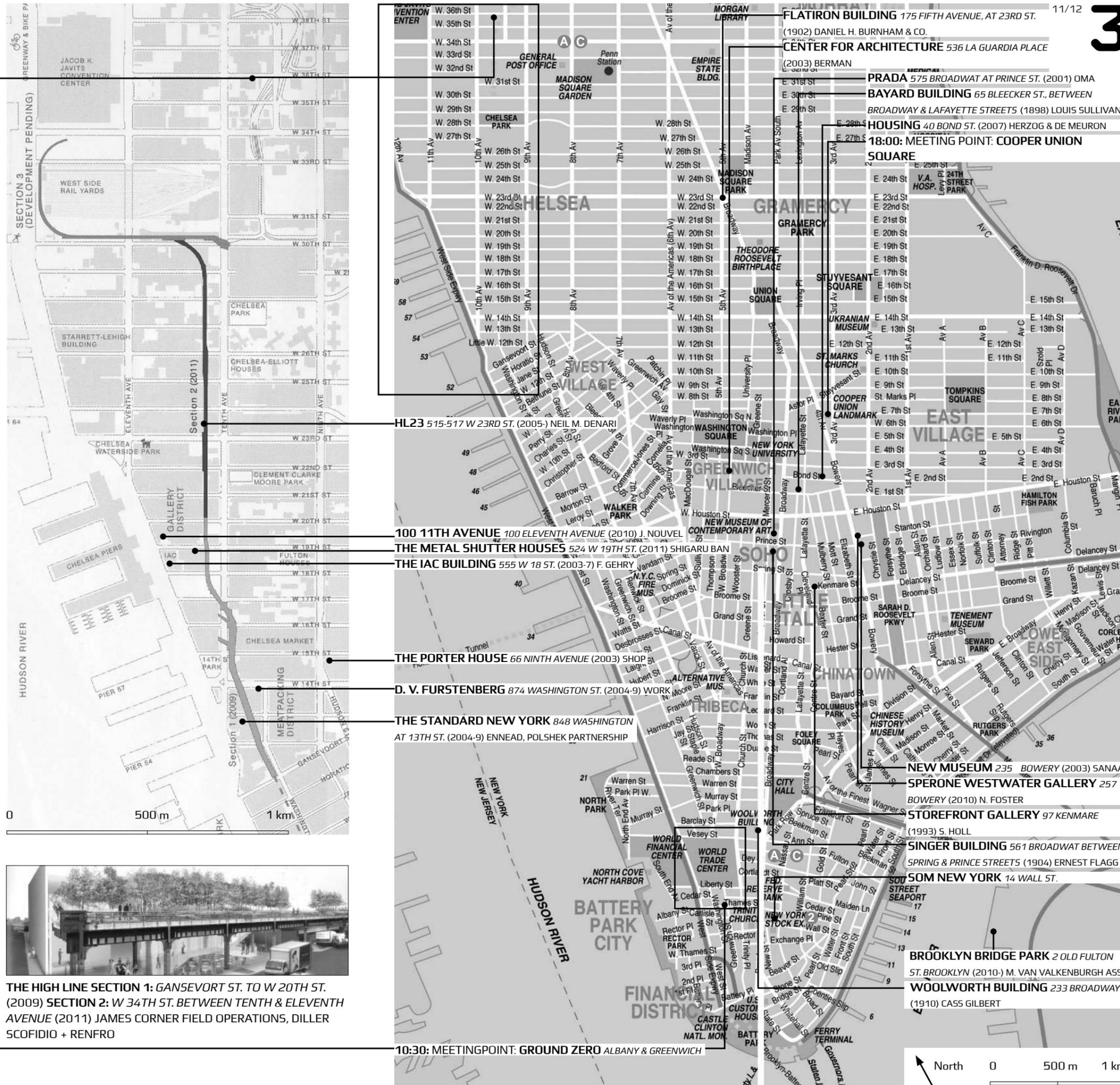
**Second Floor Plan**

1. Kitchen, 2. Open Court, 3. Cafeteria, 4. Dining Room, 5. Roof Garden

# STUDY TOUR U.S. EAST COAST 2012

## THURSDAY MARCH 22 (1)

- 06:30: BREAKFAST START: **THE COMFORT INN MIDTOWN WEST** (40°45'19.34"N, 73°59'50.36"W) 442 West 36th St. between Ninth & Tenth Avenue, NY 10018 [www.comfortnyc.com](http://www.comfortnyc.com) (+1 (212) 714-6699)
- 09:30: DEP. **THE COMFORT INN MIDTOWN WEST** **A** OR **C** FROM Penn Station TO Fulton St.
- 10:30: MEETING POINT: **GROUND ZERO** (40°44'22.15"N, 74°0'29.75"W) Corner of Albany St. & Greenwich St. [www.911memorial.org](http://www.911memorial.org)
- GUIDED TOUR: **GROUND ZERO**
- 11:30: NYC DOWNTOWN ON YOUR OWN:  
**HIGH LINE** (40°44'22.15"N, 74°0'29.75"W)
- 18:00: MEETING POINT: **COOPER UNION** (40°43'42.75"N, 73°59'25.39"W) 41 Cooper Square  
**NEW MUSEUM** (40°43'20.48"N, 73°59'34.81"W) 235 Bowery. [www.newmuseum.org](http://www.newmuseum.org) Museum closes at 21:00. Free entrance: 19:00-21:00  
ACCOMODATION: **THE GEM HOTEL MIDTOWN WEST** (40°45'20.71"N, 73°59'51.30"W) 449 W 36th St. NYC 10018 [www.thegemhotel.com/midtown](http://www.thegemhotel.com/midtown) (+1 (212) 967-7206)



- GROUND ZERO, WORLD TRADE CENTER (WTC)**  
BETWEEN CHURCH, VESEY, WEST AND LIBERTY STREETS
1. ONE WTC: SKIDMORE, OWINGS & MERRILL,
  2. TWO WTC: FOSTER AND PARTNERS,
  3. THREE WTC: ROGERS STIRLC HARBOUR + PARTNERS,
  4. FOUR WTC: FUMIHILCO MAKI + MAKI AND ASSOCIATION,
  5. FIVE WTC: KOHN YEDCRSEN FOX,
  6. TRANSPORTATION HUB: SANTIAGO CALATRAVA,
  7. SEVEN WTC: SKIDMORE, OWINGS AND MERRILL (SOM),
  8. NATIONAL SEPTEMBER 11 MEMORIAL & MUSEUM: M. ARAD, P. WALKER AND PARTNERS, D. B. BOND, SNØHETTA

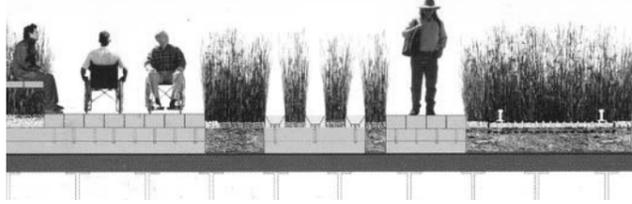


**THE HIGH LINE SECTION 1: GANSEVORT ST. TO W 20TH ST.** (2009) SECTION 2: W 34TH ST. BETWEEN TENTH & ELEVENTH AVENUE (2011) JAMES CORNER FIELD OPERATIONS, DILLER SCOFIDIO + RENFRO

10:30: MEETINGPOINT: GROUND ZERO ALBANY & GREENWICH

# STUDY TOUR U.S. EAST COAST 2012 THURSDAY MARCH 22 (2)

## THE HIGH LINE CONTIUNED:



### Background information:

The High Line is a 1.2-mile long abandoned elevated freight rail line along the west side of lower Manhattan. This 5.9 acre stretch of open space spans 20 city blocks in between and through buildings from Gansevoort Street, through the meat packing district and West Chelsea, up to 30th Street, ending at the Hudson Rail Yards. The High Line was built in the 1930s as part of the larger West Side Improvement Project, funded by the City and State of New York and the New York Central Railroad, to eliminate dangerous street-level railroad crossings. The existing substrate consists primarily of rock ballast, railroad ties, steel rails and reinforced concrete. Over the past 24 years since the last train ran on the High Line in 1980, a thin layer of soil has formed in some areas and an opportunistic landscape of early successional species has begun to grow.

### Statement:

Agri-Tecture is inspired by the melancholic, 'found' beauty of the High Line, where nature has reclaimed a once-vital piece of urban infrastructure. The design team aims to re-fit this industrial conveyance into a post-industrial instrument of leisure.

By changing the rules of engagement between plant life and pedestrians, our strategy of agri-ecture combines organic and building materials into a blend of changing proportions that accommodates the wild, the cultivated, the intimate, and the hyper-social. In stark contrast to the speed of Hudson River Park, the singular linear experience of the new High Line landscape is marked by slowness, distraction and an other-worldliness that preserves the strange, wild character of the High Line. Providing flexibility and responsiveness to the changing needs, opportunities, and desires of the dynamic context, our proposal is designed to remain perpetually unfinished, sustaining emergent growth and change over time.

(from: A+T 25, spring 2005: in common Portugal: a+t ediciones)

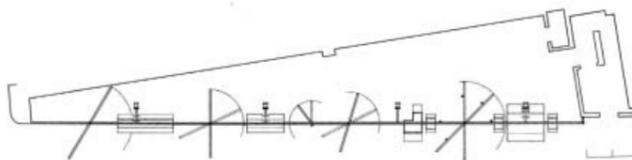


**STOREFRONT GALLERY 97 KENMARE ST. (1993) S. HOLL**

CONCEPT: Inside becomes outside, interior meshes with the city in revolving panels and doors.

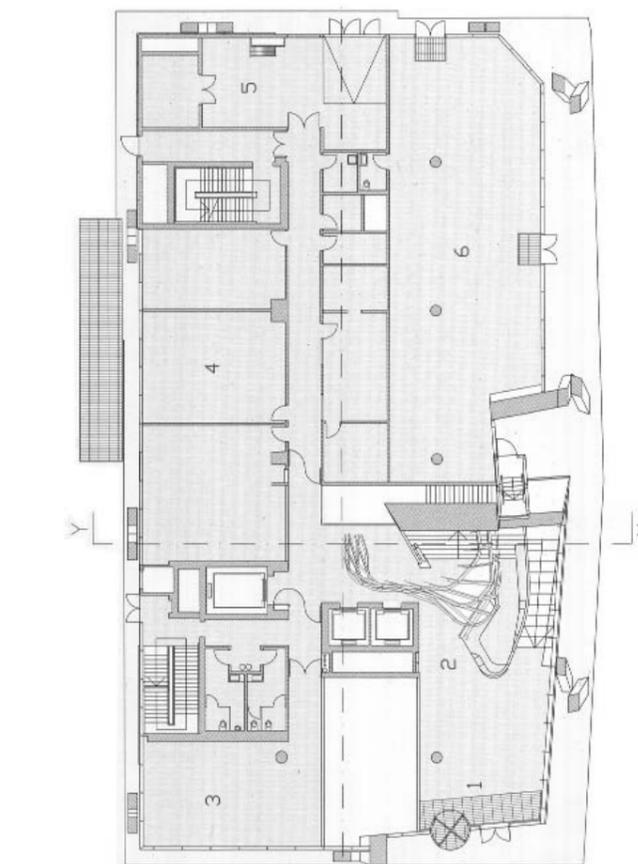
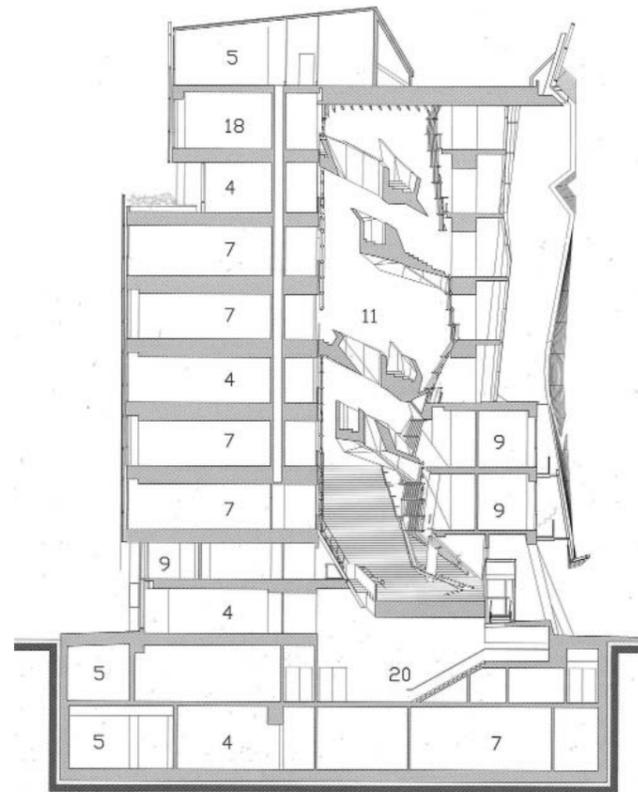
(From: HOLL, S.; PALLASMAA, J. & PÉREZ-GÓMEZ, A. (1994): "Questions of Perception".

Tokyo: A+U Publishing)



Plan

0 5 10 m



North 0 10 20 m

### Section & Ground Floor Plan

- 1: Entrance, 2: Lobby, 3: Multipurpose Room, 4: Classroom, 5: Plant Room, 6: Retail, 7: Laboratory, 8: Student Activities Space, 9: Office, 10: Lounge, 11: Full Height Atrium, 12: Computer Service, 13: Green Roof, 14: Terrace, 15: Gallery, 16: Auditorium, 17: Individual Student Workspace, 18: Art Studios, 19: Storage, 20: Foyer



**COOPER UNION ACADEMIC BUILDING 41 COOPER SQUARE (2009) MORPHOSIS**

The new academic facility is conceived as a stacked vertical piazza, contained within a semitransparent envelope that articulates the classroom and laboratory spaces. The vertical campus is organized around a central atrium that rises to the full height of the building. This connective volume, spanned by sky bridges, opens up view corridors across Third Avenue to the Foundation Building.

The interior space configuration encourages interconnection among the school's engineering, art, and architecture departments. All institutional amenities—including meeting rooms, social space, seminar rooms, wireless hubs, restrooms, and phones—are located in the fourth and seventh-story sky lobbies that surround the atrium. The skip-stop elevator system makes trips exclusively to the fourth and seventh floors, drawing occupants to use, and congregate on, the grand stair; in practice, 50 percent of people will use the stairs as their sole means of circulation. These key social spaces for students, faculty, and visitors become the places where education informally takes place.

The building's physical and visual permeability helps integrate the college into its neighborhood. At street level, the transparent facade invites the neighborhood to observe and to take part in the intensity of activity contained within. Many of the public functions (including retail space and a lobby exhibition gallery) are located at ground level, and a second gallery and a two-hundred-seat auditorium are easily accessible from the street.

The open, accessible building is exemplary as sustainable, energy-efficient architecture. A steel-and-glass skin improves the building's performance through control of daylight, energy use, and selective natural ventilation. The double skin system allows for heightened performance and dynamic composition on several levels: the operable panels create a continually moving pattern, provide surface variety on the facade, reduce the influx of heat radiation during the summer, and give users control over their interior environment and views to the outside.

(from: GA DOCUMENT 91 (2006) Japan: Dai Nippon Printing Co.)

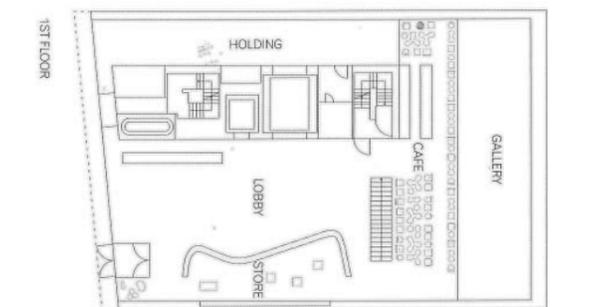
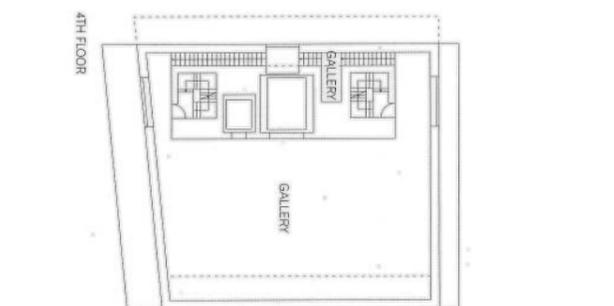
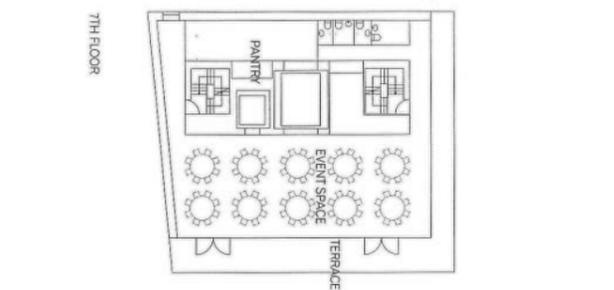
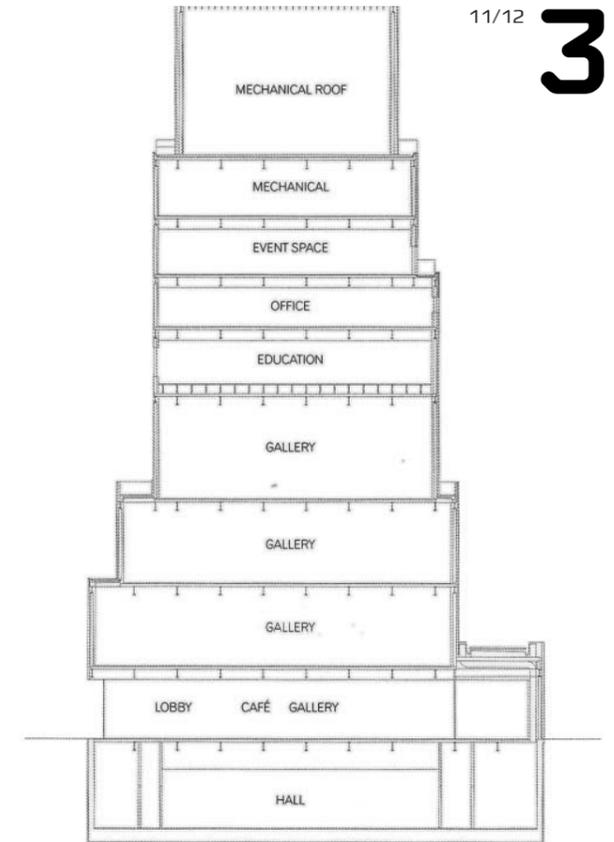


**NEW MUSEUM OF CONTEMPORARY ART 235 BOWERY, NEW YORK, NY 10002 (2003) SANAA**

An ideal museum might be a collection of well proportioned exhibition spaces, with a free circulation space connecting these. Stacking museum spaces in the dense urban setting of Downtown Manhattan would easily lead to an introverted mass. By shifting the volumes in relation to each other we can open the building up and the museum starts to interact with its surroundings. The shifting allows for skylights, views, openness and variation, while maximizing museum wall space and keeping the envelope within the zoning regulations.

For each floor the proportions and the daylight conditions will show variation, emphasized by the differing spatial relations between the core and the envelope.

(from: El Croquis 121/122 (2004) SANAA, Kazuyo Sejima, Ryue Nishizawa. Madrid)



Section, Seventh, Forth & Ground Floor Plan

0 10 20 m

# STUDY TOUR U.S. EAST COAST 2012 FRIDAY MARCH 23 (1)

- 06:30:** BREAKFAST START: **THE COMFORT INN MIDTOWN WEST** (40°45'19.34"N, 73°59'50.36"W) 442 West 36th St. between Ninth & Tenth Avenue, NY 10018 [www.comfortnyc.com](http://www.comfortnyc.com) (+1 (212) 714-6699)
- 09:00:** DEP. **THE COMFORT INN MIDTOWN WEST**  
A OR C FROM Penn Station TO Fulton St.
- 10:00:** VISIT AT: **THE ARCHITECTS OFFICE: SKIDMORE, OWINGS AND MERRILL (SOM)** (40°42'27.73"N, 74° 0'41.42"W) 14 Wall St. [www.som.com](http://www.som.com)  
2 FROM Wall St. TO 66 St., Lincoln Center
- 12:30:** MEETING POINT: **LINCOLN CENTER** (40°46'23.04"N, 73°58'57.09"W) Corner of Broadway & 65th St. [lc.lincolncenter.org](http://lc.lincolncenter.org)  
GUIDED TOUR: **LINCOLN CENTER**  
1 FROM 66 St., Lincoln Center TO 116 St., Columbia
- 14:30:** MEETING POINT: **COLOMBIA UNIVERSITY** (40°48'27.14"N, 73°57'44.36"W) College Walk
- 15:30:** NYC UPTOWN ON YOUR OWN:  
**GUGGENHEIM MUSEUM** (40°46'59.10"N, 73°57'32.84"W) 1071 Fifth Avenue, between 88th & 89th Streets. [www.guggenheim.org](http://www.guggenheim.org) Museum closes at 17:45.  
**WHITNEY MUSEUM OF AMERICAN ART** (40°46'24.45"N, 73°57'49.97"W) 945 Madison Avenue at 75th St. [www.whitney.org](http://www.whitney.org) Museum closes at 21:00. Pay what you wish: 18:00-21:00  
ACCOMODATION: **THE GEM HOTEL MIDTOWN WEST** (40°45'20.71"N, 73°59'51.30"W) 449 W 36th St. NYC 10018 [www.thegemhotel.com/midtown](http://www.thegemhotel.com/midtown) (+1 (212) 967-7206)



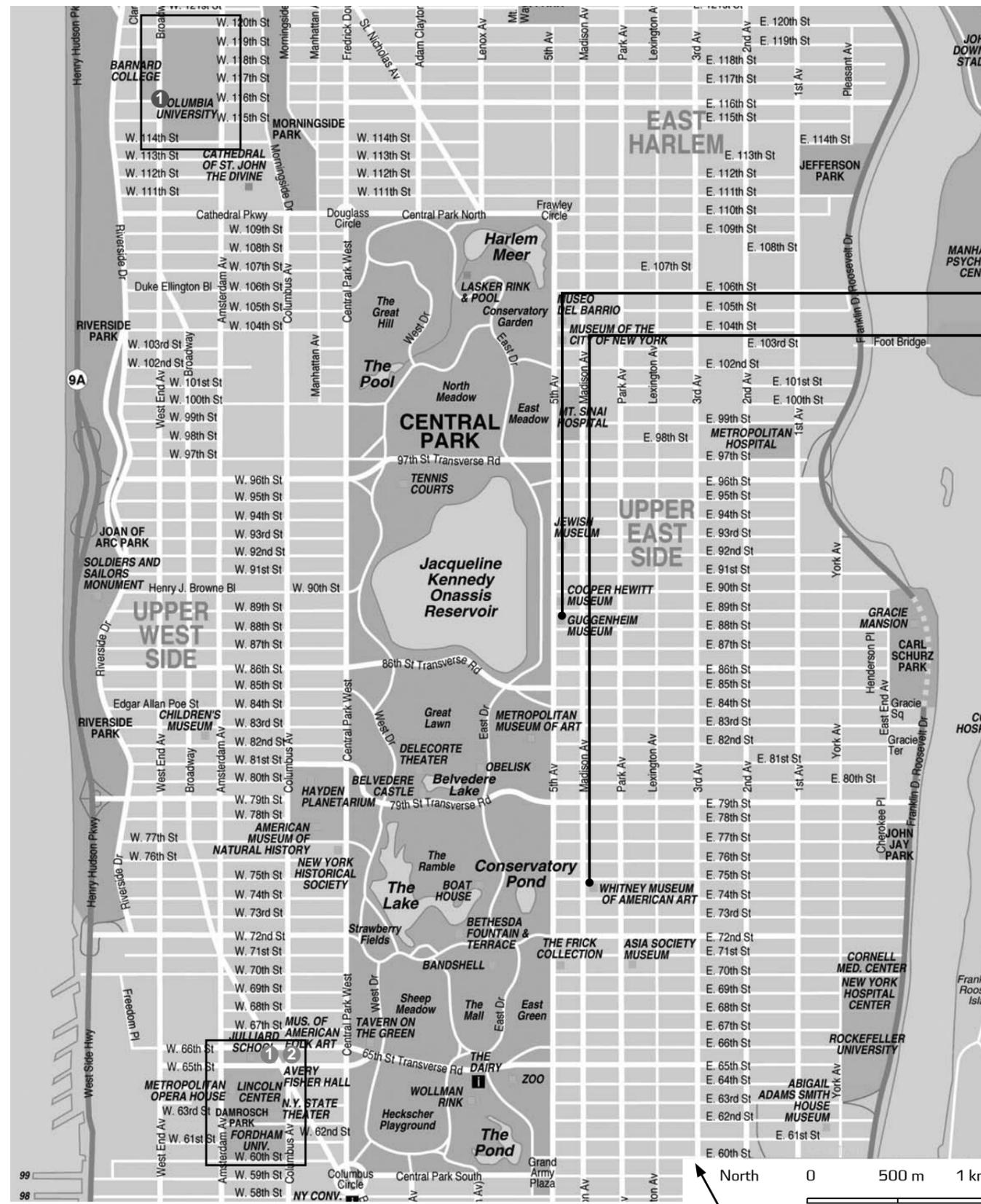
**LINCOLN CENTER FOR THE PERFORMING ARTS BROADWAY TO AMSTERDAM AVENUE, 62 TO 66TH STREETS**

Once derided as an urban mistake, an "Acropolis for the cultural elite," and the embodiment of "Monumental Modernism," a term normally applied to fascist architecture, Lincoln Center has become a valued icon inextricably linked with New York City. The ensemble of buildings and public spaces that constitute the cultural campus are the product of a group of prominent architects, "... After unfortunate renovations in the 1980s and 1990s, and poor maintenance since its inception, Lincoln Center is undergoing a large scale multi-phase makeover." "... Rather than transforming the identity of Lincoln Center, our aim is "to make Lincoln Center more Lincoln Center than Lincoln Center," that is, to amplify its most successful attributes while teasing out its unrealized potential. The architectural challenge has been to interpret the genetic code of the architecture into a language that can speak to a diverse audience after several generations of cultural and political change. The project aims to turn the campus inside-out by extending the spectacle within the performance halls into the mute public spaces between the halls and beyond into the surrounding streets.

Some of the new architectural strategies include a ceremonial new entrance at Columbus Avenue produced by the depression of an existing drop-off road shield by a floating electronic grand stair, a floating parabolic lawn that roofs over a 250-seat glass pavilion restaurant on the North Plaza, an architectural strip-tease that exposes theaters and activities buried behind opaque travertine-clad street walls of Juilliard, and the integration of smart technologies with traditional building materials to deliver information throughout the campus. The range of the project's scale requires an effort that dissolves boundaries between urban

planning, architecture, and landscape design and information design. The largest single part of the project is a 45,000-square-foot expansion and 50,000-square-foot renovation of The Juilliard School includes new jazz and dance studios, classrooms, practice rooms, a black box theater, and an orchestra rehearsal, a new entrance lobby and box office, administrative offices, a bookstore, lounges, a library expansion, and a scholar reading room for rare musical manuscripts. While in a new idiom, the language of the expansion interprets the DNA of the original building designed by Pietro Belluschi in the early 1960s. The top three teaching floors are extruded and cantilevered into Broadway.

(Excerpts From: MEDVEDOW, Jill (2011): *Diller Scofidio + Renfro*. Barcelona: Poligrafia)

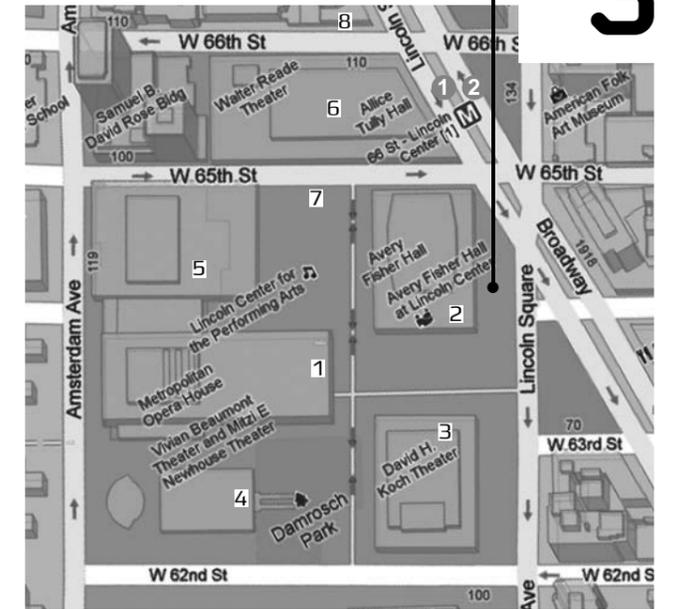


- 1. MASTERPLAN & METROPOLITAN OPERA HOUSE** (1966) WALLACE K. HARRISON.
- 2. AVERY FISCHER HALL** (1962) MAX ABRAHAMOVITZ.
- 3. DAVID H. KOCH THEATER** (1964) PHILIP JOHNSON.
- 4. VIVIAN BEAUMONT THEATER** (1965) EERO SAARINEN.
- 5. LIBRARY & MUSEUM OF THE PERFORMING ARTS** (1965) GORDON BUNSHAFT OF SOM.
- 6. JULLIARD SCHOOL OF MUSIC & ALICE TULLY HALL** (1968) PIETRO BELLUSCHI WITH E. CATALANO AND WESTERMANN & MILLER.
- RENOVATION** (2009) DILLER SCOFIDIO + RENFRO.
- 7. HYPAR PAVILION RESTAURANT** (2010) DILLER SCOFIDIO + RENFRO.

12:30: MEETING POINT: LINCOLN CENTER

11/12

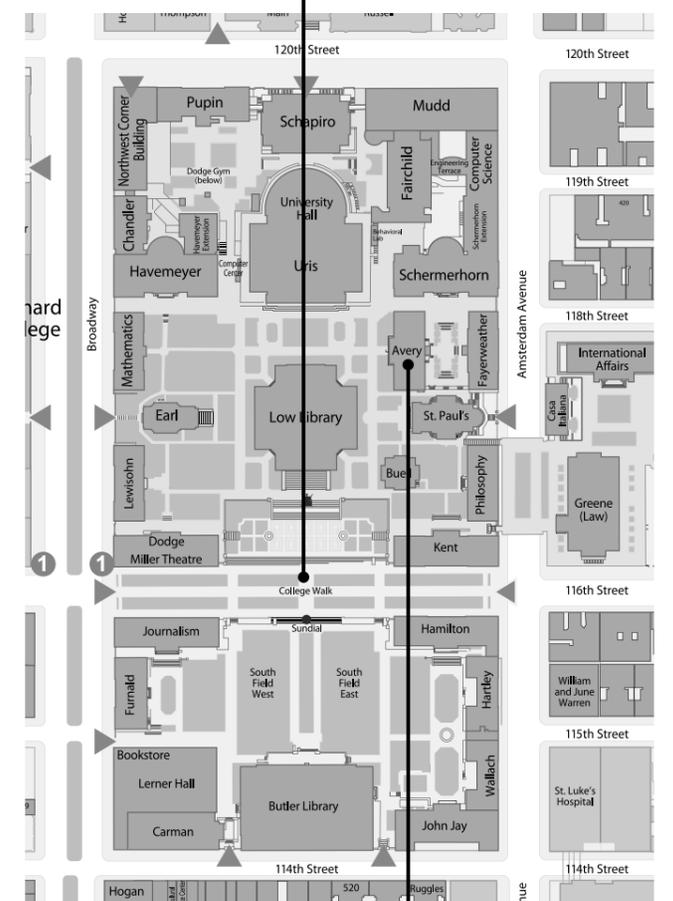
3



8. **DICHOIC LIGHT FIELD** 101 W 67TH ST. (1995) JAMES CARPENTER

**GUGGENHEIM MUSEUM** 1071 FIFTH AVENUE, BETWEEN 88TH & 89TH STREETS  
**WHITNEY MUSEUM OF AMERICAN ART** 945 MADISON AVENUE, AT 75TH ST.

14:30: MEETING POINT: COLOMBIA UNIVERSITY



**GRADUATE SCHOOL OF ARCHITECTURE, PLANNING AND PRESERVATION. COLOMBIA UNIVERSITY**

0 100 200 m

0 500 m 1 km



**WHITNEY MUSEUM OF AMERICAN ART 945 MADISON AVENUE, AT 75TH ST., NEW YORK NY 10021 (1964-6) MARCEL BREUER WITH HAMILTON SMITH**

In July 1963, Breuer agreed to design a new building for the Whitney Museum of American Art, a replacement almost twice the size of its former building, which had been sold to the Museum of Modern Art. His casual pen-and-ink sketch for the west facade, with its irregular projecting window, appeared on the reverse of a note of November 7 from Louis Kahn. A presentation of the design to the clients took place on November 12.

The cubo-projective and terraced profile of the building—an ingenious way to provide large gallery floors on a small footprint went back to 1920s Europe, to Breuer's first awareness of modern architecture in the cubic arrangements of the Adolf Loos buildings he saw in Vienna in 1920 and to his own design for the Elberfeld hospital (1929), with its overhanging cantilevers. Frank Lloyd Wright's nearby Guggenheim Museum also must have been in Breuer's mind when he designed a top-heavy tapering form fronted by a moat. The cornerstone ceremony took place on October 20, 1964; Breuer was in Europe and was represented in New York by Hamilton Smith. The new museum, Breuer's only building in Manhattan, opened on September 27, 1966.

Lower than many of its near neighbors, the Whitney is a bold, beetle-browed, Cyclopean building with three progressively extended overhangs above the base. It reaches its height not by rising from grade but by sinking below it, carving out space for a double-story sculpture court. Because of the drop, the building's height does not cut off light to structures to the east and west. The museum's modest scale was one way that Breuer respected site and context; another was the privacy given both to the Whitney's visitors and to its residential neighbors by including only a few windows. Not needed for light or ventilation, the seven windows of varied size and seemingly random location still give the comfort of orientation and awareness of the outside by framing urban vistas.

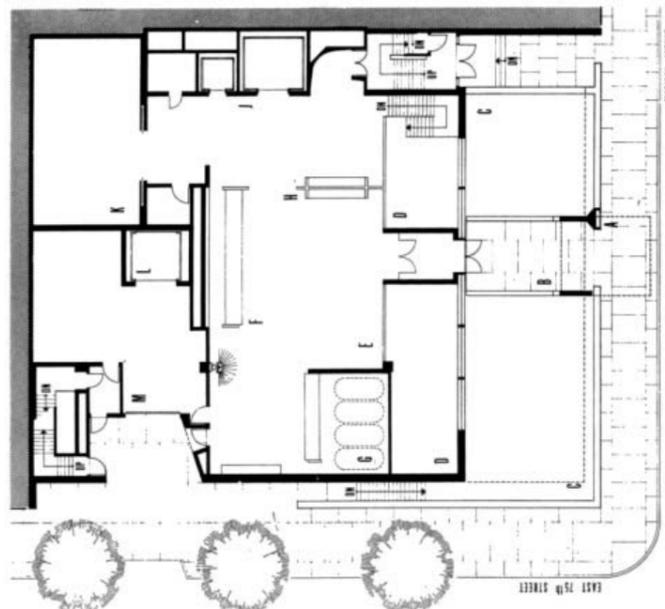
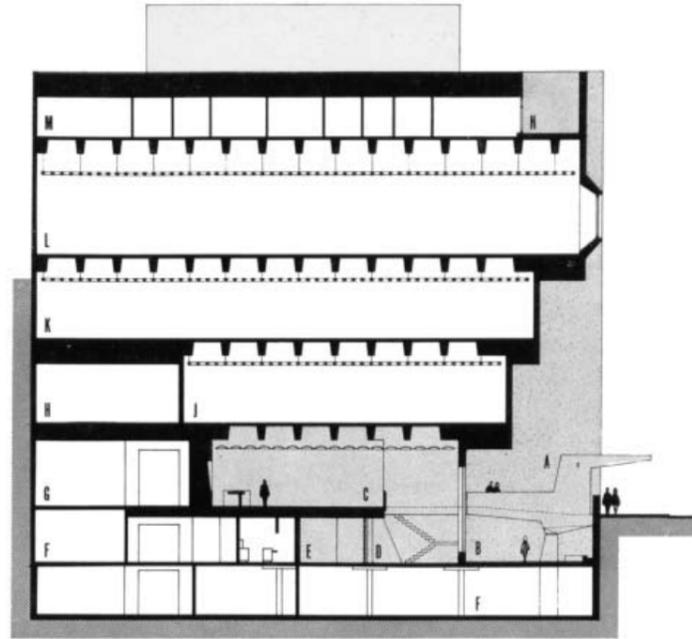
The treatment of the corner is one of Breuer's most humane achievements. Without compromising the abstract language of his design, he solved the dilemma of building on a narrow Manhattan cross street by opening the corner with the triadic sequence of projections instead of closing it with a full wall. Separated from adjacent buildings to the south and east by thin concrete slabs, the building is linked to the south slab by a windowed stair recessed from the facade plane.

Inside, the impression of a huge volume of expansive space in the lobby is repeated in the immense size of the passenger elevator, which was originally painted bright, primary blue ("Breuer blue"). The floor area needed was six or seven times greater than the site, leading Breuer to design galleries on five levels, which produced a net gallery area of almost 30,000 square feet. The gallery height of 12 feet, 9 inches (in the top gallery, 17 feet, 6 inches) accommodated the largest paintings of that period. Uninterrupted by piers or beams, galleries are covered by a precast-concrete grid ceiling suspended from the structure and holding movable lighting strips as well as tracks for floor-to-ceiling partitions. Offices and a conference room on the two top floors, hidden from the street by a slope at the top of the facade, were arranged around a library and opened through glass walls to adjacent terraces with high parapets.

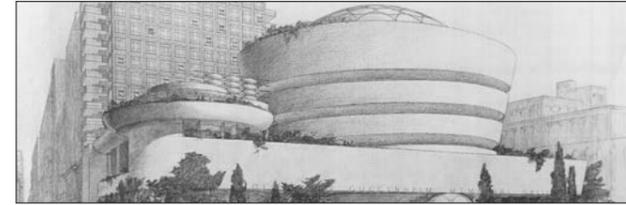
Alluding metaphorically to a moat spanned by a covered bridge (perhaps to the American vernacular covered bridge), Breuer set back the glass-walled facade of the entrance lobby so that it is reached after crossing over the sunken sculpture court. An earlier version of the facade preserved in a rendering did not include the canopy at the entrance to

this bridge. The moat and bridge are concrete, as are the bearing walls. Upper facade and flanks are sheathed with granite, a material Breuer considered "durable and serene," in a shade of gray that is a restraining factor in the visual impact of the building on the neighborhood.

(Excerpts from: XXXX, Xxx (Lxxx): Xxxx Xxxx. Xxx: Xxxx)



Section & Ground Floor Plan

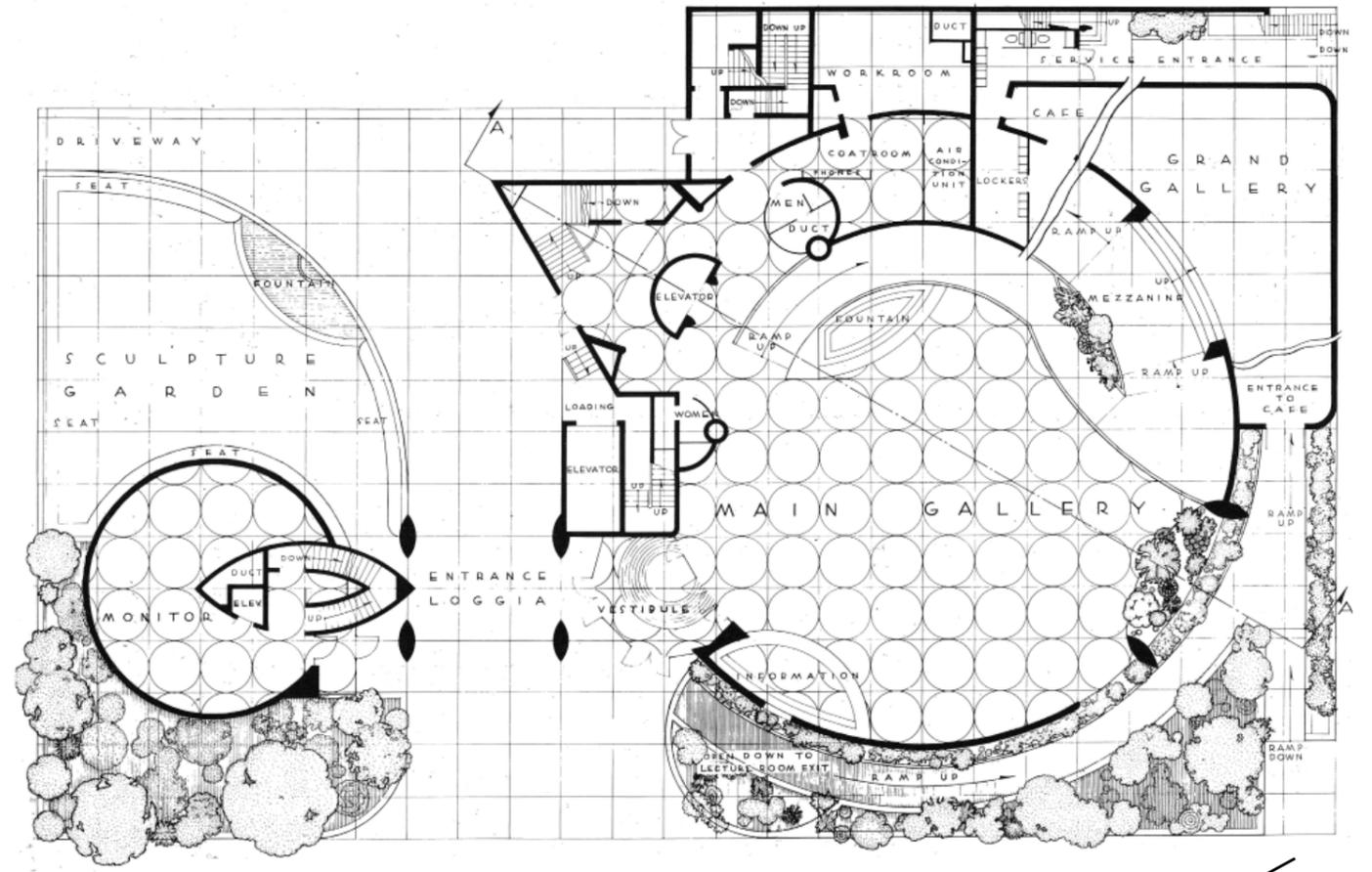
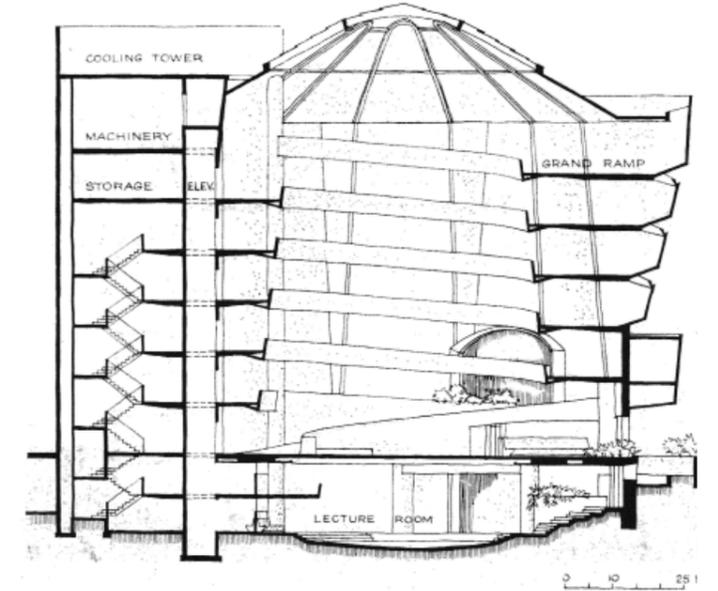


**GUGGENHEIM MUSEUM 1071 FIFTH AVENUE, BETWEEN 88TH & 89TH STREETS, NEW YORK, NY 10128-0173 (1959/2008) FRANK LLOYD WRIGHT**

When asked why he chose the ramp, instead of level floors in the conventional stack, Wright explained that he felt the museum-goer would find it far more convenient to enter the building, take the elevator to the top ramp, gradually descend around an open court, always have the option, as the ramp touched the elevator stack at each level, to either go back, or skip down to further levels, and finally, at the end of the exhibition, he would find himself on the ground floor, near the exit. Wright further reasoned that in so many conventional museums, the public traverses long galleries of exhibitions only to have to retrace its steps to get back to the beginning in order to leave. Guggenheim was overwhelmed with this concept of an ascending spiral, and supported the project until his death in 1949. The building underwent many delays from 1943 to 1956, due to changes in site conditions, building codes, the museum's own change of its program, and to the rising costs of materials and construction. But finally, on August 16, 1956, ground was broken and construction begun. When Wright died in April of 1959, the building was mainly complete, waiting for final details. Six months later, on October 21, the museum was opened to the world. While the building was in construction, a letter was sent to the director and trustees of the museum, signed by a long list of artists complaining that the sloped walls and ramped floor would be

unsuitable for the exhibition of paintings. "Why do you think the walls of the Solomon R. Guggenheim Museum are gently sloping outward? They gently slope because the donor and his architect believed that pictures placed against the walls slightly tilted back-ward would be seen in better perspective and be better lighted than if set bolt upright. This is the chief characteristic of our building and was the hypothesis upon which the museum was fashioned. This idea is new but sound, one that can set a precedent of great value."

(From: LEUHAUSER, G. & NÜRNBERG, P. G. (1991): *Frank Lloyd Wright*. Köln: Taschen)



Section & Ground Floor Plan

STUDY TOUR U.S. EAST COAST 2012  
**SUNDAY MARCH 25 (1)**

- 07:30: BREAKFAST START: **THE COMFORT INN MIDTOWN WEST** (40°45'19.34"N, 73°59'50.36"W) 442 West 36th St. between Ninth & Tenth Avenue, NY 10018 [www.comfortnyc.com](http://www.comfortnyc.com) (+1 (212) 714-6699)
- 08:00: BUSPACKING: **THE GEM HOTEL MIDTOWN WEST**
- 08:30: BUS PICK UP: **THE GEM HOTEL MIDTOWN WEST**
- NORMAN FISCHER HOUSE** 197 East Mill Road, Hatboro
- ESCHERICK HOUSE** 204 Sunrise Lane, Chestnut Hill
- VANNA VENTURI'S HOUSE** Millman Street 8330, Chestnut Hill
- 12:30: BUS DROP OFF: **ELEANOR DONNELLEY ERDMAN HALL** (40° 1'30.93"N, 75°18'43.13"W) Morris Avenue, Bryn Mawr, Greater Philadelphia PA
- 13:30: BUS PICK UP: **ELEANOR DONNELLEY ERDMAN HALL**
- 14:00: BUS DROP OFF: **A. N. RICHARDS MEDICAL RESEARCH BUILDING** (39°56'58.97"N, 75°11'54.03"W) 3700 Hamilton Walk, University of Pennsylvania, Philadelphia PA
- 15:30: BUS PICK UP: **A. N. RICHARDS MEDICAL RESEARCH BUILDING**
- 16:00: BUS DROP OFF & CHECK INN: **COMFORT INN HISTORIC DISTRICT** (39°57'9.51"N, 75° 8'25.61"W) 100 Columbus Blvd. Philadelphia PA 19106 [www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405](http://www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405) (+1 (215) 627-7900)
- 17:00: MEETING POINT: **RACE STREET PIER** (39°57'11.41"N, 75° 8'22.32"W) Pier 11, Philadelphia PA
- ACCOMODATION: **COMFORT INN HISTORIC DISTRICT**



**NORMAN FISCHER HOUSE** 197 EAST MILL ROAD, HATBORO (1967) LOUIS KAHN



**ELEANOR DONNELLEY ERDMAN HALL** BRYN MAWR COLLEGE, BRYN MAWR, MORRIS AVENUE, GREATER PHILADELPHIA, PA (1960-5) LOUIS KAHN

The Bryn Mawr dormitory building marks another stage in Kahn's development. He was commissioned to design it by the president of Bryn Mawr, a women's college founded in the nineteenth century, even before the funds were available. This allowed some time for designing, which was slow and contradictory. Bryn Mawr custom required large public/social spaces for the use of students. In some early schemes the emphasis is on the bedroom unit, which was conceived as a grid of alternating octagons and squares, so that the resulting building has some of the indeterminacy of a honeycomb. Parallel studies for this project took the separation of social from private spaces as a starting point.

Kahn had actually been given a written program in May 1961, but finances were not secured until mid-1963. By then the main outline of the plan had been set out. There were to be three square public rooms: the main hall at the center is also the entrance space with two open symmetrical staircases, while the dining room and the living room or lounge are placed on either side. Each of the public rooms is surrounded by zones of much smaller dormitories, achieving a balance between the two divergent approaches that informed the preliminary schemes, though

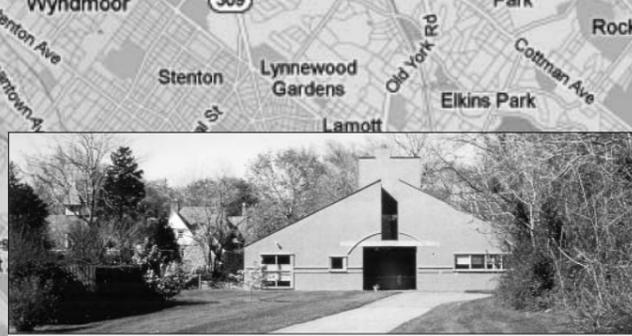
the served/servant relation of the other buildings is not established, even if the sleeping quarters were certainly the lowly attendants to the major social spaces.

The building is organized as three linked, square-plan parallelepipeds, each one set diagonally to the main orientation of the campus, so that they read as diamond shapes. This is a departure from much of Kahn's earlier work. The squares do not butt on each other, but overlap by the depth of the private room zone, providing the essential passage or link elements, while the corners are broken by doors and windows. The interlinking at the corners, different on each of the three floors, allows the user and visitor to sense the space as he or she walks from one public room to another almost as if it were breathing. This effect is emphasized by the top lighting, filtered by tall clerestory lanterns on the roof, not unlike those in Kahn's Rochester Unitarian church. All this allows for a new interpretation of the "building-within-a-building" type, since the inner one at Bryn Mawr is made up of the public rooms, whose volume is emphatically modeled by the concrete planes that articulate them, while the outer one is a shell provided by the "skin" of the student bedrooms.

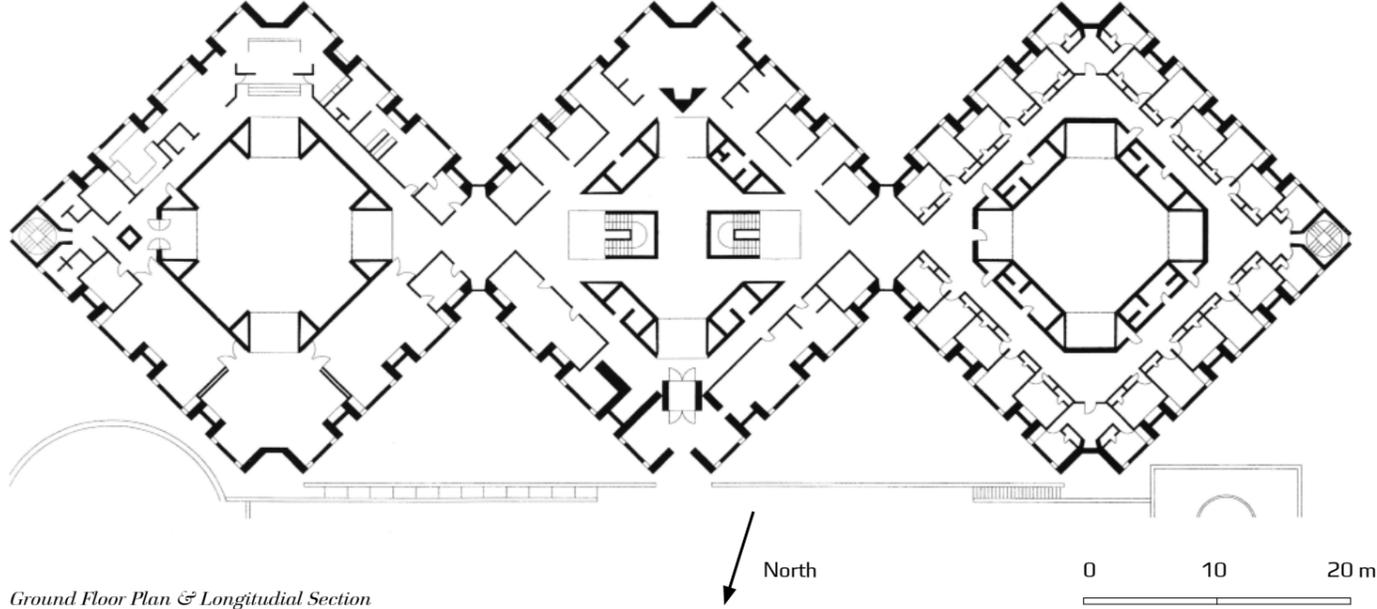
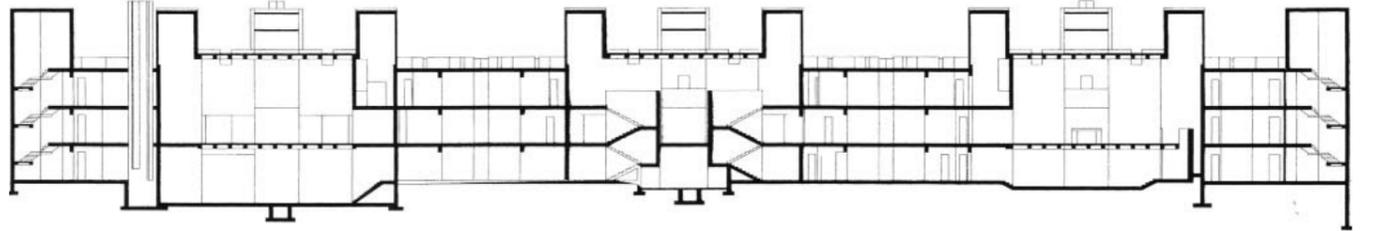
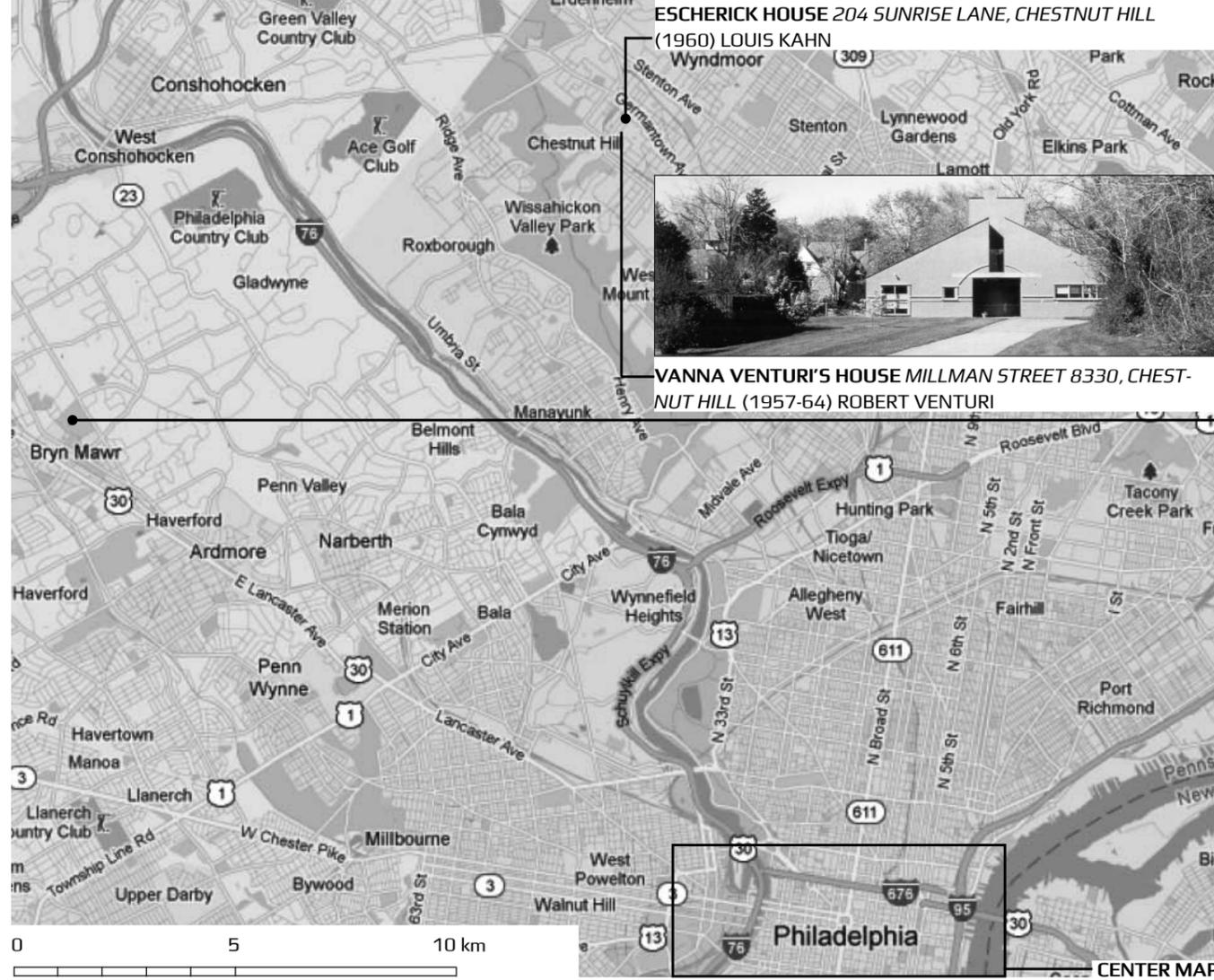
On the exterior, the vertical articulation of the volume was maintained up to the final design by giving every bedroom a bay aligned with the campus, which made a 45-degree angle to the main dormitory building. In the definitive scheme, however, the rooms are aligned with the outer surface, and the vertical emphasis is therefore provided by clearly expressed framing walls, which are emphasized by precast concrete moldings light gray against the dark surface of the glass and the blue slate of the panels that are the exterior facing. Brick was not allowed on the Bryn Mawr campus.

(From: RYKWERT, JosephDeborah (2001): *Louis Kahn*. New York: Harry N. Abrams, Inc.)

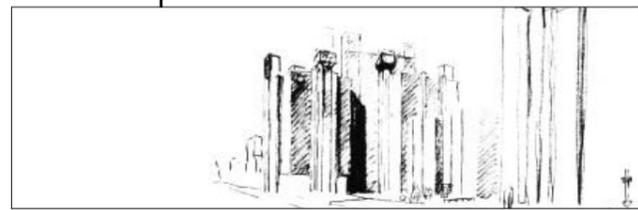
**ESCHERICK HOUSE** 204 SUNRISE LANE, CHESTNUT HILL (1960) LOUIS KAHN



**VANNA VENTURI'S HOUSE** MILLMAN STREET 8330, CHESTNUT HILL (1957-64) ROBERT VENTURI



Ground Floor Plan & Longitudinal Section



**A. N. RICHARDS MEDICAL RESEARCH BUILDING UNIVERSITY OF PENNSYLVANIA, 3700 HAMILTON WALK, PHILADELPHIA PA (1957-64) LOUIS KAHN**

This is Kahn's only building on the campus on which he spent much of his life, both as a student and as a teacher. The project had a tortuous passage, patronized as it was by two departments, medicine and biology, whose demands were not always in harmony. There were several budget cuts and constant changes of program as well. The initial design went through several transformations: at one point the service towers became wider as they went up (corresponding to the increasing volume of waste air), while the structure became increasingly lighter; Kahn also experimented with arched windows. In the built design the structure of prefabricated and prestressed concrete depended on the wide cantilevers, which were obtained using standard Vierendeel trusses. They allowed free spans as well as a horizontal passage of services. The Richards is one of the rare twentieth-century buildings in which the staccato rhythm of a vertical organization dominates the whole volume.

For all that, the ordering may be considered conventional enough: an eight-story stacking of modular laboratories serviced by ducted shafts was not unusual in science buildings of the time. The overall design seems to be a systematic working of the written program, yet the sharply vertical organization of the project contrasts not only with the spread, horizontal development of the university buildings around it but also with the horizontal emphasis of most of the exemplary structures of the time, even highrises.

Moreover, the essential configuration - a group of interdependent, lightly glazed laboratory and animal-housing towers-suggested a constantly changing interior organization; this is in contrast with the taller and permanent, even monumental, ventilation and main shafts. The opposition set up the same dialectic between served and servant spaces that was diagrammatically incipient in the Yale University Art Gallery, and

to which Kahn would return in most of his projects. Historical examples (the towers of San Gimignano in Tuscany, for instance) are also invoked for this building but do not seem to justify Kahn's deliberate emphasis on the formal vertical organization.

The Richards laboratories - named, after some hesitation, for a distinguished research biologist-are now the first buildings on the University of Pennsylvania campus any visiting architect or planner wishes to see. The university administration introduced a management firm at the last stage of construction despite Kahn's protests, and it would not commission another building from him. Like the Yale gallery, the laboratories have suffered from the neglect of their users, but the building received immediate appreciation from fellow architects: it was the first to be given an exhibition of its own at The Museum of Modern Art, New York, in 1963.

(From: RYKWERT, Joseph Deborah (2001): *Louis Kahn*. New York: Harry N. Abrams, Inc.)



**ANNENBERG PUBLIC POLICY CENTER UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA PA (2009) FUMIHUKU MAKI**

The Annenberg Public Policy Center (APPC) conducts and disseminates research, hosts lectures, and convenes roundtable discussions highlighting questions about the intersection of media, communication, and public policy. The APPC's new facility will contain offices, conference rooms, broadcast facilities, and a multi-purpose Agora housing a variety of APPC and University events. The project is located near the center of Penn's campus, surrounded by older brick and limestone structures. Its material palette of layered glass and wood complements nearby buildings, while still presenting a modern and open image - a warm transparency.

(From: [www.maki-and-associates.co.jp/e/project/48.html](http://www.maki-and-associates.co.jp/e/project/48.html))

**COMFORT INN HISTORIC DISTRICT 100 COLUMBUS BLVD.**

PHILADELPHIA PA 19106 (+1 (215) 627/7900)



**RACE STREET PIER PIER 11, PHILADELPHIA PA (2009-11) JAMES CORNER FIELD OPERATIONS**

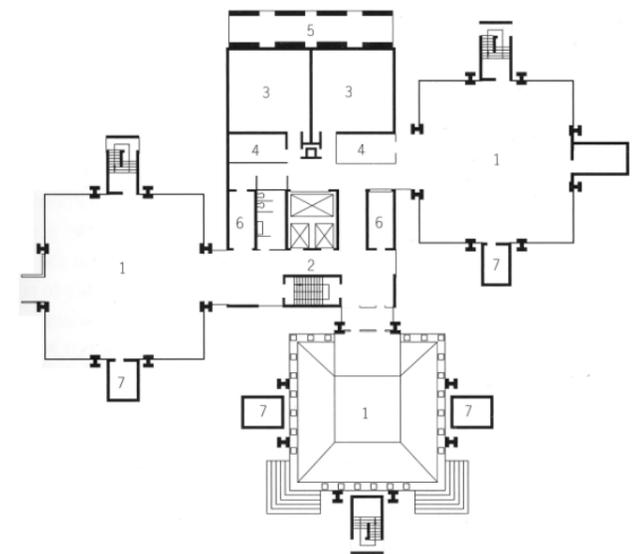
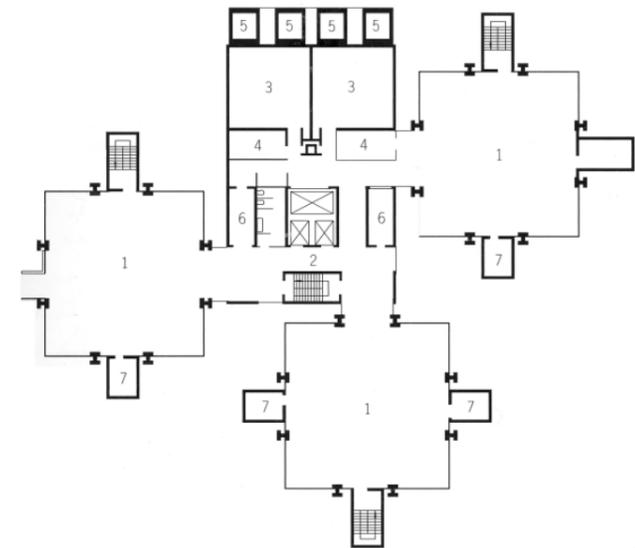
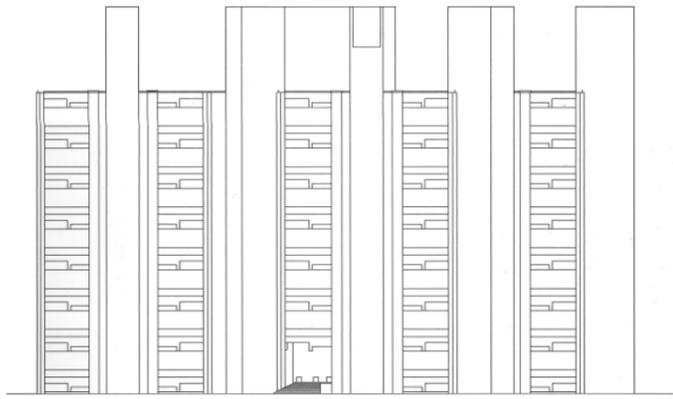
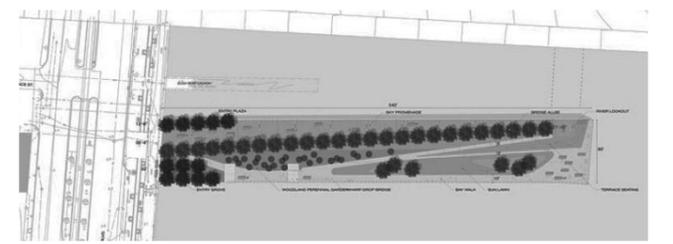
the race street pier by new york's james corner field operations is now complete. located along philadelphia's delaware river, the intervention seeks to connect the city with the river, reactivating the water's edge and establishing the area as an intimate public park.

formerly known as pier 11, the new park runs parallel to the benjamin franklin bridge, extending five hundred feet into the water. a split environment encourages a range of contrasting activities, the upper level acting as a 'sky promenade' for walking, cycling and jogging, the lower for passive recreation.

an integrated ramp bridges the two platforms, dramatizing the sense of space and arrival while providing rare views back to the city. a series of synthetic wood benches wrap around the incline marking the twelve foot elevational difference and merging the two levels. acting as functional and flexible seating, the tiered and tapered platforms add a sense of sculpture and definition to the otherwise simple design.

the race street pier, originally constructed in 1896, is one of the first public spaces to be realized as part of the larger redevelopment of the central delaware waterfront, scheduled for total completion in 2035.

(From: [www.designboom.com/weblog/cat/9/view/15311/james-corner-field-operations-race-street-pier-philadelphia.html](http://www.designboom.com/weblog/cat/9/view/15311/james-corner-field-operations-race-street-pier-philadelphia.html))



*Elevation, Upper Floor Plan & Ground Floor Plan*

1: Studio Towers, 2: Elevators & Stairways, 3: Animal Quarters, 4: Animal Service Rooms, 5: Fresh Air Intake Stacks, 6: Air Distribution Shafts, 7: Fume & Exhaust Stacks

- 07:00:** BREAKFAST START: **COMFORT INN HISTORIC DISTRICT**  
 (39°57'9.51"N, 75° 8'25.61"W) *100 Columbus Blvd.*  
*Philadelphia PA 19106* [www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405](http://www.comfortinn.com/hotel-philadelphia-pennsylvania-PA405) (+1 (215) 627-7900)
- 07:00:** BUSPACKING: **COMFORT INN HISTORIC DISTRICT**
- 07:30:** BUS PICK UP: **COMFORT INN HISTORIC DISTRICT**
- 11:00:** BUS DROP OFF: **COMFORT INN & SUITES NEAR UNION STATION**  
 (38°55'2.63"N, 76°58'48.15"W) *1600 New York Avenue, NE Washington DC 20002* [www.comfortinn.com/hotel-washington-district-of-columbia-DC012](http://www.comfortinn.com/hotel-washington-district-of-columbia-DC012)  
 (+1 (202) 832-3200)
- 11:30:** BUS PICK UP: **COMFORT INN & SUITES NEAR UNION ST**
- 12:00:** BUS DROP OFF: **NATIONAL MALL** (38°53'21.93"N, 77° 2'6.98"W)  
 THE NATIONAL MALL ON YOUR OWN:
- 18:00:** SHUTTLE BUS PICK UP: **UNION STATION** (38°53'48.65"N, 77° 0'23.10"W)  
 ACCOMODATION: **COMFORT INN & SUITES NEAR UNION ST**



WASHINGTON DC

Washington, D.C., is a planned city. In 1791, President Washington commissioned Pierre (Peter) Charles L'Enfant to design the new capital. A French-born architect and city planner, L'Enfant first arrived in the colonies as a military engineer during the American Revolutionary War. The L'Enfant Plan for Washington featured broad streets and avenues radiating out from rectangles, providing room for open space and landscaping. He based his design on plans of cities such as Paris, Amsterdam, Karlsruhe, and Milan brought from Europe by Thomas Jefferson in 1788. L'Enfant's design also envisioned a garden-lined "grand avenue" approximately 1 mile (1.6 km) in length and 400 feet (120 m) wide in the area that is now the National Mall.

In March 1792, President Washington dismissed L'Enfant due to his insistence on micromanaging the city's planning, which had resulted in conflicts with the three commissioners appointed to supervise the capital's construction. Andrew Ellicott, who had worked with L'Enfant surveying the city, was then tasked with completing the design. Though Ellicott made revisions to the original plans, including changes to some street patterns, L'Enfant is still credited with the overall design of the city.

By the start of the 20th century, L'Enfant's vision of a capital with open parks and grand national monuments had become marred by slums and randomly placed buildings, including a railroad station on the National Mall. In 1900, Congress formed a joint committee, headed by Senator James McMillan, charged with beautifying Washington's ceremonial core. What became known as the McMillan Plan was finalized in 1901. It included the re-landscaping of the Capitol grounds and the Mall, constructing new federal buildings and monuments, clearing slums, and establishing a new citywide park system. Architects recruited by the committee kept much of the city's original layout, and their work is thought to have largely preserved L'Enfant's intended design.

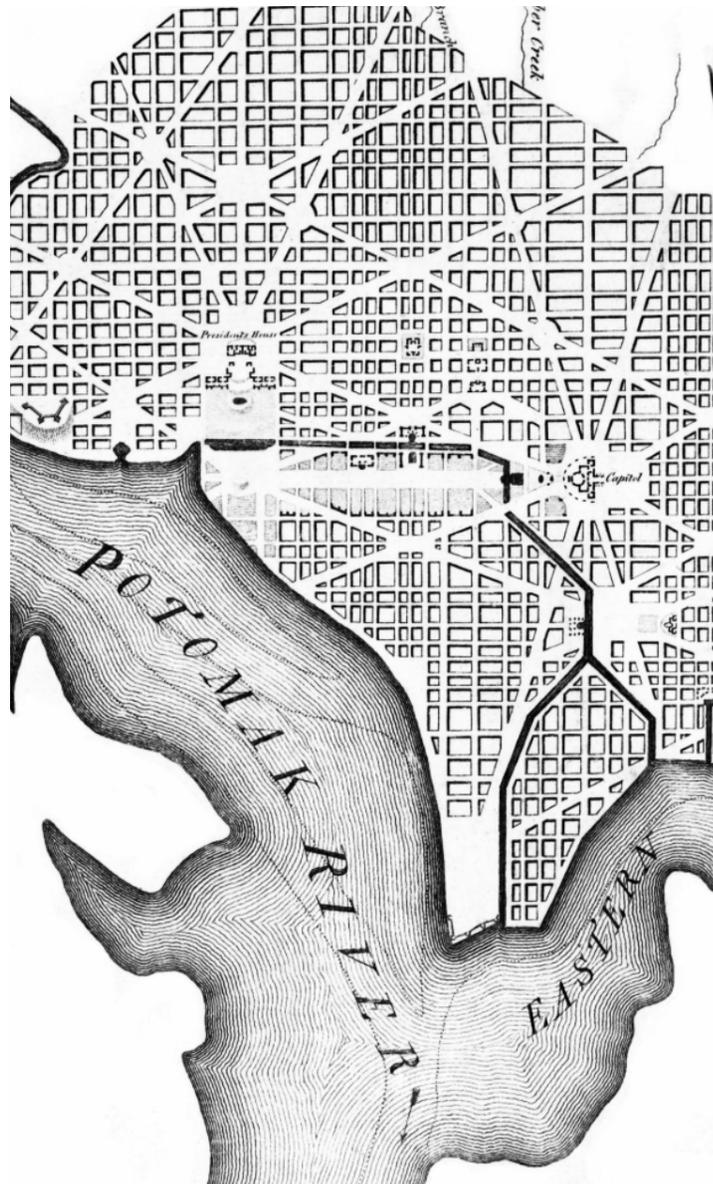
By law, Washington's skyline is low and sprawling. The first building height restrictions in D.C. were put in place following the construction of the twelve-story Cairo Apartment Building in 1894. The Heights of Buildings Act of 1910 amended the restrictions to allow buildings that are no taller than the width of the adjacent street, plus 20 feet (6.1 m). Despite popular belief, no law has ever limited buildings to the height of the United States Capitol or the 555-foot (169 m) Washington Monument,

which remains the District's tallest structure. City leaders have criticized the height restriction as a primary reason why the District has limited affordable housing and traffic problems caused by urban sprawl.

The District is divided into four quadrants of unequal area: Northwest (NW), Northeast (NE), Southeast (SE), and Southwest (SW). The axes bounding the quadrants radiate from the U.S. Capitol building.[67] All road names include the quadrant abbreviation to indicate their location, and house numbers are assigned based on the approximate number of blocks away from the Capitol. In most of the city, the streets are set out in a grid pattern with east-west streets named with letters (e.g., C Street SW) and north-south streets with numbers (e.g., 4th Street NW).

The City of Washington was bordered by Boundary Street to the north (renamed Florida Avenue in 1890), Rock Creek to the west, and the Anacostia River to the east. The city's streets were extended throughout the District starting in 1893, and Georgetown's streets were renamed in 1895. Some streets are particularly noteworthy, such as Pennsylvania Avenue, which connects the White House to the U.S. Capitol and K Street, which houses the offices of many lobbying groups. Washington hosts 176 foreign embassies, many of which are located on a section of Massachusetts Avenue informally known as Embassy Row.

(From: [http://en.wikipedia.org/wiki/Washington,\\_D.C.](http://en.wikipedia.org/wiki/Washington,_D.C.))



L'Enfant Plan for Washington DC as revised by Andrew Ellicott in 1792



**HIRSHHORN MUSEUM & SCULPTURE GARDEN SOUTH SIDE OF MALL AT 8TH ST. & INDEPENDENCE AVENUE SW (1966-74)**  
**GORDON BUNSHAFT OF SKIDMORE, OWINGS AND MERILL (SOM)** (MUSEUM: 10:00-17:30 & SCULPTURE GARDEN: 7:30-DUSK. FREE ADMISSION)

The site made available by Congress crosses the Mall, the great linear park through central Washington terminated in the east by the Capitol and the west by the Lincoln Memorial to form a cross axis at the point where the mall widens with the National Archives. One important object of the architects was to avoid any interruption of the visual continuity of the central lawn of the Mall. Their solution was to place the massive cylinder with the enclosed exhibition galleries in a position behind the

building line of the south side of the Mall with a sunken sculpture garden penetrating the tree border of the Mall and continuing the line of the cross axis.

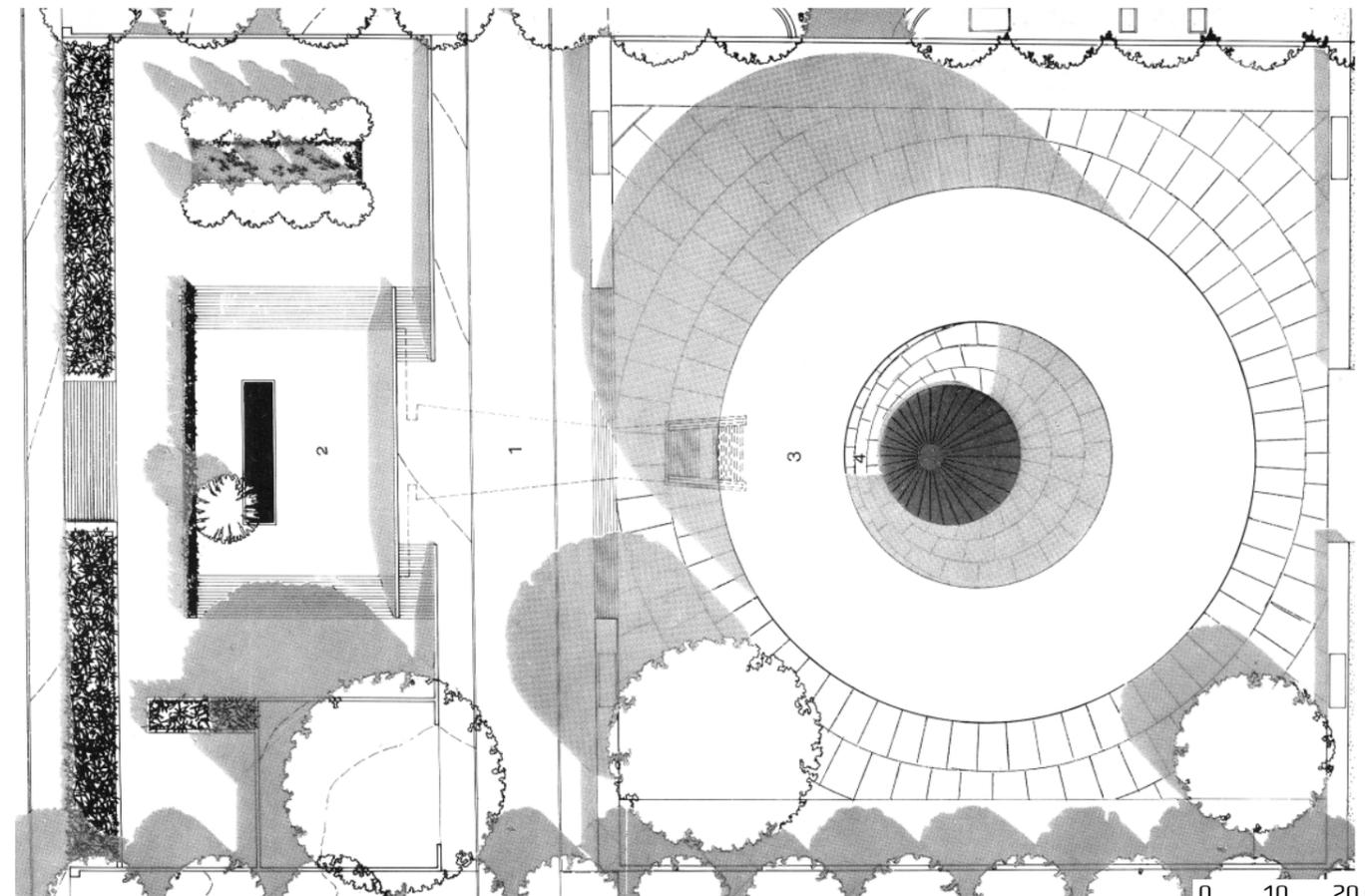
The cylinder, covered in granite aggregate precast concrete and surrounded by a walled courtyard measuring 360'x330', rests on four monumental supports which with their deepcut sculptured ribs merge in a continuous flow with the exposed ceiling structure below the second floor. Apart from a balcony at third floor level which provides a view on to the sculpture garden and Mall, the upper floors are without fenestration on the outside. Colonnaded glass walls open to an eccentrically placed circular inner court.

The visitor enters the museum through the glass-enclosed lobby. From this lobby, escalators descend to the lower floor which contains gallery space for changing exhibits, an auditorium seating 280 people, as well as service rooms. Other escalators ascend to the galleries on the second and third floors. Access to the offices and research areas on the fourth floor is by elevator connecting also to the lower level service areas. Elevators and emergency stairs are within the four massive supports.

(From: [http://en.wikipedia.org/wiki/Vietnam\\_Veterans\\_Memorial](http://en.wikipedia.org/wiki/Vietnam_Veterans_Memorial))



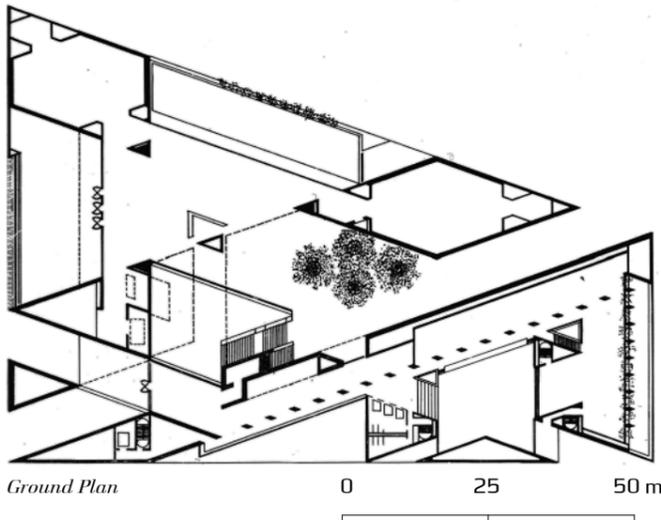
Cross-section of the museum. In the center Jefferson Drive, on the left the sunken sculpture garden in the tree border of the mall



Site plan



**NATIONAL GALLERY OF ART, EAST BUILDING 4TH ST. (1978)**  
 I. M. PEI. (10:00-17:00. FREE ADMISSION)



Ground Plan 0 25 50 m



**VIETNAM VETERANS MEMORIAL NORTH SIDE OF THE MALL BETWEEN 21ST & 22ND STREETS NW (1982) MAYA LIN**

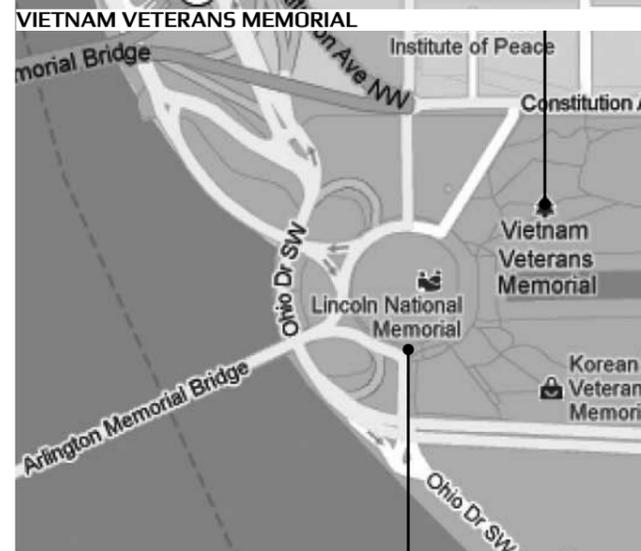
The Memorial Wall, designed by Maya Lin, is made up of two gabbro walls 246 feet 9 inches (75 m) long. The walls are sunk into the ground, with the earth behind them. At the highest tip (the apex where they meet), they are 10.1 feet (3 m) high, and they taper to a height of eight inches (20 cm) at their extremities. Stone for the wall came from Bangalore, Karnataka, India, and was deliberately chosen because of its reflective

quality. Stone cutting and fabrication was done in Barre, Vermont. Stones were then shipped to Memphis, Tennessee where the names were etched. The etching was completed using a photoemulsion and sandblasting process. The negatives used in the process are in storage at the Smithsonian Institution. When a visitor looks upon the wall, his or her reflection can be seen simultaneously with the engraved names, which is meant to symbolically bring the past and present together. One wall points toward the Washington Monument, the other in the direction of the Lincoln Memorial, meeting at an angle of 125° 12'. Each wall has 72 panels, 70 listing names (numbered 1E through 70E and 70W through 1W) and 2 very small blank panels at the extremities. There is a pathway along the base of the Wall, where visitors may walk, read the names, make a pencil rubbing of a particular name, or pray.

One panel of "The Wall", displaying some of the names of fallen U.S. service members from the Vietnam War. Inscribed on the walls with the Optima typeface are the names of servicemen who were either confirmed to be KIA (Killed in Action) or remained classified as MIA (Missing in Action) when the walls were constructed in 1982. They are listed in chronological order, starting at the apex on panel 1E in 1959 (although it was later discovered that the first casualties were military advisers who were killed by artillery fire in 1957), moving day by day to the end of the

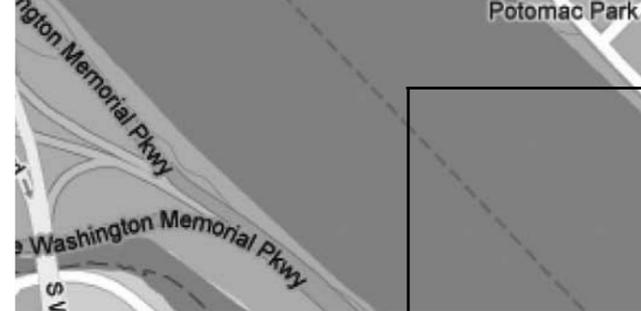
eastern wall at panel 70E, which ends on May 25, 1968, starting again at panel 70W at the end of the western wall which completes the list for May 25, 1968, and returning to the apex at panel 1W in 1975. Symbolically, this is described as a "wound that is closed and healing." Information about rank, unit, and decorations are not given. The wall listed 58,191 names when it was completed in 1983; as of May 2011 [update], there are 58,272 names, including 8 women. Approximately 1,200 of these are listed as missing (MIAs, POWs, and others), denoted with a cross; the confirmed dead are marked with a diamond. If the missing return alive, the cross is circumscribed by a circle (although this has never occurred as of March 2009 [update]); if their death is confirmed, a diamond is superimposed over the cross. According to the Vietnam Veterans Memorial Fund, "there is no definitive answer to exactly how many, but there could be as many as 38 names of personnel who survived, but through clerical errors, were added to the list of fatalities provided by the Department of Defense." Directories are located on nearby podiums so that visitors may locate specific names.

(From: [http://en.wikipedia.org/wiki/Vietnam\\_Veterans\\_Memorial](http://en.wikipedia.org/wiki/Vietnam_Veterans_Memorial))



**VIETNAM VETERANS MEMORIAL** ON THE MALL BETWEEN 15TH & 17TH STREETS NW (1982) MAYA LIN

**WASHINGTON NATIONAL MONUMENT** ON THE MALL BETWEEN 15TH & 17TH STREETS NW (1845-84) ROBERT MILLS



**LINCOLN MEMORIAL** WEST END OF THE MALL AT THE FOOT OF 23RD ST. NW (1912-22) HENRY BACON

**JEFFERSON MEMORIAL** (1932) JOHN RUSSELL POPE; EGGERS & HIGGINS

**HIRSCHBORN MUSEUM & SCULPTURE GARDEN**

**UNITED STATES CAPITOL** CAPITOL HILL (1793-1865) W. THORNTON, B. H. LATROBE, C. BULFRINCH, T. U. WALTER, M. C. MEIGS



**UNITED STATES CAPITOL** CAPITOL HILL (1793-1865) W. THORNTON, B. H. LATROBE, C. BULFRINCH, T. U. WALTER, M. C. MEIGS

0 500 1 km

# STUDY TOUR U.S. EAST COAST 2012 TUESDAY MARCH 27 [1]

- 06:30: BREAKFAST START: COMFORT INN & SUITES NEAR UNION ST
- 08:30: MEETING: COMFORT INN & SUITES NEAR UNION ST
- 09:00: BUSPACKING: COMFORT INN & SUITES NEAR UNION ST
- 09:30: BUS PICK UP: COMFORT INN & SUITES NEAR UNION ST

- BUS 1:**  
10:00: BUS DROP OFF: NATIONAL MALL  
13:00: BUS PICK UP: NATIONAL MALL
- BUS 2:**  
10:00: BUS DROP OFF: NATIONAL BUILDING MUSEUM (38°53'52.00"N, 77° 1'3.55"W) 401 F Street NW [www.nbm.org](http://www.nbm.org)  
ARLINGTON NATIONAL CEMETERY (38°52'57.43"N, 77° 4'6.15"W) Arlington VA [www.arlingtoncemetery.org](http://www.arlingtoncemetery.org)  
13:00: BUS PICK UP: ARLINGTON NATIONAL CEMETERY
- 13:15: BUS DROP OFF: EMBASSY OF DENMARK (38°55'2.53"N, 77° 3'48.32"W) 3200 Whitehaven St. NW  
14:30: BUS PICK UP: EMBASSY OF DENMARK  
14:45: BUS DROP OFF: EMBASSY OF FINLAND (38°55'27.64"N, 77° 3'54.90"W) 3301 Massachusetts Avenue NW  
16:00: BUS PICK UP: EMBASSY OF FINLAND  
16:30: BUS DROP OFF: WASHINGTON DULLES AIRPORT (38°57'11.64"N, 77°26'51.99"W) IAD Chantilly VA
- 21:05: DEP. WITH BA264: WASHINGTON DULLES AIRPORT IAD  
22:20: DEP. WITH BA292: WASHINGTON DULLES AIRPORT IAD



**NATIONAL BUILDING MUSEUM 401 F STREET NW (1887)**  
MONTGOMERY C. MEIGS (10:00-17:00. ADMISSION: 5\$)

The building was designed for two distinct functions: to house the Pension Bureau and to provide a suitably grand space for Washington's social and political functions. The design was inspired by two Roman palaces. The exterior is modeled closely on the brick, monumentally-scaled Palazzo Farnese, completed to Michelangelo's specifications in 1589. The building's interior, with its open, arcaded galleries surrounding a central hall, is reminiscent of the early-sixteenth-century Palazzo della Cancelleria. For the colossal Corinthian columns that divide the Great Hall, Meigs took his inspiration from the church of Santa Maria degli Angeli in Rome built by Michelangelo in the mid-sixteenth century.

Brick was the primary building material for the Pension Building, a choice largely driven by the affordability of brick and the directive that the building be fireproof. Despite the use of such a functional, ordinary material Meigs employed expert bricklayers and used pressed red brick to achieve the building's regular, smooth face. The decorative elements of the building were also accomplished in an "economic" fashion with ornamental terra cotta and painted plaster on brick surfaces rather than expensive building materials such as carved stone or fine marble. Decorative terra cotta details include the frieze along the building's exterior, relief spandrels and decorative keystones over the doorways, and the detailed bases of the Corinthian columns.

The interior of the building is dominated not by offices and storage facilities, but by a grand central space, the Great Hall. Measuring 116 x

316 feet, the Great Hall features a central fountain and is divided into three courts by two screens of four colossal Corinthian columns—among the tallest classical columns in the world.

From the design of the roof to the ingenious ventilation system that created a continuous flow of fresh air throughout the building, the Pension Building is a marvel of engineering. An ingenious system of windows, vents, and open archways allows the Great Hall to function as a reservoir for light and air.

The Pension Building continued to serve as office space for a variety of government tenants through the 1960s. The government began to consider demolishing the building as it was badly in need of repair, but then came under pressure from preservationists and commissioned architect Chloethiel Woodard Smith to explore other possibilities for its use. In her 1967 report, "The Pension Building: A Building in Search of a Client," Smith introduced the idea that the building be converted to a museum of the building arts. In 1969, the Pension Building was listed on the National Register of Historic Places. Congress passed a resolution in 1978 calling for the preservation of the building as a national treasure, and a 1980 Act of Congress mandated the creation of the National Building Museum as a private, nonprofit educational institution.

The glorious building that you visit today is the result of years of careful renovation and restoration. In 1997, the historic building was officially renamed the National Building Museum.

(From: <http://www.nbm.org/about-us/about-the-museum/our-historic-building.html>)



**ARLINGTON NATIONAL CEMETERY ARLINGTON, VA 22211**

More than 330,000 American servicemen as well as many famous Americans are buried at the 624 acre national cemetery. Among the notable Americans buried here are Presidents William Howard Taft and John F. Kennedy, Jacqueline Kennedy Onassis, and Robert Kennedy. More than four million people visit the cemetery each year and approximately 27-30 graveside funerals are held here each day.

Arlington House, the former home of Robert E. Lee and his family is located atop a hill, providing one of the best views of Washington, DC. George Washington Parke Custis, Lee's father-in-law, originally built the house as his own home as well as a memorial to George Washington, his step-grandfather. Arlington House is now preserved as a memorial to Robert E. Lee, who helped heal the nation following the Civil War.

(From: <http://dc.about.com/od/monuments/p/ArlingCemetery.htm>)

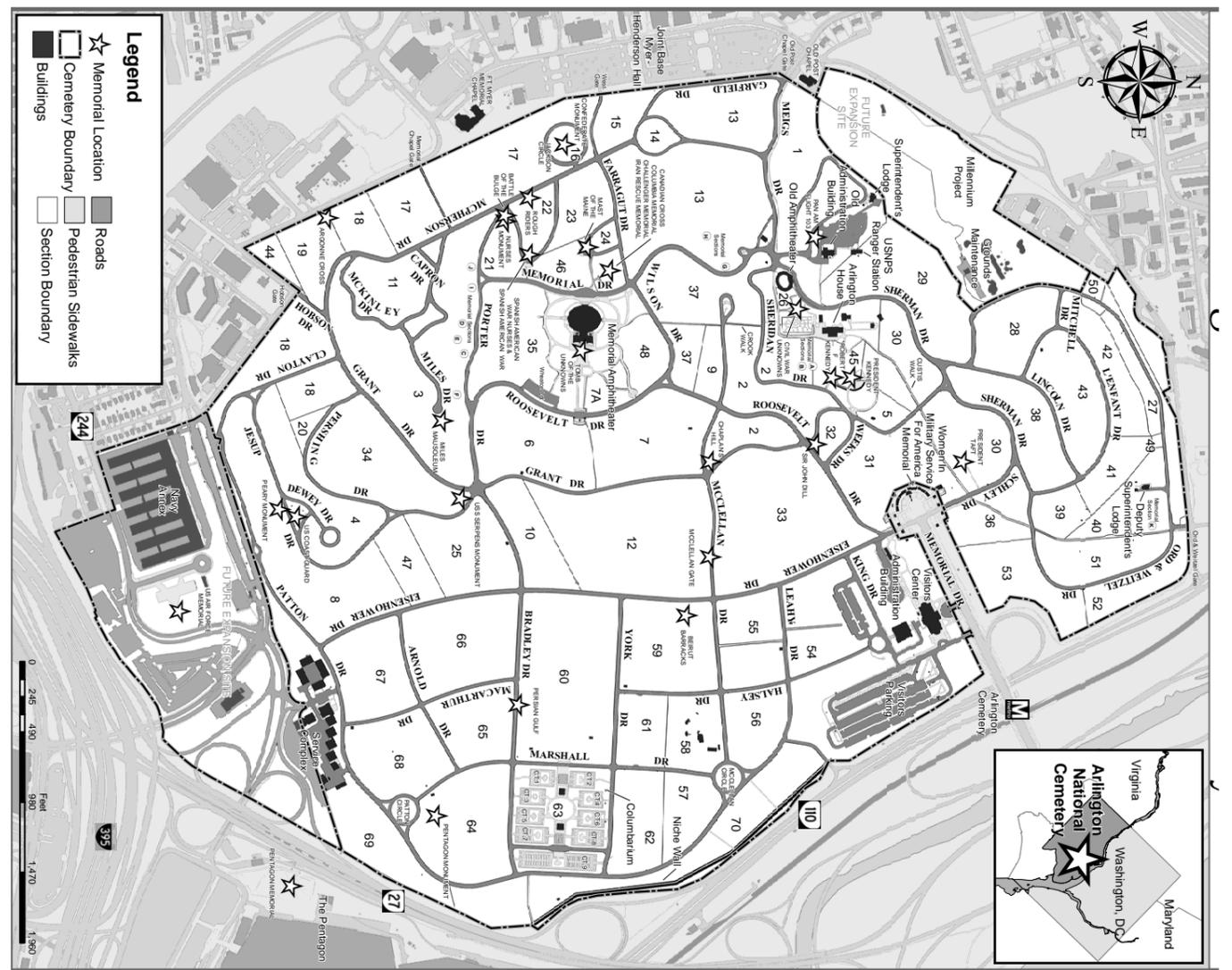


**COMFORT INN & SUITES NEAR UNION STATION 1600 NEW YORK AVE. NE WASHINGTON**

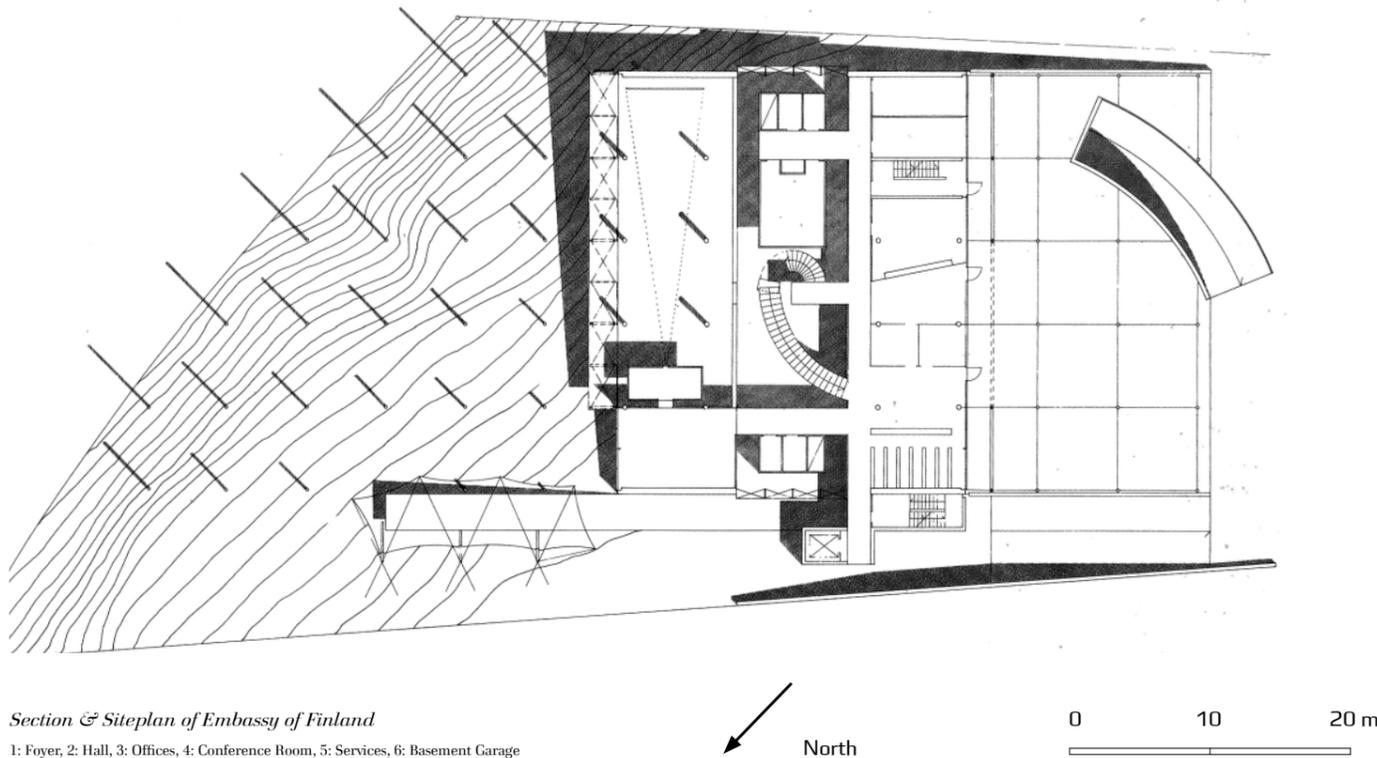
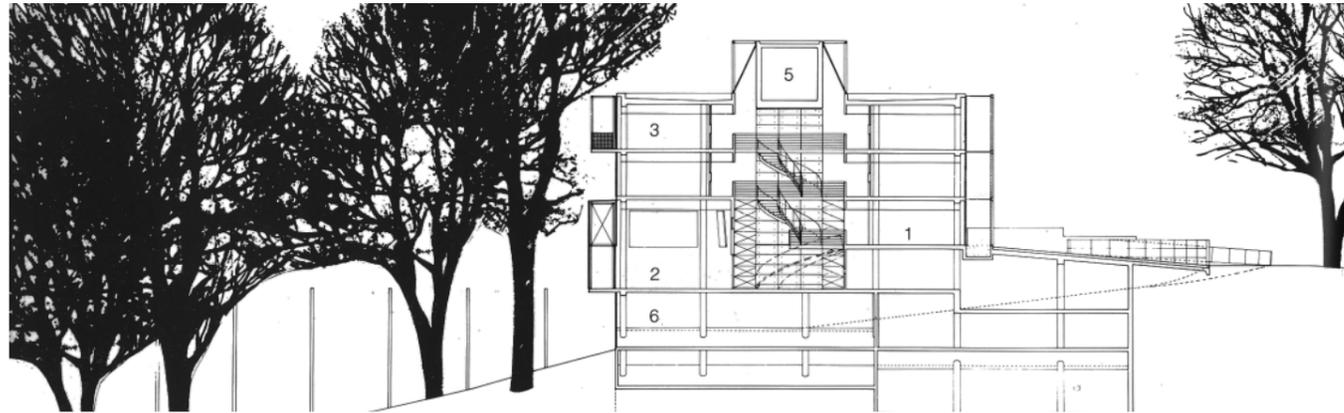


**ARLINGTON NATIONAL CEMETERY**

0 2,5 5 km



0 250 500 m



Section & Siteplan of Embassy of Finland

1: Foyer, 2: Hall, 3: Offices, 4: Conference Room, 5: Services, 6: Basement Garage



EMBASSY OF FINLAND 3301 MASSACHUSETTS AVENUE N.W., WASHINGTON DC 20008 (1990-4) HEIKKINEN-KOMONEN ARCHITECTS

The Finnish Embassy in Washington, D.C., looks like a simple cube from the outside. Its compact footprint was required to preserve the trees on the wooded site. Natural light penetrates the depths of the wide building and the complex dynamic space of its interior.

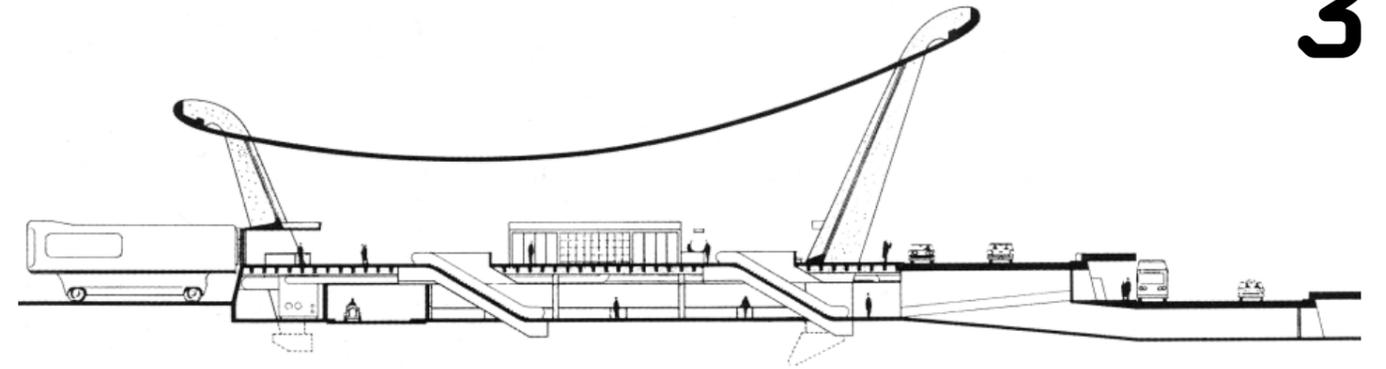
The east and west facades, clad with green granite, express the solid character of the building. The veins of the stone intertwine with the branches of the surrounding trees and their shadows, making the heavy granite resemble photosensitive paper imprinted with geological patterns and reflections from the natural surroundings.

The north and south facades are constructed of transparent and translucent surfaces: glass and glass block. A bronze trellis for climbing plants erected in front of the south facade creates a filter for the strong heat of the sun, diminishing the need for air-conditioning. When the plants are fully grown, they can be trimmed to preserve the view from the interior spaces and create an extra skin for the building that will change its image according to the season.

In addition to the glass facades an important source of natural light is the central hall, a light well nicknamed the "grand canyon." A "fabric" is woven by light that is filtered horizontally through the north and south facades and vertically through the hall. This cross-weaving of natural light corresponds to the spatial organization of the building and the simultaneous expression of lightness and gravity.

Outside the building, a network of electric points of light creates an extension of the architectural structure. To the north, faint lights on the tops of poles continue the floor level of the "grand canyon" and Finland Hall into the park. To the south, lights in front of the entrance are embedded into the granite pavement of the forecourt. This grid of lights extends the structural module of the building from the inside out.

(From: [www.heikkinen-komonen.fi/Frames\\_new\\_projects.htm](http://www.heikkinen-komonen.fi/Frames_new_projects.htm))



Section



EMBASSY OF DENMARK 3200 WHITEHAVEN ST. NW, WASHINGTON, DC 20008 (1960) WILHELM LAURITZEN

After World War II, Danish Ambassador to the United States Henrik Kaufmann (1888–1963) suggested that Denmark needed a new embassy building. At the time, Kaufmann's idea was very innovative since most countries bought large American mansions to house their representations. The Danish Ambassador, however, believed that designing a new building would have several advantages.

Standing on the hilltop at the end of Whitehaven Street, the building today consists of two parts: the chancellery, containing all the offices, and the Ambassador's residence with the representation rooms.

The entrance hall of the Ambassador's residence – which functions as a large and open porch – greets visitors. The design of the entrance leaves guests with a friendly and hospitable first impression.

This first impression is particularly important since, for many people, the first impression of the building is also their first impression of Denmark. This good first impression also serves to facilitate favorable negotiations and closer ties between Danes and Americans.

The simple appearance of the exterior of the building is also reflected in the interior: for instance, white marble from Greenland is used on the inside as well as the outside of the building.

The white walls combine with large windows, allowing in lots of natural lighting, making the Embassy appear light, open and welcoming.

The interior is stately and dignified, but at the same time, unpretentious. In line with Danish modesty, equalitarianism and democratic principles, the modernist architectural style is known for clean lines and humble expressions.

(From: <http://usa.um.dk/en/about-us/embassy-of-denmark-in-the-us/about-the-embassy/the-architectural-history-of-the-embassy/>)



DULLES INTERNATIONAL AIRPORT (IAD) CHANTILLY VA (1958-62) EERO SAARINEN

Designed almost concurrently with the Trans World Airlines Terminal at Idlewild International Airport in New York, now John Fitzgerald Kennedy

International Airport, the passenger terminal at Dulles was conceived as a temple of modern transportation resting on a massive base. Sited on flat piece of land, this accent building retains a federal character through a giant colonnade, which slopes forward to shelter the passenger drop-off. Flying, and the symbolism associated with it, appealed to the architect tremendously. Aircraft technology became a central source of reference for the development of shapes evocative of jets and their trajectories in the sky. The concrete roof suspended over the simple concourse by cables captures movement in one sweeping gesture.

The simplicity of the overall image is a counterpoint to the complexity of the program. During the initial phase of the design process, Saarinen and his consultants sent out a team of researchers to gather data at airports in other parts of the nation using non-participant observation. Gaining first-hand knowledge of the flow of traffic in a building type still being developed was a stepping stone on the way to the final design. In mapping out the movement of the passengers, his group identified three major clusters of concern. The first was how to bring the travelers to and from the airplanes. The second was how to deal with the cost of taxiing jet planes. The third was the importance of providing maximum flexibility for the workers servicing the aircraft. Working collaboratively, this pool of experts, comprising engineers, mechanical engineers and an airport consultant pioneered the invention of the mobile lounge, "a departure lounge on stilts and wheels," as the architect commented.

Saarinen's close friend, Charles Eames, produced a film to sell the idea to the Federal Aviation Agency and the twelve airlines involved in the project. As passengers accessed the main space and went through the ticketing procedure, they made their way to the back of the building where the mobile lounge would be waiting. This capsule linked the terminal to the planes, thus reverting to the more typical procedure of bringing the planes to the passengers. Saarinen was only a consultant in the design of the mobile lounge, branded as a "lumbering beast, at best, in its appearance" in a commentary published in the April 1962 issue of The Architectural Forum. Since its completion in the early sixties, additions have been made to the terminal that have altered the original sequence of steps taken by passengers proceeding from the street to the aircraft. Today, the mobile lounge carries travelers to a secondary structure from which they gain access to the airplane.

The control tower also contributes to the definition of a unique skyline. Like the water tower at the General Motor Technical Center, this vertical gesture underwent numerous versions before arriving at its final form. In reinforcing the monumental scale of the tilted columns spaced forty feet apart, the tower signals the presence of the structure from afar. Saarinen paid close attention to the surroundings, designing both access routes and landscaping with his close collaborator landscape architect Dan Kiley. Those who have experienced the approach to the terminal directly will have certainly noticed the remarkable level of detail in the way the project touches the ground with its main formal idea reverberating in the adjacent walkways. According to Kiley, Dulles was a far more convincing proposition than the TWA Terminal: "Much simpler and much stronger... it's suggesting freedom and movement."

(From: SERRAINO, Pierluigi (2005): *Eero Saarinen on his work*. Köln: Taschen.)