NEVER BUILT NEW YORK

GALLERY GUIDE

WEST WALL:

01: Frank Lloyd Wright and Taliesin Associated Architects, Key Plan for Ellis Island, 1959. Ink on napkin, pencil and colored pencil on paper, ink and colored pencil on paper (facsimile), courtesy The Frank Lloyd Wright Foundation Archives (The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University), FLW 131, 5914, Key 212.

The leading contender to replace a decommissioned Ellis Island, this self-contained plan included radiating residential towers surrounded by mixed-use glass domes and terraced parks.

02: Thomas Hastings, *National American Indian Memorial*, 1913. Ink and gouache on paper (facsimile), courtesy Mathers Museum of World Cultures, Indiana University.

The architect of the New York Public Library and famed sculptor Daniel Chester French designed this Indian Chief-topped Beaux Arts monument, whose groundbreaking in Staten Island was attended by President Taft along with 32 Indian chiefs.

03: Peter Eisenman, *Staten Island Institute of Arts and Sciences*, 1997. Plotter drawings in ink (facsimile) and computer rendering (facsimile) courtesy Peter Eisenman fonds, Canadian Centre for Architecture.

Paired with a renovated St. George terminal of the Staten Island Ferry, Eisenman's torquing structure, wrapped in a metallic ribbon skin, angled upward as if about to take flight.

04: Norman Bel Geddes, *Rotary Airport*, 1932. Pencil on paper (facsimile) and gelatin silver print (facsimile), courtesy Harry Ransom Center, The University of Texas at Austin.

Floating 800 feet off the Battery, the airstrip equaled seven square city blocks, with two runways and a terminal sitting atop a central pivot point. Motorized marine propellers kept the airport aligned with prevailing winds for ideal takeoff and landing.

05: Louis Kahn, Memorial to the Six Million Jewish Martyrs, 1968. Pencil on trace, courtesy The Museum of Modern Art, New York, Gift of the architect, 1981; charcoal on trace, pencil and lead on trace (facsimile), courtesy Louis I. Kahn Collection, University of Pennsylvania and the Pennsylvania Historical and Museum Commission.

A memorial at the island's southern tip, composed of 10 foot square by 11 foot high glass columns surrounding a slightly taller, lilac-hued pillar, was inscribed in Yiddish, Hebrew, and English. Holocaust survivors deplored it.

06: Richard Meier, World Trade Center, 2002. Graphite on tracing paper courtesy Richard Meier & Partners Architects.

Meier's original sketch of the grid of five slender towers to replace the collapsed World Trade Center was conceived in collaboration with Peter Eisenman, Charles Gwathmey, and Steven Holl.

07: Steven Holl, World Trade Center, 2002. Watercolor and charcoal on two taped paper sheets, courtesy The Museum of Modern Art, New York, Gift of Patricia Phelps de Cisneros, 2003.

Architects Richard Meier, Peter Eisenman, Charles Gwathmey, and Steven Holl conceived a grid of five slender towers connected by bridges supporting sky garden in an homage to the burnt structures left standing after the collapse of the original World Trade Center.

08: Daniel Libeskind, World Trade Center Freedom Tower, 2002. Study models (paper), ink and pastel on trace and paper (facsimile) and digital print courtesy Studio Daniel Libeskind.

The hub of Libeskind's competition-winning master plan for the new World Trade Center, the 1,776-foot-tall "Gardens of the World" was an angular, off-center glassy spire filled with internal plantings, inspired by the silhouette of the Statue of Liberty.

09: Paul Rudolph, *Graphic Arts Center*, 1967. Ink and pencil on mylar (facsimile) and gelatin silver prints (facsimile) courtesy Library of Congress, Prints & Photographs Division.

Rudolph's mixed-use mega project for the Amalgamated Lithographers Guild of America was composed of overlapping, prefabricated "dwelling capsules" clustered around more than 25 service cores. The plan was killed by competing unions, wary of its outsourced fabrication plan.

10: Calvin Pollard, Washington Monument, Union Square, 1843. Pencil and watercolor on paper in legacy mat, courtesy Avery Architectural & Fine Arts Library, Columbia University.

This 425-foot-tall Gothic monument to George Washington would be made of solid granite, with a cast iron pinnacle. In an era in which classicism ruled, it was widely derided, and its funding never materialized.

11: Paul Rudolph, City Corridor, 1967. Pencil and ink on trace and print on mylar (facsimile) courtesy Library of Congress, Prints & Photographs Division.

This Ford Foundation initiative to re-imagine Robert Moses' Lower Manhattan Expressway would have buried the thoroughfare and, in certain places, topped it with a raised topography of prefabricated megastructures and varied transportation typologies.

12: Robert Moses, Lower Manhattan Expressway, 1941-1965. Booklet, gouache on board (facsimile), courtesy MTA Bridges and Tunnels Special Archive. Drawings by Gero and Paul Rudolph.

Called "LOMEX," the expressway was an effort to extend Interstate 78--as a ten-lane elevated highway--from the Holland Tunnel to the Manhattan and Williamsburg Bridges. The route was Broome Street, slicing through the heart of SoHo and Little Italy.

13: Diller Scofidio + Renfro, Eyebeam Museum, 2005. Prints mounted on gatorboard, model (wood, acrylic sheeting, and paint) courtesy Diller Scofidio + Renfro.

The digital art museum in Chelsea focused on a shifting precast concrete ribbon that carved out separate spaces for media presentation and production.

14: Steven Holl, *Bridge of Houses*, 1981. Etching, model (wood), courtesy The Museum of Modern Art, New York, Mrs. Gianluigi Gabetti and Suzanne Slesin Purchase Fund, 2005; pencil and ink on paper, courtesy Steven Holl Architects.

Twenty-nine years before the High Line Park opened in Chelsea, Holl presciently proposed using the abandoned railway to create "an ornate collection of urban villas," from single-room-occupancy studios for the homeless to luxury apartments for the smart-set.

15: Steven Holl, *Parallax Towers*, 1990. Model (nylon scrim and steel) courtesy The Museum of Modern Art, New York, given anonymously and David Rockefeller, Jr. Purchase Fund, 1997; photograph courtesy Steven Holl Architects.

The idea was to stretch 72nd Street into the Hudson River with super-skinny skyscrapers rising from the water. Horizontal bars suspended between the towers—containing horizontal elevators—frame public spaces below.

16: Charles R. Lamb, *Diagonal Plan*, 1904. Newspaper clippings (facsimile), graphite and watercolor on paper on board (facsimile) courtesy Avery Architectural & Fine Arts Library, Columbia University.

Lamb wanted to plow long diagonal avenues through much of the city's tight grid. The results would open up vistas, allow for a greater variety of architecture and "put light, air and sunshine into the congestion."

17: Charles R. Lamb, *Streets High in the Air*, undated. Watercolor and gouache on paper courtesy Avery Architectural & Fine Arts Library, Columbia University.

Like many of his contemporaries, Lamb predicted that the city's grid would rise high above street level to ease congestion.

18: Kahn and Jacobs, *Multi-Use Theater*, 1940. Pastel on paper courtesy Avery Architectural & Fine Arts Library, Columbia University, 1978.001.07321-2.

Kahn and Jacobs' Times Square theater for developer Robert Dowling deftly incorporated riotous textures and colors into the glass and steel vocabulary of postwar Modernism.

19: Venturi, Scott Brown & Associates, *Times Square Tower*, 1994. Pencil and computer plot on vellum, model (colored paper, transfer letters, diazo-type print, metal, foamcore) courtesy The Architectural Archives, University of Pennsylvania by the gift of Robert Venturi and Denise Scott Brown.

A typical box-like entertainment complex and tower hotel converted into a 3D billboard crowned by a jester's cap, blurring the line between signage and structure.

20: Joseph Urban, Metropolitan Opera, 1926. Watercolor and pencil on paper (facsimile) courtesy Joseph Urban Archive, Rare Book and Manuscript Library, Columbia University.

Forced to partner with Benjamin W. Morris to design a new Metropolitan Opera on 57th Street, Urban nonetheless dreamed of his own—classically inspired, yet very Deco—"coliseum" scheme. When word leaked out, the plan was quickly squelched by the Opera's board.

21: Joseph Urban, *Reinhardt Theater*, 1928. Watercolor and pencil on paper (facsimile) courtesy Joseph Urban Archive, Rare Book and Manuscript Library, Columbia University.

Designed for theater and film producer Max Reinhardt, this Times Square theater, said Urban, wedded "beauty and ballyhoo," with a black glass facade and gold-tinted balconies and metalwork.

22: Benjamin Wistar Morris, *Metropolitan Opera*, 1930. Pencil and charcoal on paper in legacy mat courtesy Avery Architectural & Fine Arts Library, Columbia University; pencil and charcoal on paper (facsimile) courtesy Library of Congress, Prints & Photographs Division.

Combining classical proportions and Art Deco styling, Morris's opera house was to be the centerpiece of Rockefeller Center, which was then called "Opera City." The Great Depression wiped out its financing.

23: Bertrand Goldberg, ABC Office Building, 1963. Blackline on mylar (facsimile), ink and pencil on paper (facsimile), courtesy Archive of Bertrand Goldberg, gifted by his children through his estate (RX23664/5.170) and copyright Art Institute of Chicago/Bertrand Goldberg/Art Resource, NY; photograph courtesy Chicago History Museum, Hedrich-Blessing Collection.

This 60-story office across from Lincoln Center consisted of concrete tubes around a circular core. Behind this rose a translucent antenna tower, taller than the Empire State Building.

24: Matthew Nowicki, Columbus Circle Shopping Center, 1948. Pencil and charcoal on vellum (facsimile) and positive photostatic print with gelatin silver photograph (facsimile) courtesy Cornell University Library, Division of Rare and Manuscript Collection.

Polish emigré Nowicki levitated a glassy, ring-shaped promenade lined with shops and cafes above the city's most famous and pedestrian unfriendly traffic circle.

25: Aranda\Lasch, 20 Bridges For Central Park, 2011. 3D-printed ABS Plastic, courtesy Aranda\Lasch.

Designed to connect disparate landscapes in Central Park—from small streams to crosstown throughways—these bridges, composed of concrete fractal blocks, would be walkable sculptures covered with vegetation. One of twenty is shown here.

26: William Zeckendorf, Airport, 1945. Magazine, private collection.

Unveiled by Zeckendorf in the December 1945 issue of *Life* Magazine, the \$3 billion, 144-square-block airport would rise 200 feet above street level on steel columns from 24th to 71st Streets, and from Ninth Avenue to the Hudson River.

27: Wallace K. Harrison, *Lincoln Center for the Performing Arts*, 1966. Pencil and colored pencil on paper courtesy Avery Architectural & Fine Arts Library, Columbia University, 1000.001.00299,300,301. Drawing by Hugh Ferriss.

The Metropolitan Opera, which was the centerpiece of Lincoln Center, went through dozens of conceptions, many expressing Harrison's obsession with thin form concrete. All but the last (and least ambitious) foundered amidst the staggering bureaucracy overseeing the project.

28: Isamu Noguchi & Louis Kahn, Adele Levy Memorial Playground, Riverside Park, 1960-1967. Model (bronze), courtesy The Isamu Noguchi Foundation and Garden Museum, New York; ground level plan and pencil on trace (facsimile) courtesy Louis I. Kahn Collection, University of Pennsylvania and the Pennsylvania Historical and Museum Commission.

Noguchi and Kahn's children's wonderland was made of sculpted earthworks and without conventional play equipment. Six years of modifications never satisfied the surrounding neighbors.

NORTH WALL + PROJECTIONS:

29: R. Buckminster Fuller & Shoji Sadao with June Jordan, *Harlem Skyrise Project*, c. 1960. Pencil on trace courtesy Department of Special Collections, Stanford University Libraries and The Estate of R. Buckminster Fuller; magazine, private collection.

Poet and essayist June Jordan suggested *Skyrise* to Fuller as an alternative to "a housing project planted in the middle of a slum." Fifteen 100-story conical towers, suspended from central masts, would house a quarter of a million people without tearing down existing buildings.

30: Buckminster Fuller, *Brooklyn Dodger Dome*, 1955 and *Dome Over Manhattan*, 1960. Digital projection, images courtesy Department of Special Collections, Stanford University Libraries and The Estate of R. Buckminster Fuller.

Fuller, with students at Princeton, devised a translucent fiberglass-roofed geodesic dome for Dodger Stadium to be supported by a lightweight, aluminum-truss structure measuring 300 feet high and 750 feet in diameter.

More speculative than realistic, Fuller's grandest scheme was a two-mile-diameter dome over mid-Manhattan. Centered on 42nd Street, spanning river to river from 29th to 62nd Street, this dome would be three times the height of the Empire State Building.

31: Work AC, Guggenheim Collection Center, 2015. Model (paper, acrylic, and polystyrene foam) courtesy Work AC.

This new home for many of the Guggenheim Museum's collections, offices and library emanated futurism and transparency through a permeable but protective "wrapper," projecting from a glassy core. It also merged building and landscape through carved, planted terraces and sinuous vertical promenades.

32: Regional Plan Association, The Regional Plan of New York and Its Environs, 1929. Hand-tinted glass transparencies transferred to digital projection, Courtesy Cornell University Library, Division of Rare and Manuscript Collection.

The Regional Plan Association's first major proposal provided a blueprint for the city's architectural, transportation and open space networks. Many of its propositions-including classically-inspired waterfront boulevards, a system of raised streets and a gargantuan new city hall--never came to be.

EAST WALL:

33: Daniel Lawrence Turner, *Transit Construction Commission Subway Plan*, 1920. Ink on paper foldout map (facsimile) courtesy New-York Historical Society.

This 25-year, \$175 to \$350 million construction program with five new trunk and nine new crosstown Manhattan subways, and 40 outer borough lines--in all, 830-plus miles of new routes--would have more than doubled the reach of today's subway system.

34: Samuel Friede, Coney Island Globe, 1906. Postcard. Collection Queens Museum.

A goliath measuring 300 feet around and 750 feet high,, the balloon-like tower containing theaters, a dancehall, restaurants, and a roller rink was made of 7,000 tons of steel topped by powerful searchlights. Friede and his partners never intended to build it, and one member of the team was arrested for embezzlement.

35: Rufus Gilbert, *Elevated Railway*, 1871. Wood engraving (facsimile), courtesy Library of Congress, Prints & Photographs Division.

Gilbert proposed a compressed air-powered transit system elevated on ornate cast iron arches. The state legislature gave him a charter to build it in 1872, but investment dried up in the Panic of 1873.

36: Alfred Ely Beach, Beach Pneumatic Railway, 1870. Stitched book with black printing ink, yellow paper covers courtesy New-York Historical Society; book page (facsimile) courtesy The New York Public Library, Astor, Lenox and Tilden Foundations.

Beach's underground railway was a system of subway cars propelled by a curtain of air, like packages in a pneumatic tube. A preliminary 294-foot tunnel was constructed in just 58 days, and remained operational for three years.

37: Eric Gugler, Development of Battery Park, 1929. Gelatin silver print, courtesy Library of Congress, Prints & Photographs Division.

Gugler, designer of prominent memorials in Washington, D.C. and Chicago, proposed an 800-foot-tall obelisk on landfill at the tip of Manhattan as a World War I tribute and a gateway to the metropolis.

38: Norman Bel Geddes, *All-Weather-All-Purpose Stadium*, 1949. Pencil on paper (facsimile), courtesy Harry Ransom Center, The University of Texas at Austin; magazine, Collier's, September 27, 1952, courtesy private collection.

This was to be Brooklyn Dodgers stadium with a retractable roof and a "synthetic substance to replace grass on the entire field...painted any color." Roof and field preceded the invention of AstroTurf and building of the Astrodome by more than 10 years.

39: Raymond Hood, *Skyscraper Bridges*, 1925. Page proof for publication courtesy Avery Architectural & Fine Arts Library, Columbia University. Drawing by Hugh Ferriss.

Hood, obsessed with tackling the city's mounting congestion, proposed a series of 50 to 60 story "apartment bridges"—containing housing, shops, theaters, and esplanades—on either side of broad roadways above the East and Hudson Rivers.

40: Pei Cobb Freed, John F. Kennedy International Airport, 1984-1990. Rendered section, 1990. Watercolor, gouache, and ink on wove paper, courtesy Pei Cobb Freed.

The JFK makeover would connect scattered terminals via moving sidewalks leading to a grand concourse—a domed arrival space rivaling Grand Central Terminal, with a huge oculus-shaped skylight permitting the sun's rays to pour in from overhead.

41: Norman Sper, Filling in the Hudson, Modern Mechanix Magazine, March 1934. Private collection.

Modern Mechanix called publicist and "engineering scholar" Norman Sper's \$1 billion plan to dam the Hudson River at both ends of Manhattan, connecting the island with New Jersey, "the world's eighth wonder."

42: John A. Harris, *Plan to Drain the East River, Popular Science* Magazine, December 1924. Private collection.

As traffic congestion spiked in Manhattan in the mid-1920s, John A. Harris, a deputy police commissioner, proposed a plan using dams to drain the entire East River, converting it into a system of "automobile and motor-truck highways, subway lines, parking spaces and city centers."

43: Thomas Kennard Thomson, City of New Manhattan, 1930. Map mounted on scrapbook page, newspaper clippings (facsimile) courtesy The Lionel Pincus and Princess Firyal Map Division, The New York Public Library, Astor, Lenox and Tilden Foundations.

Thomson, a skilled and successful civil engineer, devised a way to fill New York Harbor from Battery Park to Ellis Island and beyond, adding 50 square miles to Manhattan. His plan never found financial backing.

44: Venturi, Scott Brown & Associates, Whitehall Ferry Terminal, 1992. Computer plot on vellum, pencil and marker on trace, model (acrylic, paint, paper) and diazo-type print (facsimile) courtesy The Architectural Archives, University of Pennsylvania by the gift of Robert Venturi and Denise Scott Brown.

A postmodern tour de force, the soaring barrel-vaulted shed sported the world's largest clock. This electronic billboard depicting a timepiece—not a mechanical device—would have made the ferry building a 24/7 ornament at the tip of Lower Manhattan.

45: McKim, Mead & White, Design for the Brooklyn Museum, 1893. Watercolor and pen and ink on paper and site plan (facsimile) courtesy Brooklyn Museum. Watercolor by Francis L.V. Hoppin.

The firm's Beaux-Arts palace consisted of four inter-connected wings that would have made it larger than the Met and the Louvre (and four times its current size). But when New York annexed Brooklyn in 1889, the dream died along with Brooklyn's autonomy from its more populous neighbor.

46: Frank Gehry, Guggenheim Museum East River, 2000. Photograph of model (facsimile) courtesy Gehry Partners, LLP.

The swirling metal mass near the Brooklyn Bridge, crowned by a 40-story condominium, was called "an icebreaker of a design, a plan for crunching through rigid streetscapes and frozen minds." Then the World Trade Center attacks wiped out the global economy.

47: Moshe Safdie, *Habitat New York I & II*, 1967-1968. Pencil, plastic tone sheet, and lettraset on paper, ink on trace, pencil on paper and model (wood, painted acrylic), courtesy Moshe Safdie Collection, McGill University Library.

Safdie called his vision "modern-day Utopias," modular, communal, terraced living spaces composed of ultralight units suspended from catenary cables, like decking on a suspension bridge. The octagonal living spaces were meant for vacant piers next to the Fulton Fish Market.

48: George Audsley, City Hall, 1893. Ink on paper, courtesy The Architectural Archives, University of Pennsylvania by the gift of G. Holmes Perkins.

Audsley's oh-so-Victorian entry for the 1893 competition to replace New York's cramped City Hall even displayed hints of Moorish detailing. No scheme was deemed worthy, and the next year the state passed a law prohibiting City Hall's demolition.

49: Frank Lloyd Wright, *St. Mark's Tower in the Bouwerie for William Norman Guthrie*, 1927-1931. Pencil and colored pencil on paper, ink and colored pencil on paper (facsimile), courtesy The Frank Lloyd Wright Foundation Archives (The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University), 2905.002-3, 19, 29.

Wright's series of cantilevered glass towers, clustered around the city's oldest church, was disliked by conservative church elders and eventually doomed by the Great Depression.

50: Office of Metropolitan Architecture, 23 East 22nd Street, 2008. Model (Steel, resin, acrylic, painted foam), computer rendering, courtesy OMA, Rotterdam, The Netherlands.

A building playing peekaboo from behind another featured cantilevered floors piled precariously like shoeboxes about to topple from 24 stories off the ground. Luxury apartments with glass-bottomed overhangs added vertigo to the building's many side-effects.

51: Harvey Wiley Corbett and Dan Everett Waid, *Metropolitan Life North Pavilion*, 1929. Newspaper clippings and ink and pencil on paper courtesy MetLife; photomontage (facsimile) courtesy Avery Architectural & Fine Arts Library, Columbia University, 1000.057; model (wood) courtesy Make It Nice.

The Great Depression forced the architects to trim this telescoping 100-story Art Deco tower—now known as Eleven Madison—down to a stubby 30.

52: Daniel Libeskind, One Madison Avenue, 2007. Ink on trace and model (plexiglas, paper, wood) courtesy Studio Daniel Libeskind.

Like his early World Trade Center designs, the 54-story apartment tower was filled with a spiral of terraced sky gardens, this time revealed with cutaways in the glass facade. The project was doomed by the Great Recession of 2008.

53: Morphosis Architects, *Olympic Village*, 2004. Pencil on trace and computer rendering courtesy Morphosis Architects.

New York's failed bid for the 2012 Summer Olympics included a plan of contoured buildings and gridded walkways to remake 61 acres of industrial land at Hunter's Point, directly across the East River from the United Nations.

54: Wallace K. Harrison, X-City, 1946. Pencil on paper (facsimile) courtesy Avery Architectural & Fine Arts Library, Columbia University, 1000.001.00169. Drawing by Hugh Ferriss.

Developer William Zeckendorf originally planned a Rockefeller Center-like development on the future site of the United Nations. Instead he sold the land to John D. Rockefeller himself, who donated it to the UN.

55: Howe and Lescaze, *The Museum of Modern Art*, 1930. Photograph of model and drawings courtesy Avery Architectural & Fine Arts Library, Columbia University, 1979.003; model (wood, plastic, and metal) courtesy The Museum of Modern Art, Gift of Della Rothermel, 1998.

The architects experimented with translucent glass, staggered and setback facades, light tubes, and stacked cantilevered boxes. Philip Goodwin and Edward Durell Stone were hired instead.

56: I.M.Pei, *Hyperboloid*, 1954-1956. Mixed media on paper, ink and pencil on tracing paper, and printed design report courtesy Pei Cobb Freed.

A 1,497-foot tall office tower and transit hub that would replace Grand Central Terminal, the 108-story, \$100-million edifice, spanning a nine-acre site, would have

been the world's tallest and most costly structure, besting the Empire State Building by more than 200 feet.

57: Marcel Breuer, 175 Park Avenue, 1968. Graphite, ink and gouache with trace, oil on illustration board, and pencil on trace courtesy Marcel Breuer Papers, Special Collections Research Center, Syracuse University Libraries.

Breuer's 55-story skyscraper would preserve Grand Central Terminal's façade, but driven its foundation through the station's waiting room, a desecration nearly equal to the demolition of Pennsylvania Station in 1963.

58: McKim, Mead & White, *Grand Central Terminal*, 1903. Black ink and watercolor wash on paper courtesy New-York Historical Society.

The dominant architects of the era would have won the competition for a new Grand Central Terminal, but their 14-story station, with its 60-story clock tower, lost to a design by the brother-in-law of the railroad's chief engineer.

59: Reed & Stem, *Grand Central Terminal*, 1903. Photostat (facsimile), courtesy The New York Public Library.

The firm proposed a French Renaissance station containing a 12-story office building, with a "grand court" over the tracks surrounded by colonnaded edifices (including a Metropolitan Opera House, an Academy of Design, and several municipal buildings).

60: CoopHimmelb(I)au Wolf Prix & Partner, New York Tower, 2006. Computer rendering courtesy CoopHimmelb(I)au.

Rising 1000 feet on Eighth Avenue, the first 400 feet a conventional rectangular shaft, the floors above begin to twist, ultimately rotating 50 degrees, providing views that would have sliced at a diagonal through the city's rigid street grid.

61: Zaha Hadid, 425 Park Avenue, 2012. Computer rendering courtesy Zaha Hadid Architects.

Four brand-name architects vied for the coveted Park Avenue and 55th Street tower. Hadid said the "sleek verticality" of her 669-foot, 40-story structure with its exterior glass elevators "breathes the very essence of the city, while its gentle curves evoke a new dynamism of form which is both distinctly contemporary and ageless."

62: I.M. Pei, *Helix Apartments*, 1948-1949. Mixed media and photograph on poster board, courtesy Pei Cobb Freed.

Responding to the post-War housing crunch, these 21-story cylindrical towers, composed of wedge-shaped apartments spiraling up around a central trunk like a tree, could allow families to grow. Each building was column-free, supported by radiating fins of pre-stressed concrete.

63: Michael Graves, Whitney Museum of Art Expansion, 1985. Model (Paper board, basswood, acrylic sheet, and acrylic paint) and pencil and colored pencil on yellow trace paper, courtesy Michael Graves Architecture & Design.

Graves' response to Marcel Breuer's 1966 Madison Avenue original would have tripled the gallery space of Breuer's inverted ziggurat. Neighbors and many critics condemned it, and a fickle museum board withdrew funding for the \$37.5-million addition.

64: Richard Morris Hunt, New York Historical Society, 1866. Watercolor, pencil, and pen on paper (facsimile), courtesy Library of Congress, Prints & Photographs Division.

The design for what was then the largest museum in the city resembled the Louvre, with its classical proportions, enclosed courtyards and copious stone sculptures. The site was revoked, but Hunt later went on to design the Metropolitan Museum of Art.

65: Richard Morris Hunt, Central Park Gates, 1863. Watercolor, pen, and pencil on paper (facsimile), courtesy Library of Congress, Prints & Photographs Division.

Hunt, the first American to study at the École des Beaux-Arts in Paris, proposed grand, European-inspired entries to Central Park. But park designers Olmsted and Vaux's pastoral vision won out.

66: Aymar Embury, *Porte Nouveau*, *Metropolitan Museum*, 1943. Charcoal and crayon on paper (facsimile) courtesy Avery Architectural & Fine Arts Library, Columbia University. Drawing by Hugh Ferriss.

Robert Moses's favorite architect (and designer of the building that houses the Queens Museum) proposed removing the Met's grand stairs and replacing them with a curved car ramp. Embury had similarly destructive plans for the American Museum of Natural History's south facade.

67: Edward Larrabee Barnes, New York Botanical Garden, Plants and Man Exhibit, 1973. Pencil and ink on mylar (facsimile) and photograph of model courtesy Frances Loeb Library, Harvard Graduate School of Design.

Barnes' megastructure—faceted like a quartz crystal—consisted of independent biospheres clad in hexagonal glass panels, supported by thin pipe columns. A restoration of the garden's historic conservancy robbed the project of needed funds.

68: John Johansen, *Leapfrog City*, 1966. Ink on paper (facsimile) courtesy Avery Architectural & Fine Arts Library, Columbia University, 1998.011.

First intended for a site in Harlem, then expanding citywide, Johansen's bold vision of "sites over sites" installed new housing above existing stock, supported by industrial-inspired steel gantries.

69: Frank Lloyd Wright, New Sports Pavilion, Belmont Park Raceway, 1956. Pencil and colored pencil on paper, ink, pencil and colored pencil on paper (facsimile), courtesy The Frank Lloyd Wright Foundation Archives (The Museum of Modern Art | Avery Architectural & Fine Arts Library, Columbia University), 5616.012, 16, 20.

This angular, stacked proposal for Harry S. Guggenheim was topped by a textured plastic roof that would glow when struck with spotlights. The New York Jockey Club dismissed the plan.

MODELS, BOOKS and PAMPHLETS:

70: Santiago Calatrava, 80 South Street, 2003. Model (plexiglas, plastic, and wood) courtesy Sciame Construction.

Calatrava's first proposed residential project in the U.S. would be 835 feet tall. The reed-thin building, rising a block from the South Street Seaport, would consist of 12 glazed cubes, each four stories high, cantilevered from steel trusses hanging from a vertical core.

71: Harvey Wiley Corbett, How You May Live and Travel in the City of 1950, 1925. Magazine courtesy Queens Museum.

The president of the American Architecture League looked into the future metropolis and saw half-mile high skyscrapers, with clean air piped from the countryside, and traffic moving freely on quadruple level streets.

72: Robert Moses, Othmar Ammann, *Brooklyn Battery Bridge*, 1939. Pamphlet with foldout, courtesy MTA Bridges and Tunnels Special Archive.

A span connecting Brooklyn to the Battery would be a key link in a speedway that would allow Brooklyn traffic to enter Manhattan at its southern tip, race up the island, and exit at the Bronx-Whitestone Bridge. President Franklin Roosevelt axed it.

73: Victor Gruen, East Island, 1961. Printed booklet. Courtesy Gruen Associates.

Developer Frederick Richmond hired Los Angeles-based Gruen to devised a \$450-million plan for the largely vacant city plot now known as Roosevelt Island. The architect wanted to deck the island with a 22-foot-tall platform, above which would rise a wall of 8- to 50-story apartment towers, housing up to 70,000 people.

74: THINK, World Trade Center Master Plan, 2002. 3D printing material, acrylic, and piano wire, courtesy Rafael Viñoly Architects.

Runners-up in a 2002 competition to design a new master plan for the World Trade Center, THINK—consisting of Rafael Vinoly, Shigeru Ban + Dean Maltz, Frederic Schwartz and Ken Smith—reinterpreted the original Twin Towers, but in the form of two steel scaffolds rising like shafts of light, hosting a memorial, a museum, and an amphitheater.

75: Archi-Tectonics, Winka Dubbeldam, *Soho Tower*, 2007. Model (lasercut wood and plexiglas) courtesy Archi-Tectonics.

Located on a triangular site in Soho, this hotel scheme merged transparency, privacy and sustainability with a glass envelope wrapped around a solid form. The firm lost a private competition.

76: John Rink, *Plan of the Central Park, New York*, 1858. Ink and colored washes on woven paper backed with linen (facsimile) courtesy New-York Historical Society.

Engineer John Rink's competition-losing vision of a formal, symmetrical Central Park with tightly arranged arbors and glades created shapes resembling stars and medallions bordered with formal sequences of trees, shrubs, flowers, and a golf links.

77: John Johansen, Resort Hotel, 1980. Sketchbook, courtesy The Architectural Archives, University of Pennsylvania by the gift of John Maclane Johansen.

Johansen, known for radically manipulating common typologies, designed a hotel whose steel space frame construction would open up a large atrium filled with strange floating objects. A rooftop restaurant was shaped like a UFO.

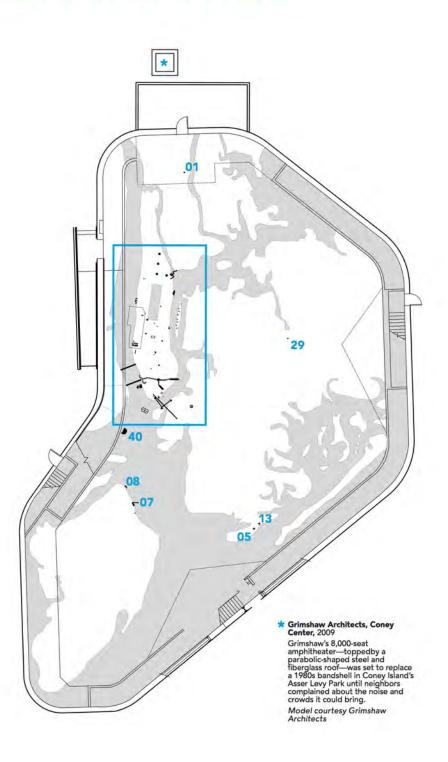
78: Robert Moses, *Midtown Manhattan Expressway*, 1945-1959. Pamphlet with foldout and photograph, courtesy MTA Bridges and Tunnels Special Archive; bound volume courtesy The New York Public Library, Astor, Lenox and Tilden Foundations.

The expressway, coupling New Jersey to Long Island, ran 10 floors above the street. Its six-lane path would obliterate all of the buildings on the south side of 30th Street. Those buildings spared would be sheared or hollowed, like logs.

79: William Pereira, ABC Headquarters, 1963. Model (wood, plastic, paper) and binder (facsimile), courtesy Johnson Fain.

This elongated, 77-story black pyramid, merging skyscraper and transmission tower, was to be located on Columbus Avenue, diagonally across from Lincoln Center. Pereira adapted the idea in 1969 for the Transamerica Pyramid in San Francisco.

THE PANORAMA OF THE CITY OF NEW YORK



- Edward Larrabee Barnes, New York 01-Botanical Garden, Plants and Man Exhibit Santiago Calatrava, Governors Island Gondola Santiago Calatrava, 80 South Street 03-2003 04-Harvey Wiley Corbett and Dan Everett Waid, Metropolitan Life North Pavilion 1929 05-Samuel Friede, Coney Island Globe 06-Norman Bel Geddes, Rotary Airport 07-Diller Scofidio+Renfro, Stapleton Homeport Peter Eisenman, Staten Island Institute of 08-**Arts and Sciences** 1997 09-R. Buckminster Fuller & Shoji Sadao with June Jordan, Harlem Skyrise Project 10-Buckminster Fuller, Brooklyn Dodger Dome Michael Graves, Whitney Museum of 11-Art Expansion 1985 12-Bertrand Goldberg, ABC Office Building 13-Grimshaw Architects, Coney Center 14-Victor Gruen, East Island 1961
- Eric Gugler, Development of Battery Park Office of Metropolitan Architecture, 23 15-East 22nd Street 16-Wallace K. Harrison, X-City 31-I.M. Pei, Hyperboloid 1954-1956 Wallace K. Harrison, Metropolitan Opera 32-Pei Cobb Freed, Columbia University Master Plan 1966 1969 33-Pereira and Luckman, Communications City 18-Steven Holl, Parallax Towers Paul Rudolph, Graphic Arts Center 34-Steven Holl, Bridge of Houses 35-Paul Rudolph, City Corridor 20-Raymond Hood, Skyscraper Bridges Moshe Safdie, Habitat New York I & II 36-21-Philip Johnson, Galleria 37-Venturi, Scott Brown & Associates, Whitehall Ferry Terminal 22-Morris Lapidus, Olympic Tower Venturi, Scott Brown & Associates, 23-Howe and Lescaze, The Museum of **Times Square Tower** Modern Art Frank Lloyd Wright, St. Mark's in the Daniel Libeskind, One Madison Avenue 24-Bouwerie for William Norman Guthrie 25-Raymond Loewy, Midtown Airport Frank Lloyd Wright and Taliesin Associated Architects, Key Plan for Ellis Island Robert Moses, Fifth Avenue South 26-William Zeckendorf, Airport 27-Robert Moses, Othmar Ammann, 1945 Brooklyn Battery Bridge 42-Kohn Pederson Fox, West Side Stadium, Matthew Nowicki, Columbus Circle 43-Kohn, Pedersen, Fox, New York Stock Exchange Tower **Shopping Center** Richard Meier & Partners, Eisenman Eliot Noyes, Westinghouse Pavilion for Architects, Gwathmey Siegel and Associates, the 1964 World's Fair and Steven Holl Architects, Memorial Square 1961 **World Trade Center** 2002

