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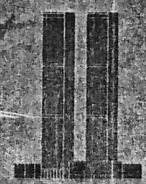


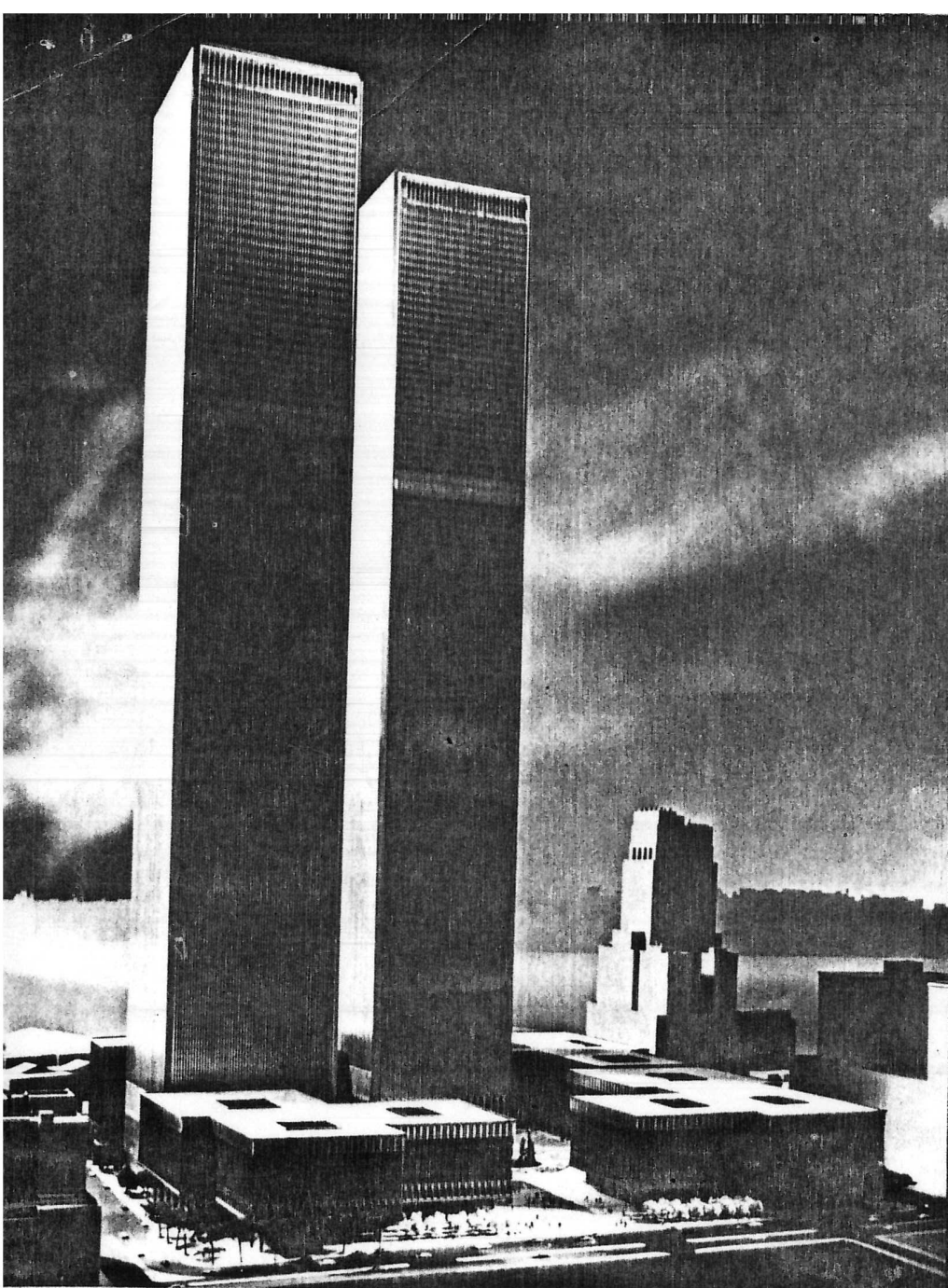
THE PORT OF NEW YORK AUTHORITY  
111 Eighth Avenue, New York, New York 10011

# the world trade center

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*Port of N.Y. Authority World Trade Dept.*





*Over-all view of model of The World Trade Center, looking northwest, shows main entrance at Church Street, and gleaming 110-story twin towers rising 1,350 feet above the vast plaza.*

WT-1035-0366

## The World Trade Center in the Port of New York

The World Trade Center, with its gleaming twin 110-story towers, will add a new symbol of international trade to the world-famous Manhattan skyline. The principal design elements of the Center include the two towers, the tallest buildings in the world, soaring 1,350 feet above a spacious plaza of almost five acres surrounded by four buildings, each with a specific function in international trade.

The great Trade Center, under construction by The Port of New York Authority on the west side of lower Manhattan, will provide a unified community in the Port of New York for America's export-import business and act as a clearing house for the handling, development and expansion of such business. It will be recognized throughout the nation and the world as a focal point for the convenient and efficient administration of all phases of international trade.

The site on which the international trade complex is being built is bounded by West Street on the west, Barclay and Vesey Streets on the north, Church Street on the east, and Liberty Street on the south.

The Trade Center, containing approximately 10 million square feet of rentable space, will accommodate various governmental agencies, world trade services and exhibit areas, and private businesses engaged in export-import trade in world markets. Of the total space in the Center, approximately four million square feet will be available for rental to business and industries engaged in foreign trade. The balance of the space is earmarked for State, Federal and foreign governmental agencies, building and tenant service areas, parking and "population" circulation. Rental rates will be comparable with those prevailing in New York City.

The Trade Center will include a new and spacious Manhattan Terminal for the Port Authority Trans-Hudson (PATH) system, the former Hudson and Manhattan Railroad, to replace the existing terminal of that interstate system in the present Hudson Terminal Buildings on Church Street.

Under agreements worked out between the City of New York and the Port Authority, the Port Authority will pay to the City in lieu of real estate taxes on the site the full amount of taxes received when the property was privately owned. Additional annual payments, based on full tax rates will apply to office, store and hotel areas occupied by private tenants engaged in the carrying on of a trade or business for profit.

#### **World Trade Center Occupancy**

Government and private firms which play an indispensable part in international marketing and in the administrative processing of world trade will be housed in the great new project.

The United States Bureau of Customs and other Federal agencies, Port Authority administrative offices, foreign commercial attaches, national government trade centers, foreign government purchasing missions, Custom House brokers, trade associations, exporters, importers, freight forwarders, international banks, steamship lines, marine insurance firms and other agencies and businesses related to foreign trade also will be among the occupants of The World Trade Center.

The centralization of these basic elements in the handling of foreign trade will provide an unparalleled opportunity to streamline and coordinate their activities with resulting dollar and time savings and enormously increased efficiency. These efficiencies and the rapidity of communications within the Center are expected to contribute substantially to the expansion of this country's trade with the world.

Supplementary services will include a World Trade Information Service, a World Trade Institute and extensive exhibit and display facilities. The Center thus will become an international market place for the buying and selling of goods and products of the United States as well as those of other nations.

Government agencies and businesses will be able to communicate with regard to common problems and the imple-

mentation of foreign trade programs with a minimum of cost, time and effort. It is expected that their common interests will be served by the World Trade Institute which will be established in the Center to serve as an instrument for world trade education, research and promotion.

All international trade operations of the Bureau of Customs in the Port of New York will be consolidated within The World Trade Center. The intricate Customs functions relating to the movement of commerce into and out of the Port will be brought together so that importers, exporters and the public may transact their business with Customs at one convenient location.

Greater efficiency will result from the consolidation of Customs offices in this modern and specially designed 763,500-square-foot facility. This will permit the handling of the increased volume of business which government officials anticipate in substantially less space than in Customs' present crowded, inadequate quarters.

One of the most important elements of the Trade Center, a World Trade Information Service, will be a clearing house for international trade information. It will provide, on a scale not now available, accurate and timely assistance on world trade regulations, markets and opportunities to Americans and overseas businessmen. It will fill the urgent need for a "one-stop" world trade information facility.

A hotel, to be located in the same building as the Information Service, will provide an essential public amenity for the thousands of business visitors who will come to The World Trade Center every day.

#### **The Port Authority Trans-Hudson (PATH) Terminal**

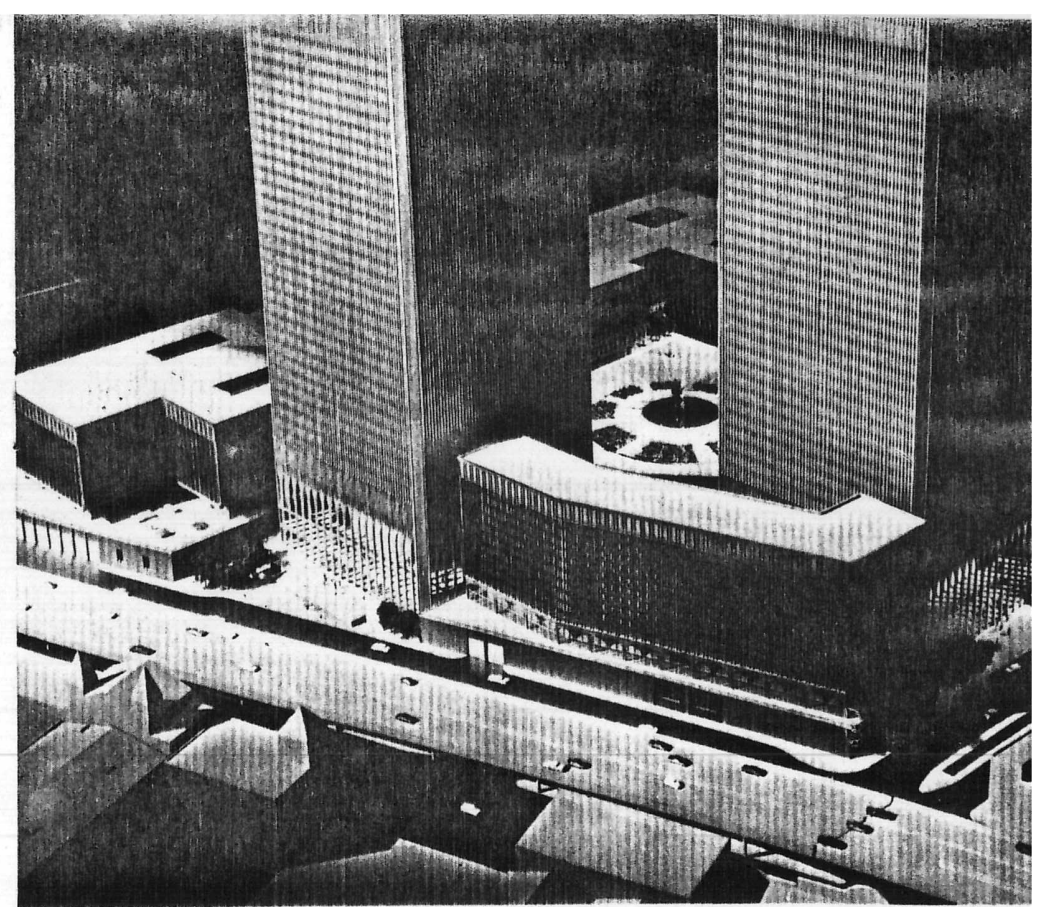
A new PATH Terminal in The World Trade Center will replace the existing, outmoded facilities in the Hudson Terminal Buildings at 30-50 Church Street to provide a modern and convenient rapid transit terminal for New Jersey and New York commuters. The new Terminal will have convenient access to all local transportation systems. Every subway system in lower Manhattan will connect directly with the Concourse beneath the Trade Center Plaza.

The Port Authority Trans-Hudson rail transit system, which carries about 30 million passengers a year, is an essential link in the network of rail, bus, and auto facilities for trans-Hudson commutation between New Jersey and New York. The Port Authority has undertaken a multi-million dollar modernization and rehabilitation program since acquiring the PATH properties in September 1962.

### Relocation Program at Trade Center Site

On December 1, 1965 there were some 238 retail stores; 143 manufacturing, warehousing and industrial premises; 102 residential units including 41 apartments and 61 rooms, and 79 offices for a total of 562 tenants on The World Trade Center site. The Port Authority undertook a \$2,800,000 program to assist the occupants of these premises to relocate them and to defray their moving expenses. By the end of 1967, over 500 or 90 percent of these tenants had been relocated.

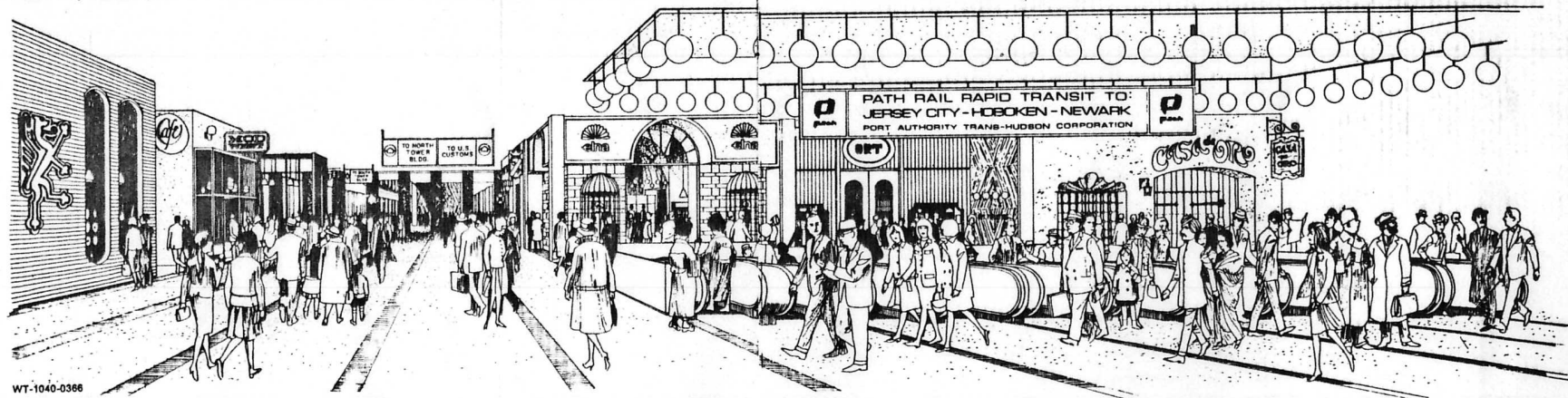
The personalized relocation program is similar to those successfully carried out by the Port Authority in connection with construction projects at its midtown Bus Terminal, the Lincoln Tunnel Third Tube, the George Washington Bridge



View of model of The World Trade Center, looking northeast, showing United States Customs Building (extreme left) and World Trade Information Center and Hotel (curved structure at right).

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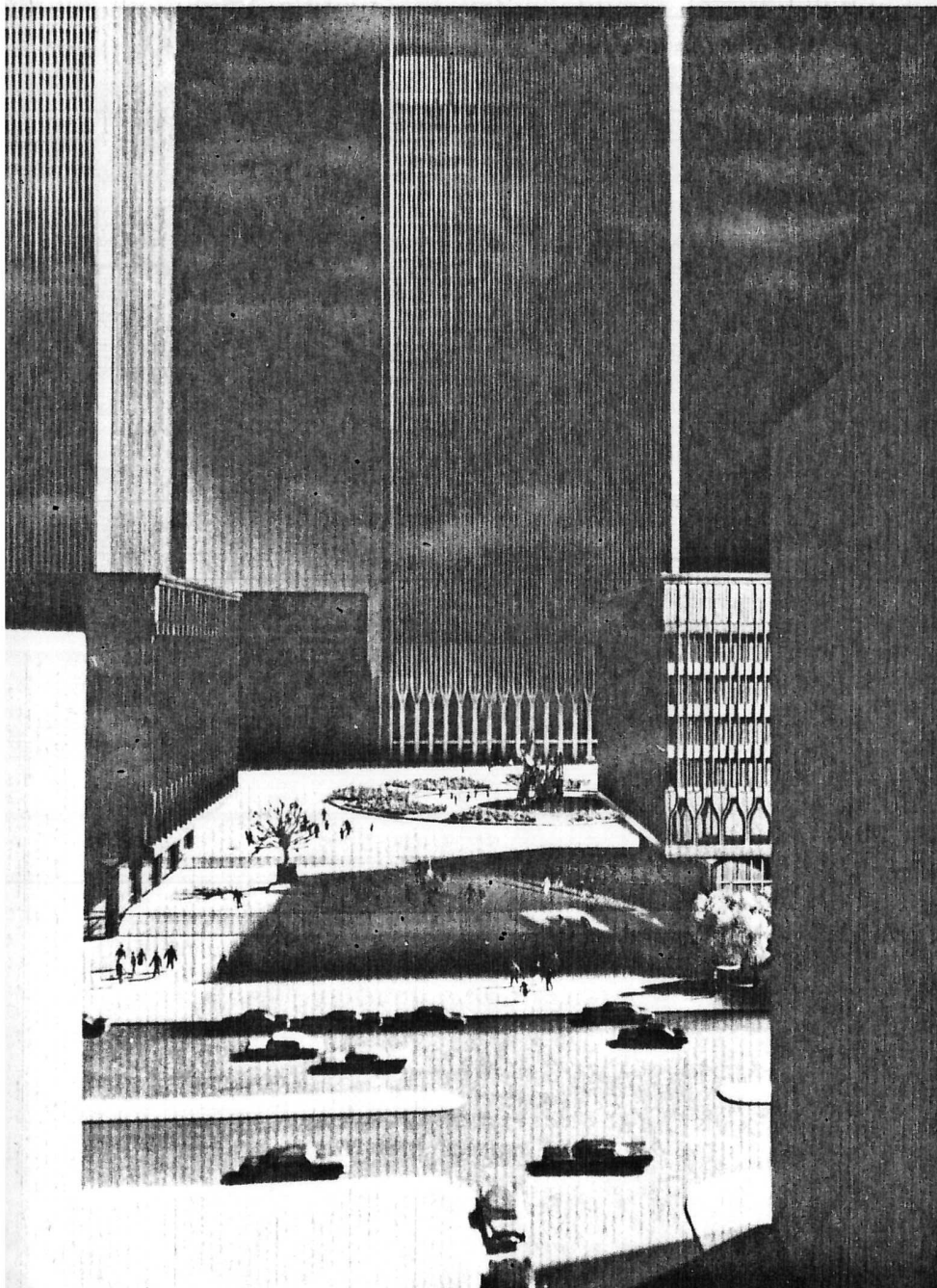
*The World Trade Center's Concourse, immediately below plaza level, will be the principal pedestrian circulation area of the entire complex, and will serve as entrance to new Manhattan terminal of Port Authority Trans-Hudson (PATH) System. Concourse will also provide access to all New York City subways.*



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View looking west, shows 175-foot-wide main entrance on Church Street.

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lower level, and the Brooklyn-Port Authority Marine Terminal. The Port Authority is making payments for moving expenses comparable to those available under the City of New York's non-Title I Relocation Program and the Federal Government's Title I Urban Renewal Program. In addition, the bi-state agency is providing bonus payments to retail stores and residential occupants who move within three to six months of the date of title vesting.

### **Construction**

The Port Authority undertook the \$575 million World Trade Center project in accordance with legislation enacted in 1962 by the States of New York and New Jersey. The project will be financed and built by the bi-state agency on a self-supporting basis.

Construction of the Trade Center started in August 1966. Contract awards for the Trade Center project through the end of 1967, totaling over \$200 million, include the foundations; a perimeter wall around the excavation; some 250 elevators and escalators; the fabrication and erection of the 192,000 tons of steel required for the two Tower Buildings and the subsurface areas west of Greenwich Street; and the fabrication and erection of the aluminum exterior curtain walls. A contract has also been awarded for the New York City-Port Authority 23.5-acre Hudson River landfill project in connection with the Trade Center.

First occupancy in the Center will take place in 1970, with full completion of the entire project scheduled for 1972. Between 20,000 and 30,000 man years of work will be required for the project. An estimated 7,000 to 8,000 men will be working on the project during peak periods of construction activity.

### **The Architects and the Plan**

Two of the world's leading architectural firms, Minoru Yamasaki and Associates of Troy, Michigan, and Emery Roth & Sons of New York City were engaged by the Port Authority in September 1962 as architects for The World Trade Center.

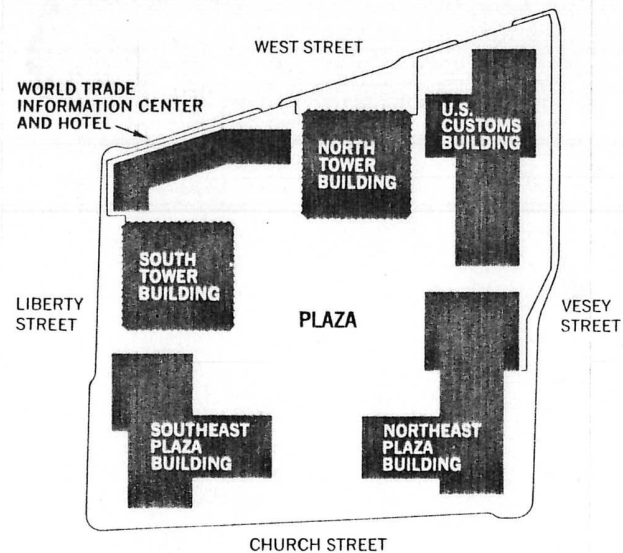
Mr. Yamasaki's achievements have received international

recognition as outstanding examples of contemporary architecture. At the time he accepted The World Trade Center assignment, he described it as "the most exciting thing we or anyone else in the architectural profession will have the opportunity of working on for a long time to come."

Emery Roth & Sons, one of New York's leading architectural concerns, which has designed some 60 of Manhattan's most important buildings, described The World Trade Center project as "one of the most challenging and gratifying in our long experience."

The architectural firms have been assisted throughout by the World Trade Center Planning and Construction Division under the direction of Malcolm P. Levy, Chief, and the Port Authority Engineering Department under the direction of John M. Kyle, Chief Engineer. Also assisting them have been the consulting engineering firms of Jaros, Baum and Bolles, and Joseph R. Loring and Associates, both of New York City; and Skilling, Helle, Christiansen, Robertson of Seattle, Washington.

**Site Plan/Plaza Level**



*View looking northwest, shows five-acre plaza and main entrance at Church Street.*

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The Tishman Realty & Construction Company, Inc. of New York City, is general contractor on the project. The company, which specializes in high rise buildings, previously had served as consultant-contractor, assisting the Port Authority's own design and planning team. As general contractor for the Trade Center, Tishman will coordinate and supervise construction and assume responsibility for all field contracts, exclusive of the foundation work. The company, subject to Port Authority approval, also will arrange for all remaining sub-contracts for the Trade Center.

### Design of the Trade Center

In their design for The World Trade Center, the architects have solved major problems in cost, structural design and vertical transportation to produce a self-supporting facility of unparalleled magnitude.

The architectural treatment of the plaza buildings features textured exteriors of precast concrete of a deep gray-brown hue with bronze colored anodized metal spandrels and vertical mullions to complement the brightly polished metallic finish of the lower portion of the towers.

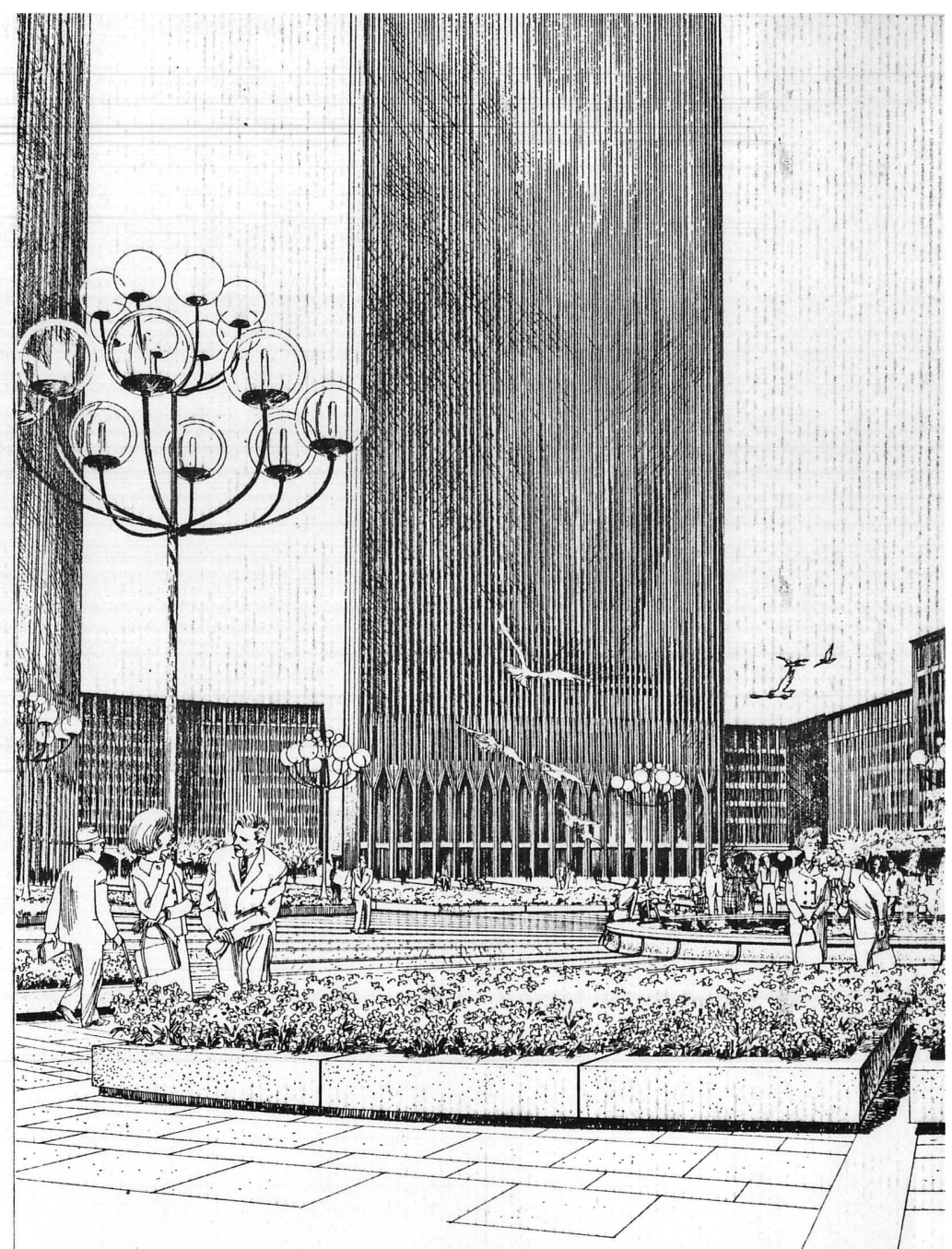
The Plaza pavement will be of beige-gray Mankato Marble, a specially hard marble from Minnesota, with off-white radiating lines emanating from the fountain.

The design also includes a landscaped West Street entrance to the North Tower Building. This feature makes it possible to integrate the architectural plan for The World Trade Center with the development of the Hudson River waterfront after the West Side Highway is depressed, as proposed by the New York City Planning Commission.

### Tower Buildings

The most outstanding feature of the architectural plan is the twin 110-story towers, whose purity of design and soaring height represent the ultimate expression of Twentieth Century high-rise architecture. The two towers, each 209 feet square, will be faced with a shiny aluminum metallic skin.

At their base, the exterior columns of the tower buildings

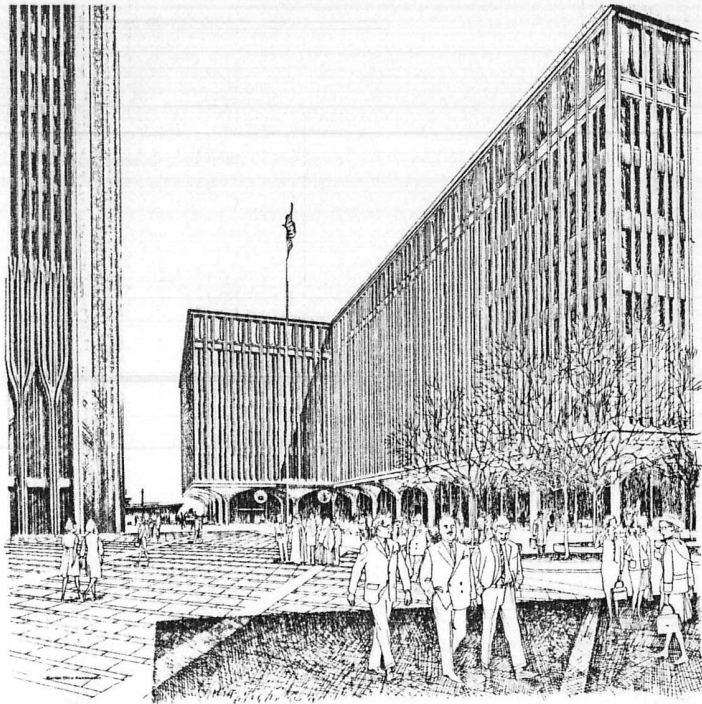


Artist's rendering of plaza area of The World Trade Center shows North Tower Building (center) and portion of 80-foot-diameter fountain in spacious park-like plaza.

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will be spaced at ten-foot intervals. As the columns rise to a height of 40 feet, they gracefully separate into three columns, each 3 feet 4 inches apart, forming the normal building module. These columns serve as dramatic frames for floor-to-ceiling windows, each 22 inches wide. The columns terminate in a delicate tracery at the crown. The spacing of the columns at the lower portions of the tower buildings allows a visual tie-in between the towers' main lobbies and the Plaza.

The main lobbies of the tower buildings will be a particularly dramatic element in the overall architectural plan. They are in complete harmony with the grand scale of the building and with the expected volumes of World Trade Center population and visitors. The lobbies will rise 70 feet from the



*Rendering of United States Customs Building at northwest corner of The World Trade Center as seen from plaza area.*

Concourse level where the main bank of elevators for each tower building is located. Visitors to the buildings from the Plaza level will enter onto a large balcony overlooking the Concourse level.

The skylobby concept which divides the tower buildings into three elevator zones, each with its own express service, reduces the number of elevator shafts required. In the unique structural framing system, the exterior walls of the tower buildings will carry most of the vertical loads, resist the lateral wind loads and provide a dividend in the form of column-free interiors from the elevator core to the exterior walls, permitting complete flexibility in space layout. The design also offers maximum efficiency in structural resistance to wind load.

#### **The Plaza and Plaza Buildings**

Four low-rise buildings — the United States Customs Building, the Northeast and Southeast Plaza Buildings, and the World Trade Information Center and Hotel — will surround the five-acre Plaza, which has been opened to broad pedestrian vistas. This has been accomplished by separating each structure, thus enhancing the skyward sweep of the twin towers, as well as increasing accessibility and circulation from the surrounding streets to and from the Plaza.

The magnificent Plaza will rank in size and beauty with the historic plazas of the Old World. From this Plaza will be seen the delicate tracery of the four plaza buildings and the soaring arches of the entrances of the twin towers. The Plaza incorporates an off-center pool and fountain, 80 feet in diameter, surrounded by a planting area, as a main focal point and unifying element of design. Plants varying with the seasons will add dramatic color to the great Plaza. The pool has been integrated with the Plaza paving by means of radiating lines which intersect a series of off-center circles, reminiscent of the Campidoglio in Rome.

The broad opening at Church Street will serve as the main entrance to The World Trade Center. This entrance, 175 feet wide at the Plaza level, will provide a dramatic gateway





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*View of World Trade Information Center and Hotel which will face spacious five-acre plaza. South Tower Building is at left.*

between the busy, narrow thoroughfares of lower Manhattan and the spacious park-like atmosphere of the Plaza.

Flanking the Church Street entrance to the site, the Northeast and Southeast Plaza Buildings are designed to provide essential governmental trade services, as well as spacious areas for displays of American and overseas products to facilitate international trade transactions. Both are seven-story structures of irregular shape. The Northeast Plaza Building extends for 420 feet along Vesey Street and 300 feet on its Church Street side. The Southeast Plaza Building is about 300 feet long on its Liberty Street side and 300 feet along Church Street.

The Port of New York's new Customs House will be located on the northwest corner of the Trade Center site, adjacent to the North Tower Building. This structure will extend 450 feet along Vesey Street and some 240 feet along West Street.

At the southwest corner of the site, between the two tower buildings, will be the World Trade Information Service and Hotel Building. This ten-story structure will overlook West Street and the Hudson River. It will be 370 feet long along its central spine and some 65 feet wide.

The Concourse level immediately below the Plaza, with its connections to the PATH System and the subways, will be the principal pedestrian circulation level of the entire com-

plex. From this Concourse the population of The World Trade Center and business and other visitors will have access to all of the buildings on the site.

### **History of the Project**

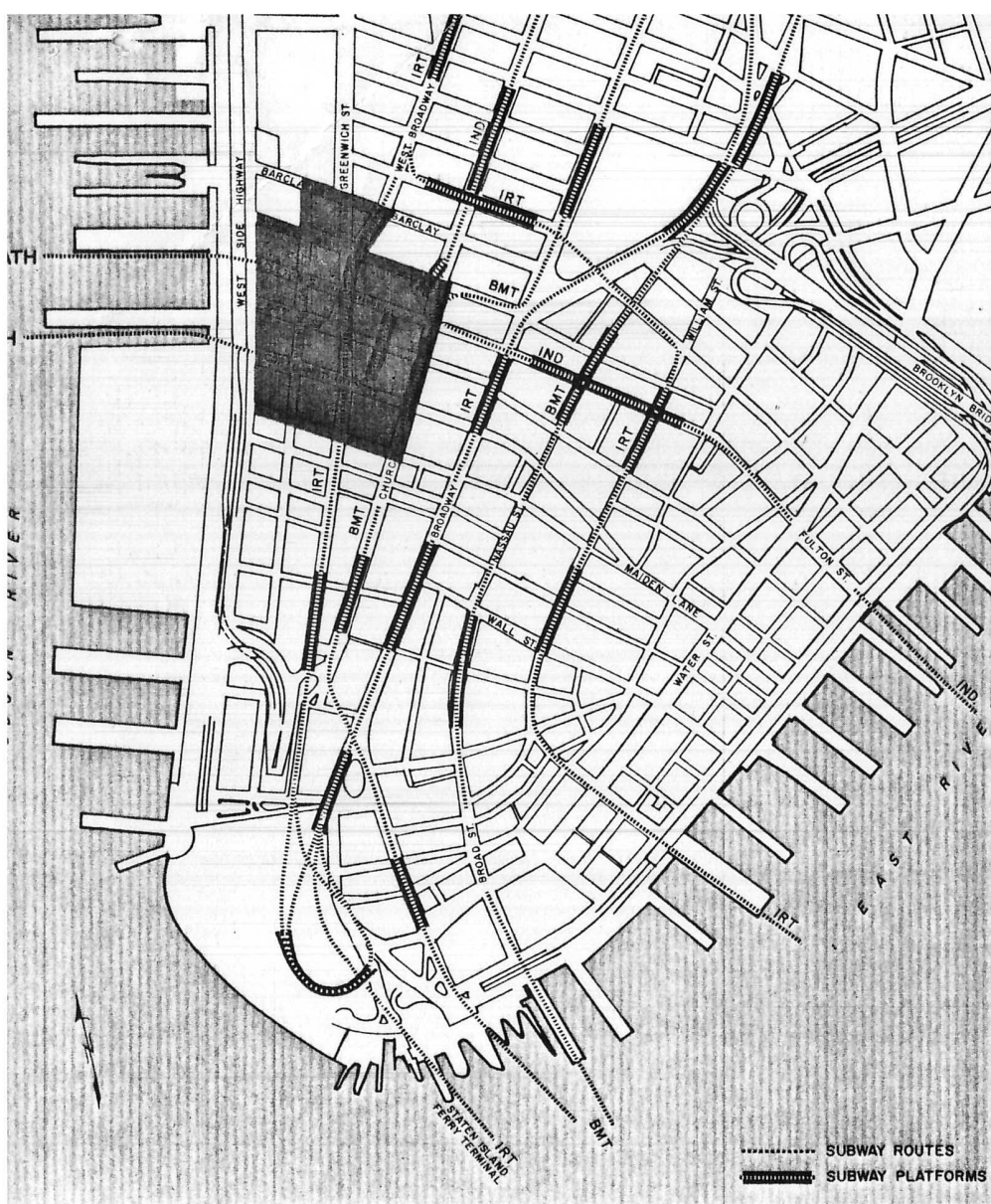
The original impetus for the establishment of a World Trade Center in the Port of New York came from the Downtown-Lower Manhattan Association in January 1960. At that time, the Association requested Governor Nelson A. Rockefeller, former Mayor Robert F. Wagner and the then Governor of New Jersey, Robert B. Meyner, to authorize a Port Authority study of the planning, financing, construction and activation of such a bi-state facility of commerce.

The Port Authority, following a year-long study, reported to the Governors and the Mayor in March 1961. It stated that the development of such a Center, then recommended for an east side location, would be economically feasible. It was clear that it would benefit the people of the entire Port area by maintaining and stimulating the flow of international trade in the Port.

Legislation authorizing the east side development was approved on April 6, 1961 by the New York State Legislature. It was not at that time approved by the New Jersey Legislature.

Subsequently, the Port Authority recommended the consolidation of the Center on the west side of lower Manhattan with the New York terminal facilities of the Hudson and Manhattan Railroad located at 30-50 Church Street.

Effective March 27, 1962, enabling legislation calling for the acquisition of the H&M and the development of The World Trade Center on the west side was passed by the Legislatures of both States. In September 1962, the first stage of the plan was implemented by Port Authority acquisition of title to the properties of the Hudson and Manhattan system, now known as the Port Authority Trans-Hudson (PATH) System. In March 1965, the bi-state agency purchased a small parcel of property on the Trade Center site for foundation tests. In December 1965, it acquired title to the remaining properties on the site.



Shaded area marks 16-acre site of The World Trade Center in lower Manhattan. Large rectangular area adjacent to The World Trade Center indicates 23-acre landfill project being created by the placement of excavated material from The World Trade Center construction into the Hudson River. The Port of New York Authority is creating this landfill project for the City of New York.

THE PORT OF NEW YORK AUTHORITY is the self-supporting corporate agency of the States of New Jersey and New York. Operating without burden to the taxpayer, it was created in 1921 by treaty between the two States to deal with the planning and development of terminal and transportation facilities, and to improve and protect the commerce of the Port District.

Port Authority Commissioners, six from each State, are appointed by the Governors of New Jersey and New York. They serve without pay for terms of six years.

Charged by statute with the protection of port commerce, the Port Authority appears before such regulatory bodies as the Civil Aeronautics Board, the Interstate Commerce Commission, and the Federal Maritime Commission in the interest of the welfare of the united Port Area. It maintains Trade Development Offices in the United States and abroad in the interest of promoting the movement of commerce through the Port of New York.

During the past 47 years, The Port of New York Authority has invested almost \$1.7 billion in 23 land, sea, and air terminal and transportation facilities.

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Architects for The World Trade Center:  
Minoru Yamasaki and Associates  
Emery Roth and Sons

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