### REPORT

ANDE DATED BY

TO THE

GENERAL ASSEMBLY

OF THE

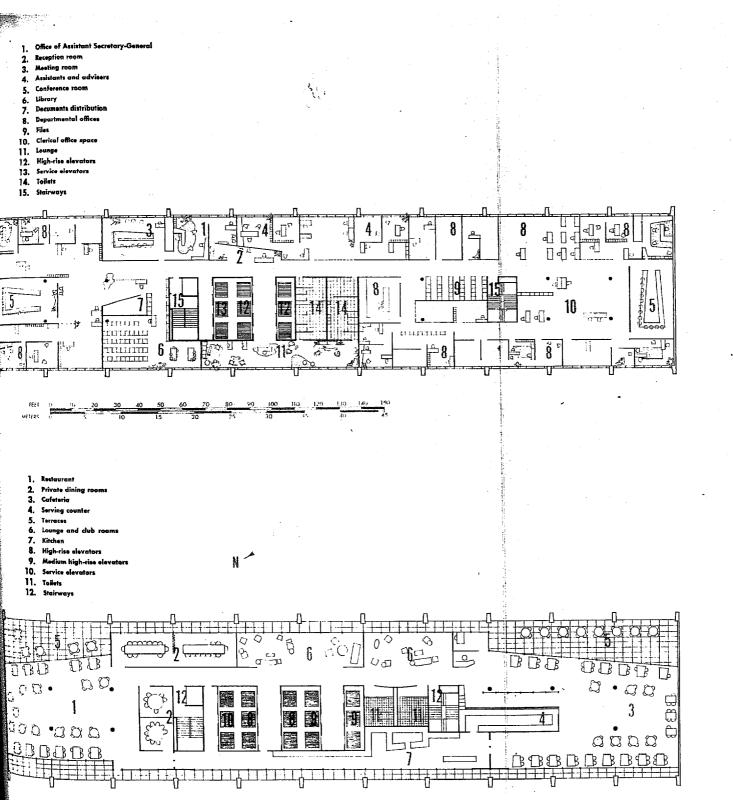
UNITED NATIONS

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SECRETARN-GENERAL

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# Permanent Headquarters of the United Nations



### REPORT

TO THE

GENERAL ASSEMBLY

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SECRETARY-GENERAL

ON

## Permanent Headquarters of the United Nations

UNITED NATIONS · LAKE SUCCESS · NEW YORK • JULY 1947

Document A/311

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#### ERRATA

A/311

The following corrections are to be incorporated in the "Report to the General Assembly of the United Nations by the Secretary-General on the Permanent Headquarters of the United Nations" (document A/311):

- Page 9. The fifth name under the "Headquarters Advisory Committee" in the right-hand margin should read "C.L. Hsia (China)".
- Page 10. "Special Consultants". The sixth name should read "Hugh Ferriss (United States of America)".
- Page 13. The green symbols in the colour key at the lower right-hand corner of the page should be moved up one line.
- Pages 45 and 46. Substitute attached pages 45 and 46 for the existing one.
- Page 78. Paste attached portion of map in the upper right-hand corner of the page.
- Page 79. The direction of the north arrow is incorrect. It should be at an angle of 28° to the Manhattan north-couth street pattern.
- Page 86. In the second column of figures of the "Distribution of Families by Income and Size" table substitute "33.3" for "38.3".

The official title of the report is "Official Records of the second session of the General Assembly, Supplement No. 8".

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### Statement

by the Secretary-General

In accordance with Resolution 100 ( adopted by the General Assembly on December 1946, the following prelimina report on the establishment and planning the permanent headquarters of the Unit Nations is submitted for consideration at second session of the General Assembly.

This report brings into clear view i long-awaited end of the uncertainty whi has surrounded the somewhat nomadic e periences of the United Nations in its sean for permanent headquarters. Since 194 when the Charter was fashioned in San Frs cisco, the Organization has had tempors headquarters in three different places—La don, Hunter College, Lake Success—s nowhere has it remained quite a year.

At the first meeting of the Headquar-Advisory Committee, the Chairman, Mr. arren R. Austin (United States of Amera), signalized as "one of the most historic ents in history" the attempt about to be gun to "inscribe in stone and steel the hievements of the human race up to this me" in the search for world peace and ogress.

He stated: "To us falls the task of makthe Headquarters of the United Nations appropriate representation of the progof history and a promise for the future will be constantly telling mankind that are working in harmony; that we are intaining unity. In this way we can conthe toward that great objective to which upire---the avoidance of war."

Four and a half months later, the Director of Planning presented to this Committee the basic plans that had been unanimously agreed upon by his distinguished international Board of Design Consultants. He presented the plans with these words: "The world hopes for a symbol of peace; we have given them a workshop for peace."

Among the many expressions of satisfaction in the Headquarters Advisory Committee was that of the representative of India, who stated that the accomplishment of this agreement might be considered a major miracle and should serve as an example to other United Nations hodies.

With these three statements all men of good will can heartily associate themselves.

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### Table of Contents

COTT & 1717-12 4-1	NT BY THE CEODETADY CENEDAI
	NT BY THE SECRETARY-GENERAL
I. INTRODUC	TION
	Acquisition of the Site Organization of the Headquarters Planning Office
2. ANALYSIS	5 OF THE SITE
	"raffic to the Site
	Topography and Subsurface Conditions Orientation and Climate
3. THE BUI	LDING ELEMENTS
	Conference Area
	Secretariat Building
	Auxiliary Elementa
	Buildings for Delegations and Specialized Agencies
	Summary of Space Requirements
4. THE ARC	HITECTURAL ORGANISM
	The Structure-Foundations, Low Buildings, High Buildings
	Light, Air, and ViewAir Conditioning
	Air Conditioning
	Communications
	Circulation
	Relaxation and Recreation Flexibility and Expansion
	•
5. THE PLA	NS
	Site Plan
	Lower Levels
	Second Level
	Third Level
	Fourth or Delegates' LevelFifth Level
	Fifth Level
	Roof Level
	Coneral Assembly Hall
	Council Chambers
	Conference Rooms Delegates' Lounge
	Secretariat Building
	Sections
	Programme of the City of New York
6. HOUSING	G OF UNITED NATIONS PERSONNEL
7. PRELIMI	NARY COST ESTIMATE AND STATEMENT ON FINANCIA
CONCLUS	
ANNEXE	S
	<ol> <li>Letter and Memorandum from Mr. John D. Rockefeller, Jr., to th Permanent Headquarters Committee (document A/Site/50</li> </ol>
I	<ol> <li>Resolution adopted by the Board of Estimate of the City of Ne York (Cal. No. 1, 13 December 1946)</li> </ol>
(	C. Resolution 100(1) adopted by the General Assembly (14 Decenber 1946)
I	D. Letter from the Secretary-General to the Mayor of the City New York (22 March 1947)

## 1

### Introduction

The resolution adopted by the General Assembly on 14 December 1946 held a clear note of urgency. The period of hesitation was over, and no crippling delays could be allowed to prevent an idea of such grandeur from being swiftly translated into substance and reality. Simultaneously, therefore, the two basic lines of endeavour indicated by the resolution were at once undertaken and diligently pursued: first, the fulfilment of all conditions necessary for the final acquisition of the site, and, secondly, the organization of the planning work on a basis that would assure construction in the shortest possible time. Negotiations were begun for the acquisition of the site immediately upon the adjournment of the first session of the General Assembly. Responsibility for handling the great variety of complex legal problems was assigned to the Legal Department of the Secretariat, which worked closely with the New York State and City officials conccrned.

#### **Fulfilment of Legislative Conditions**

On 26 February 1947, the President of the United States of America signed a bill providing for the exemption of the Rockefeller gift from the federal gift tax.

The next day the Governor of the State of New York signed a series of bills that had been drafted according to recommendations of the United Nations:

First, an amendment to the State law authorizing the United Nations to acquire any land necessary, useful, or convenient in carrying out the functions of the Organization and authorizing the Governor to cede jurisdiction over such land, to the extent he deemed proper, either directly to the United Nations or to the United States for the use and benefit of the United Nations (Chap. 25, N. Y. Laws, 1947);

Secondly, a law exempting from taxation all real property used exclusively for the purpose of headquarters and places of assembly for carrying on the functions of the Organization (Chap. 24, N. Y. Laws, 1947);

Thirdly, a law authorizing the City of New York to convey real property within the site area to the United Nations and to purchase, or condemn where necessary, any such property for the establishment of the United Nations headquarters; and also authorizing the City to regulate and limit billboards and other advertising devices and amusements in the areas surrounding the site and across the river (Chap. 23, N. Y. Laws, 1947); Fourthly, a law, designed to protect United Nations jurisdiction of the site, making it a criminal offence for any person to possess or use an identification card issued to another person by the United Nations (Chap. 81, N. Y. Laws, 1947).

#### Acquisition of Properties and Rights

The United Nations option on that greater part of the site which was to be purchased from private interests with the proceeds of the Rockefeller gift originally expired on 10 January 1947. It was, however, extended to allow time for the passage of the legislation described above and for clearing the title. This clearance presented many unforeseen difficulties, since the property had a most complicated history, portions of it even having been under water originally and later filled in.

Painstaking legal precautions had to be taken to make sure that the United Nations acquired good title to the property. First, the titles to all of the land involved in the purchase were thoroughly searched and examined. Then the Legal Department set about eliminating all defects and encumbrances revealed by the search, such as restrictive covenants, easements, reversionary rights, mortgages, and leases, by means of releases, 'ssignments, cancellations, and agreements. Finally, the title was insured to protect the United Nations against undisclosed claims.

On 25 March 1947, the Secretary-General was finally able to accept Mr. Rockefeller's gift of \$8,500,000 and to take possession for the United Nations of the properties owned by private interests, which constituted the bulk of the site.

On Sunday, 13 April, the City of New York held a public ceremony on the site at which the Secretary-General, in the name of the United Nations, formally accepted the City's contributions. These consisted of that portion of the block between 47th and 48th Streets not included in the Rockefeller gift, the playground on the north side 42nd Street, and all the City streets within the e. The City's gift also included exclusive rights the waterfront between 42nd and 48th Streets order to permit the United Nations to build up the United States Pierhead Line if it so desired, d, in addition, a strip of land approximately feet wide along Franklin D. Roosevelt Drive compensate for a strip 30 feet wide along First enue given to the City to make possible the nstruction of a traffic tunnel under First Avee. The City also granted easements and rights access in respect of adjoining property and opted certain zoning changes in the neighbourod. Thus, the City of New York went even bend the letter in implementing the resolution opted by its Board of Estimate on 13 December 46.

There also is within the site, at 42nd reet near First Avenue, a piece of land upon hich the New York City Housing Authority is we constructing a seven-story office building heduled to be completed in August 1947. Netitations are now in progress with City officials or the acquisition of this building, which will intain 65,700 square feet of office space, for use of the Headquarters Planning Office, by the Sectariat of the Military Staff Committee, and erhaps for some delegation offices.

#### **Clearance and Demolition**

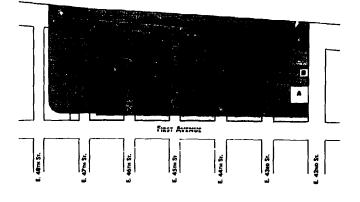
Some of the industrial tenants have already incated premises, and it is likely that most of the ea will be evacuated by early autumn of 1947. The Director of the Bureau of Real Estate of the ity of New York has been authorized to act as roperty manager for the United Nations and to undle all matters relating to the relocation of e fifty-one residential tenants now living on the te. The rents of leased properties, now being actived, are being applied to the costs of this roject.

The present plan is to begin demolition on e site about 1 July 1947.

Purchased with Rackefeller gift Donated by the City of New York

Given to the City by the United Nations for the construction of the First Avenue tunnel A Property of the New York City Housing Authority

B Subway shaft vent which may be relacated off the site by the United Nations



### Organization of the Headquarters Planning Office

The clear implication of the General Assembly's request for a report by 1 July 1947 on the very complex matters contained in Part II of Resolution 100 (I) was that speed was of the essence of the problem. The General Assembly undoubtedly recognized the fact that the overcrowding and improvised conditions of work at Lake Success made it imperative that some part of the permanent headquarters be available for occupancy at the earliest possible date. Plans, therefore, had to be completed at such a rate that they could be approved early in the second session of the General Assembly, and everything had to be done to reduce the time interval between that approval and the beginning of construction. All the principal organs of the United Nations were now organized and already engaged on their substantive work. It remained only to assure a proper setting for this work and, with the least possible delay, to install the necessary machinery for its smooth performance.

These considerations were paramount in determining the manner in which the planning was organized, so as to employ the principle of intimate collaboration of all the international participants rather than that of a time-consuming competition among them. But there were other cogent reasons besides time and urgency in favour of this method of work:

International collaboration is the very purpose of the United Nations and should be the spirit permeating each of its activities.

The size and location of the East River site dictate in advance its exploitation by those modern techniques of vertical construction for which the architects of the United States, and especially the construction engineers of New York, would in any case have to be called upon. These techniques are so complex, delicate, and interdependent, that they become the very key to the final architectural composition.

Finally, since the site is part of a very intensively developed area in New York, its final character will depend crucially upon City improvements. The closest possible co-ordination of planning between the United Nations and the City authorities is indispensable for the creation of a dignified yet practicable plan and for its orderly and rapid execution.

Therefore, immediately upon the adjournment of the General Assembly in December 1946, the Secretary-General proposed to the Headquarters Advisory Committee the creation within the Secretariat of a Headquarters Planning Office and the appointment of a Board of Design Consultants, organized upon the simple lines described below.

Within a few weeks there was assembled on the twenty-seventh floor of the RKO Building in New York a group of some of the world's mod. distinguished architects, abundantly equipped by professional standards with all their necessar working tools. The Board of Design Consultant constituted a creative centre for architecture and urbanism, for the daily discussions of architect and engineers, for draughting designs and mak ing models. Some fifty basic designs wen created, criticized, analysed, and re-synthesized The problem was set and pursued in its most right orously functional terms, terms provided by c ceaseless investigation into the prime needs a Secretariat personnel, delegations, and ted nicians of all kinds. Out of this procedure had grown not simply a group of buildings but a integrated, articulated organism. Every possible relevant consideration has gone into the find composition presented in this report: landscape view, plastic organization of architectur masses, functions, working conditions in the in terior of the buildings, etc.

One noteworthy fact: in the course of this long and arduous work of collaboration, is singleness of viewpoint became manifest and al major decisions were arrived at unanimously. The spirit of the times seemed to rally all those engaged in this task, and the result must certainly be that the architectural concepts born in the workshop of the Headquarters Planning Office express that spirit.

### The Headquarters Advisory Committee

At various times in the organization and progress of the work, the sixteen members of the Headquarters Advisory Committee, created by the General Assembly for the purpose of advising the Secretary-General, were called upon for advice on matters of policy and administration. This assistance was generously and sympathetic ally rendered at all times. The Committee hus held a total of seven meetings; the Secretary-General has kept it informed at every stage of the acquisition of the site and has sought in advice on major policy matters before making final decisions.

At the first meeting on 6 January 1947, Mr. Warren R. Austin (United States) was elected Chairman. At this session consent was given to the Secretary-General's proposal to appoint Mr. Wallace K. Harrison as Director of Planning and to appoint an international staff of eminent engineers and architects who were designated the Board of Design Consultants.

### **Best Copy Available**

The appointment of the first five members the Board of Design Consultants, the appointent of three Associate Architects and Engineers, ad the organization of the Headquarters Planing Office were recommended by the Committee its second meeting on 13 February 1947.

The Committee met with officials of New ork City on 7 March and heard them explain the plans for improvements in the City areas surunding the site and the possible time schedules or the work of both the City and the United ations. The possibility of completing a buildig for the Secretariat and Councils by Novemar 1948 was discussed.

The Committee confirmed the appointment y the Secretary-General of five additional memers of the Board of Design Consultants.

At the fourth meeting of the Committee on 1 March 1947, a proposed time schedule of lanning and construction was considered. In mnexion with the time schedule, the Committee nanimously adopted the following resolution:

"RESOLVED that the Committee advise the Secretary-General that he use the authority which he possesses to make the following commitments:

1. Advance to the City of New York \$125,000 for planning of changes of the East River Drive.

2. Utilize \$200,000 for additions to the budget of the Director of Planning.

3. Utilize \$1,000,000 to undertake demo-

lition, excavation, and related work on the United Nations site."

At the fifth meeting on 22 March 1947, after further study of the planning programme of the United Nations and the City of New York, the Committee approved the draft of a letter from the Secretary-General to the Mayor (attached as Annex D).

On 21 May 1947, at the sixth meeting, the preliminary architectural and engineering plans, which had been developed and agreed upon by the Director of Planning and the Board of Design Consultants, were presented to the Committee, whose members expressed satisfaction with the progress which had been reached on fundamental elements of the plan.

On 18 June 1947, at its seventh session, the Committee was informed of the plans for the acquisition of the New York City Housing Authority Administration Building, under construction on the site, on a lease-purchase arrangement. The proposal to relocate residential tenants now on the site at United Nations expense was presented.

The Committee consented to the appointment of Messrs. George Spargo, O. L. Nelson, and J. R. Kilpatrick as advisers to the United Nations on contracts, and advised the Secretary-General to proceed with the next stage of the work—the refinement of plans and the preparation of detailed drawings under the direction of the Director of Planning with such specialists as might be required.

### HE SECRETARIAT

The Headquarters Planning Office was originally made part of the inecutive Office of the Secretary-General, but was later placed under the eneral charge of the Assistant Secretary-General for Administrative and inancial Services. Very close liaison was maintained with the highest New lork City authorities.

#### RECTOR OF PLANNING

The work had to be directed by a man experienced in the planning md construction of projects similar to that contemplated here, familiar with the area and its special requirements, and having the confidence of the ity authorities with whom he must co-operate. As, in effect, chief architect md chief engineer, his responsibilities would require the greatest possible reedom from a technical standpoint, including authority to engage pernonnel and to establish working procedures, consistent with United Nations policy and direction.

Acting on the authority given him by Resolution 100 (1) of the Genral Assembly, the Secretary-General asked the City authorities and the United States Government to recommend a person fulfilling all the above requirements. Upon their recommendation the appointment was granted to Mr. Wallace K. Harrison. Among the projects with which he has been associated as a principal architect are Rockefeller Center and the office buildings for the Time and Life Corporation and the Aluminum Company of America. He is uniquely acquainted with the United Nations site since he had been retained by its previous owners to develop a great office and residential project there. Mr. Harrison is President of the Architectural league of New York.

#### HEADQUARTERS ADVISORY COMMITTEE

C. V. Kellway (Australia) Roland Lebeau (Belgium) Henrique de Souza-Gamez (Brazil) C. D. Howe (Canada) C. L. hsia (China) Edmundo de Holte Castello (Colombia) Guy de la Tournelle (France) Vassili Dendramis (Greece) M. J. Vesugar (India) Finn Moe (Norway) Juliusz Katz-Suchy (Poland) Toufik Huneidi (Syria) V. G. Lawford (United Kingdom) Warren R. Austin (United States of America) N. D. Bassov (Union of Soviet Socialist Republics) Stoyan Gavrilovic (Yugoslavia)

#### NEW YORK CITY

William O'Dwyer

Mayor

Hugo Rogers President of the Borough of Monhottan Robert Moses

Co-ordinator of Construction James Dawson

Liaison with United Nations

#### BOARD OF DESIGN CONSULTANTS

To ensure that the planning work at its highest level would be carried out on a truly international collaborative basis, the Director has been actively assisted by a board of ten eminent international experts qualified in the various architectural and engineering aspects of the project. These ten experts were recommended by the Director, and confirmed by the Headquarters Advisory Committee, from lists of names suggested by twentynine Member nations.

#### ASSOCIATE ARCHITECTS AND ENGINEERS

In order to make use of the best available local experience, several members of large New York architectural and engineering firms have been associated with the organization at various stages of the planning. This arrangement has made available to the Director, from the staffs of associated firms, many technical experts on a part-time basis and at prevailing rates, thereby rendering unnecessary the creation of a large and expensive technical stafn on a temporary basis within the Secretariat.

#### SPECIAL CONSULTANTS

In addition to the above, the Director has called upon other outstanding architectural and engineering experts from Member nations to serve him and the Board as special consultants.

#### CONSULTING ENGINEERS

The Director has also made direct contractual arrangements for obtaining the technical services of members of some of the leading engineering firms familiar with the specialized problems of construction in Manhattan.

#### STAFF OF THE HEADQUARTERS PLANNING OFFICE

(a) Regular members of the Secretariat were assigned to the staff as required for administrative, clerical, or other services.

(b) Draughtsmen, designers, research workers, and others whose services were required for varying lengths of time were employed by the firms of the Director and of the Associate Architects and Engineers. As far as feasible, these technicians were of diverse nationalities. G. A. Soilleux (Australia) Gaston Bruntauv (Belgium) Oscar Niemeyer (Brazil) Ernest Cormier (Canado) Su-ch'eng Liang (China) Charles Le Corbusier (France) Sven Markelius (Sweden) N. D. Bassov (Union of Soviet Socialist Repi Howard Robertson (United Kingdom) Julio Vilamajó (Uruguay)

Louis Skidmore

(Skidmore, Owings and Merrill) Gilmore D. Clarke

(Clarke, Rapuano and Holleran) Ralph Walker

(Voothees, Walker, Foley and Smith)

Josef Havlicek (Czechoslovakia) Vladimir Bodiansky (France) John Antoniades (Greece) Matthew Nowicki (Poland) Peter Noskov (Union of Soviet Socialist Rep Hugh Ferris (United States of America) Ernest Weissmann (Yugoslavia)

William Mueser Emil H. Praeger John F. Hennessy James L. Edwards Edward J. Content William Wilson, Co-ordinator

## 2

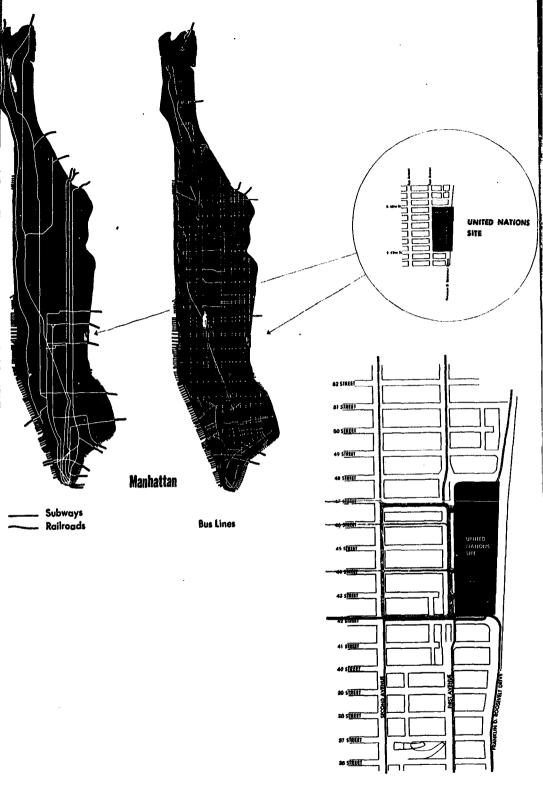
### Analysis of the Site

Underlying any architectural planning is the site in and on which it is proposed to build—its geographical *locus*, meteorological conditions, geological foundations, economic and social relationships, communications and transport facilities, ite `uman and material and technological resources, etc.

The United Nations has selected the site for its headquarters in a great metropolis which is one of the main crossroads of international transportation and communication. To this site representatives of Member States will be able to come quickly and directly from all parts of the world; they can communicate instantaneously with their home Governments; they will have at their disposal every means for efficient work.

The City of New York is actually the heart of a vaster urban organism, all of which must be considered in the planning of the headquarters of the United Nations. It offers within easy reach a wide base of technical, commercial, cultural, residential, recreational, and social resources.

The East River site, extending 1,500 feet from 42nd to 48th Streets, and from First Avenue to the edge of the water, has sufficient scale for applying the fundamental elements of modern urbanism—sunlight, space, and verdure. Protected, yet given added spaciousness by the wide expanse of the East River, the site has breadth enough to be made into a living unity of strength, dignity, and harmony. The city-dweller, who lives and moves between the frontier walls of buildings that give his streets the profile of canyons, should find on the United Nations site a sense of radiant space.

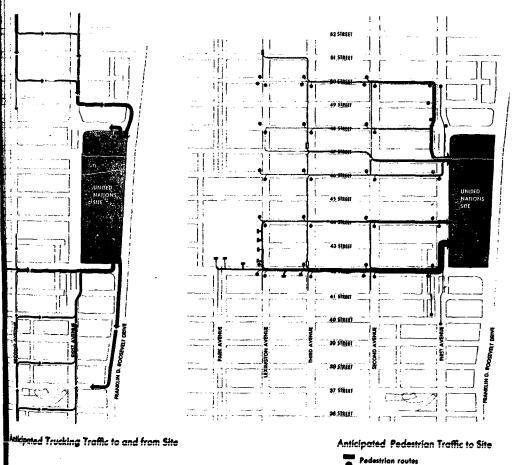


Anticipated Automobile Trafr.c to Site

### Traffic to the Site

Detailed analysis of the traffic pattern surrounding the site, both vehicular and pedestrian, must be based on existing conditions and the probable changes to be brought about in this pattern by the coming of the United Nations to its permanent headquarters. The maps illustrate anticipated traffic flow, from the north and south on the Franklin D. Roosevelt Drive, and from the streets and avenues to the west. Direct access to the site on and off the Drive and facilitating the cross-town approach are of paramount impor: ance. The heavy north-south flow past the site, especially on First Avenue, must be kept from conflicting with the traffic of the United Nations by a diversion underground or by other means.

The arrival of pedestrians—from the Grand Central Railroad Terminal on 42nd Street, from the subway station stops, and from the buses creates a secondary pattern from the west, as larger groups walk toward the southern end of the site.



Bus stops

**Grand Central Railroad Station** 

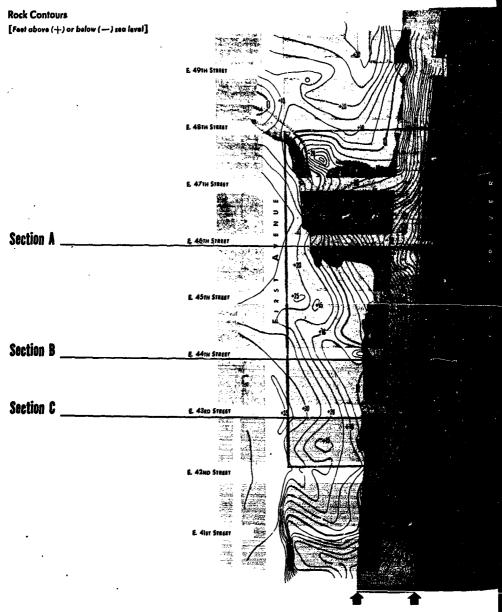
Subway stations Elevated stations

### **Topography and Subsurface Conditions**

The land on the site slopes gently east to the East River and from the south-west corner to the north-east. Advantage can be taken of these slopes in planning entrances to and exits from the site.

The nature and location of the bedrock underlying the site were investigated for the United Nations by foundation engineers, who made 26 new borings and re-examined some 218 previous borings and test pits in the area. A bedrock of hard Manhattan Schist, lying just below the surface, forms a solid base for structures almost anywhere on the site. It falls off toward the riv dropping sharply at about 46th Street into earlier indentation of the river shoreline call Turtle Bay.

The Franklin D. Roosevelt Drive creater man-made shelf which continues the site out the Bulkhead Line established by the Unit States Government. The United Nations is p mitted to build above this shelf, spanning lanes of parkway traffic, and even up to Pierhead Line if the construction is on piles, piers not impeding the flow of water.

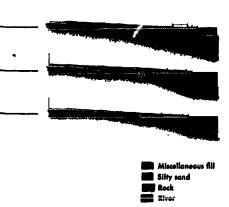


Shoreline of 1820, showing former indentation of Turtle Bay

**Present Buikhead Line** 

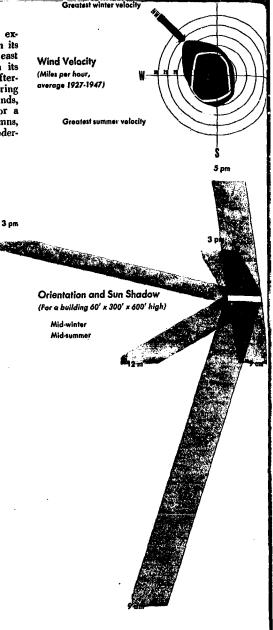


Aerial View of the Site (Fried-Leder Photo-Aerographic Service)

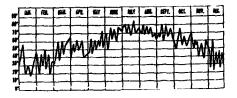


### **Orientation and Climate**

The site is oriented within the existing Manhattan street pattern, with its long axis running about 18 degrees east of true north. The sun shines on its longer sides in the morning and afternoon, and on its short dimension during the hot midday hours. Prevailing winds, temperature and humidity make for a climate of cool springs and long autumns, two hot and humid months, and moderately severe winters.



**Temperature 1946** (Degrees Fahrenheit) (Annual mean 1946--54,9°)

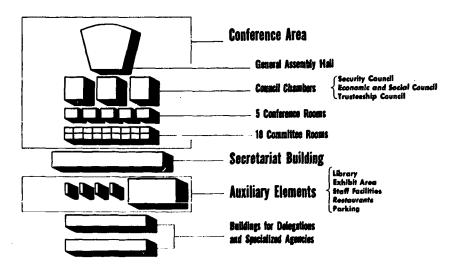


## 3

### The Building Elements

We have seen that the first basic datum for planning is the site itself. The second, equally basic, is the functions to be performed on the site. Not only for administrators, but for architects and engineers too, these functions are defined by the Charter. The actual constitution of the United Nations must determine the main points of its architectural composition.

Analysis of the structure of the Organization and classification and co-ordination of its functions must supply the data which are to be translated into architectural terms. Only then can we enumerate the main building elements, consider the useful housing of the organs and their distribution among the buildings. The accompanying diagram, therefore, is the first rough and abstract grouping of building elements.



	Conference Area	a b Security Economic and Social C The Council
	General Assembly	Council Chambers
Delegates	Square feet 350 delegates 350 alternates and advis- ers	<ul> <li>(a) 18 delegates, 72 advisers at table 40 additional advisers 100 representatives of non-govern- mental organizations</li></ul>
Press	500 Press seats 6,000 45 booths (400 linear feet) 4,020 10,020	200 Press sonts per chamber
Public	1500 seats for public and special guests 12,000	525 seats for the public and special guests per chamber
Total Area	43,370	
General Considerations	Regular annual session opens in Septem- ber and lasts from four to six weeks; special sessions are possible any time, but may have fewer delegates. Assembly Hall is available at other times for con- ferences of the specialized agencies.	Security Council meets at least once a forting often simultaneously with the General and other bodies. Economic and Social regular session three times a year for weeks a session. May have special sessions ship Council in regular session twice a year, special sessions. Possibility of a fourth char considered.
	nates of space requirements on this and the following re given in net square feet. Stairways, corridors, elever	1

pages are given in net square lest. Stairways, corridors, eleve-tors, toilets, and the space occupied by structural and mechan-ical elements have not been included.

EXCESSIVE GUTTER BINDING

1000

There are at present fifty-five Member States of the Organization; it is well to plan on a possible membership of at least seventy. In larger or smaller groups their representatives gather, face to face, to assert, explain, debate, concede, and agree. The conditions under which they come in contact for these purposes must be defined with meticulous precision.

As far as the headquarters is concerned,

and a second second

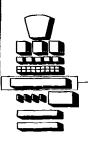
the delegates are travellers, drawn between the work to be done and some impatience to return to their homes and normal patterns of life. Their daily schedules must be considered carefully, not only for the periods of work in the meeting halls, but also for the periods of socalled relaxation when so much of the groundwork for agreement and compromise is laid. Every possible means should be put at their

Conference Rooms	Committee Rooms
Square feet (0 delegates, 280 advisers per room (6,400 sq. ft. x 5 rooms) 31,000	Square feet 12 rooms with up to 40 delegates at table (1,900 sq. ft. each)22,800 6 rooms with up to 30 delegates at table (1,100 sq. ft. each) 6,600 29,400
Conference Rooms No. 1, No. 2, No. 3, and No. 4:         50 Press and Secretariat seats per room         (1,500 sq. ft. x 4 rooms)	7 booths in each of four larger rooms 3,360
<sup>00</sup> seats for public in each of four rooms (1,500 sq. ft. x 4 rooms) 6,000 <sup>00</sup> seats for public in Room No. 5 3,200 9,200	Up to 50 seats in larger rooms Up to 30 seats in smaller rooms
61,500	32,760
ated by the six Main Committees, (on which all Member tates are represented) during General Assembly sessions. The rooms adequate for expected maximum of simultaneous ations. At other times available to other committees or com- tistions with large public attendance.	Used by the Sub-Committees of the six Main Committees of the General Assembly; at other times by other committees, Commis- sions, Sub-Commissions, specialized agen- cies, Secretariat, etc.
onference Room No. 5, for the use of bodies having an espe- ially large public attendance, and also available to special essions of the General Assembly having fewer than normal number of delegates, is to be situated close to the General esembly Hall, in order to use the same service areas.	Conference tables should be adjustable in size.

disposal for rapidly expediting their business in the meeting halls and in the lobbies, for protecting them against unwanted annoyance and for assuring them the desired contacts with other delegates, the Press, or the public.

The grouping and arrangement of all meeting rooms, entrances, lounges, and Secretariat services should be for the sole purpose of making the delegate's *whole* day productive.

Lounges and Lobbies	Secretariat Services to Conference Area	
Square feet Lobby with coat rooms, in- formation and transpor- tation desks, telephones, toilets	DEPARTMENT OF PUBLIC INFORMATION         Press       Square feet         55 offices for newspapers and press associations, central writing-room, 4 cable offices, Press conference room, offices of Press division         25,750         Radio         18 Network offices, offices of Radio Division, 6 radio studios, radio correspondents' and news offices.       14,600         Film and Photo       2 interviewing rooms, 2 liaison offices, ready rooms, lockers, 2 dark rooms, etc.       2,200         Volunteer organizations       700	
Lounges, rest rooms, re- freshment bar, etc 50,000	CONFERENCE AND GENERAL SERVICES Documents distribution, offices of verba- tim reporters, translators, interpreters, Order of the Day office, pass control of- fices, First Aid Clinic, typing pools, switchboard room, security guards room, transportation office, educational services	
Lobbies and lounge (in- cluding coat rooms, tele- phones, etc.)	and offices)	Grand Total
251,000	75,650	510,830 Sq. ft
The delegates' lobby would be open to the Secretariat and members of the Press, the lounge only to the delegates and their guests. These areas are in use mainly before, be- tween, and after meetings. The delegates' lounge, in particular, is an important point of circulation as the central meeting place for all delegates. The lounge and lobby areas include exhibit	Included in the conference area are space provisions for those groups of the Secretariat which serve conferences directly. These provisions represent permanent offices, workshops, and facilities necessary for the smooth func- tioning of all meetings, and for the maintenance of public relations with specific conference events.	



### Secretariat Building

The Secretariat is directed by the Secretary-General, its eight departments by Assistant Secretaries-General. It is made up of three thousand, or possibly, in the future, five thousand employees of various types and classifications, divided among administrative bureaux, divisions, sections, and units. It handles the current business of the Organization, prepares international meetings, and carries into effect the decisions arrived at in these meetings. It tells the world what has happened, is happening, and will happen, using all modern communications media. Its work is daily, of unbroken continuity throughout the year, and its principal work places are offices.

These thousands of employees, who must spend the daylight hours of their lives in offices, pose a question of principle which must be decided at the very outset: to provide the conditions necessary for a proper psychophysiological balance—the natural conditions of sunlight and view, and not the arbitrary conditions of artificial light and confined space. Artificial light and confined space will be limited—and then only because of

The space requirements tabulated below were necessarily computed on the basis of future estimates of the size of the Secretariat. In the overall planning, the total requirements must be provided for first. The exact allocation of space among departments and divisions will be a future problem of administrative management.

EXECUTIVE OFFICE OF THE SECRETARY-GENERAL

DEPARTMENT OF SECURITY COUNCIL AFFAIRS

DEPARTMENT OF ECONOMIC AFFAIRS

DEPARTMENT OF SOCIAL AFFAIRS

\_\_\_\_\_

DEPARTMENT OF TRUSTEESIUP

LEGAL DEPARTMENT

DEPARTMENT OF PUBLIC INFORMATION

CONFERENCE AND GENERAL SERVICES

ADMINISTRATIVE AND FINANCIAL SERVICES

SECRETARIAT OF MILITARY STAFF COMMITTEE

TOTALS

important technical considerations—to the auditoriums whose transient visitors will remain at the permanent headquarters in New York for not more than a few days or weeks at a time.

Through some of its members, the Secretariat participates directly in the labours of the General Assembly, the Councils, Commissions, and Committees. For these officials, easy and convenient access to the meeting places—the unimpeded interflow of persons and documents—is an obvious necessity. During the debates, the Department of Public Information and the Department of Conference and General Services are especially active, bringing into play technicians of every kind: interpreters and translators, verbatim reporters and editors, printers and distributors of documents, photographers, motion picture cameramen, radio and television operators.

The relationship of the conference area and the Secretariat Building is one of the most important problems that has been posed the planners.

TOTAL	OTHER SERVICES	MEETING ROOMS	OFFICE SPACE	PERSONNEL	
SQUARE FOOTAGE	Sq. ft.	Sq. ft.	Sq. ft.	Futur <del>o</del> estimate	Present
12,730	800	1,940	9,990	60	58
38,230	3,084	2,736	32,410	250	90
67,735	1,665	3,980	62,090	535	195
51,162	4, 120	4,222	42,820	330	135
34,350	3,950	1,750	28,650	215	80
12,720	1,400	1,200	10,120	85	41
102,796	36,010	1,436	65,350	670	285
420,023	277,224	3,084	139,715	2,600	1,540
63,229	19,944	2,685	40,600	450	233
13,136	3,286	2,000	7,850	70	35
816,111	351,483	25,033	439,595	5,265	2,692

#### ON FIRST LOWER LEVEL:

Reproduction plant, Document distribution and storage, main-		
tenance shops, mechanical storage and shops	119,808	
SCOND LOWER LEVEL:		
Receiving, storage and issue, car service	97,890	217,698
Departmental areas in Secretariat Building above ground;		
Lobbies and restaurants are not included. Net		598,413

### The Library

For the great amount and variety of research it must carry on, the Secretariat should have at its disposal a wellstocked and well-equipped library. If it includes the collections of the specialized agencies, it may well contain a million or more volumes.

The delegates and their advisers, as well as some private scholars, should also have ready access to the library. Small specialized branches or depots may be established among the various departments and specialized agencies, and pneumatic or other mechanical means for rapid delivery should be envisaged.

### **Exhibition Halls**

Space should be set aside and arranged for the visual presentation and graphic explanation of matters that should be of special interest to the public, and for exhibits of all sorts. It should be near the public lounge but also readily accessible to delegates and the Secretariat, especially to the offices of the Department of Public Information, which will naturally be responsible for the exhibits.

### **Staff Facilities**

For the convenience and recreation of all persons working on the site—whether in the delegations, the Secretariat, or the specialized agencies—certain special facilities, over and above their working space, should be planned, if not in the first stage of construction, then in later ones:

A club where one may read, play games, or simply rest;

A gymnasium and game courts;

A theatre for stage presentations, for and by the persennel, and for motion picture showings, which the public might on occasion attend to see documentary and educational films;

A dormitory for the emergency use of transient personnel;

A first-aid clinic and emergency hospital, also a dentist's office, in the Secretariat Building;

A post office and cable, wire, and telephone services.

### Restaurants

Provision should be made on the site for feeding the following groups:

Secretariat personnel—should be able to eat close to their working quarters (preferably in small dining rooms) and should be able to arrange for small dining parties;

Delegates-should have very pleasant facilities close to their lounge in order to carry on discussions in small or large groups;

Public-should have simple eating facilities near the public lounge;

Wherever feasible, kitchen services should be centralized.

### Parking

Parking space for those working on the site (delegates, Secretariat, Press. etc.), for those with business on the site and for special visitors. The various groups of car-users should have well-defined, segregated parking areas. Space Requirements Square Feet

(BASED ON ANTICIPATED MAXIMUM OF 1,500,000 VOLUMES)		
RECEIVING AND ACQUISITION	8.000	
PROCESSING AND CATALOGUING		
STACKS		
ARCHIVES		
FILM AND RECORD STORAGE		
REFERENCE AND CATALOGUES	16,000	
READING ROOMS (FOR DELEGATES		
AND PUBLIC	16,000	
DIVISIONAL READING ROOMS	24,000	
MAP LIBRARY	5,000	
STAFF AND RECEPTION	11,000	
		171,00

INCLUDED IN LOUNGES AND LOBBIES

LOUNGE AND CLUB ROOMS	12,500
GYMNASIUM AND LOCKER RODIAS	14,000
2 GAME COURTS	4,200
OFFICES	600
THEATRE, DRESSING ROOMS, PROJECTION	
BOOTH	6,200
DORMITORY (SO BEDS)	4,200
CLINIC AND HOSPITAL (STAFF OF 12)	4,100
POST OFFICE	10,000
CABLE	500
TELEPHONES	500
MISCELLANEOUS	2,000

,	SECRETARIAT DINING ROOM (SEATING	6,400
	3 CAFETERIAS (TOTAL SEATING 1,600)	
	SANDWICH COUNTER (SERVING 100)	1,500
	DELEGATES' DINING ROOM (SEATING 500)	8,500
	PUBLIC CAFETERIA (SEATING 500)	6,500
	KITCHENS (TOTAL)	23,500
	CENTRAL FOOD STORAGE	6,000

76,40

58,40

OFFICIAL CARS TRUCKS AND SERVICE VENICLES OFFICIAL DEREGATION CARS CARS OF SECRETARIAT, PUBLIC AND SPECIAL VISITORS ACCREDITED FRESS CARS TOTAL APPENDS. 1,900 CARS

GRAND TOTAL

\_\_\_\_

590,0<sup>01</sup>





### **Buildings for Delegations and Specialized Agencies**

These two groups must enter into the planning now although their requirements are necessarily still far from being precisely determined. Their combined personnel will, in time, equal that of even a much enlarged Secretariat. Eventually, they will need Committee rooms of their own but for some time it will be possible, by judicious scheduling, to make available to them the meeting facilities of the conference area. Similarly, in the early stages of site development, their personnel will find office space in the Secretariat Building.

### Delegations

On the basis of estimated requirements submitted by the already established permanent delegations of Member States, 70 delegations (the planning figure adopted) would employ approximately 2,400 people.

	Square Feet
EXECUTIVE OFFICES	123,000
PRIVATE OFFICES	121,000
OPEN OFFICES	94,000
115 CONFERENCE ROOMS	89,000
STORAGE, ETC.	59,000
RESTAURANT (SEATING 200) AND CAFETERIA (FOR 500)	11,200
KITCHEN	6,000
TOTAL	503,200

### **Specialized Agencies**

Certain specialized agencies may establish their international headquarters on the site; and others may wish to maintain only liaison offices here. Ample space has been reserved at the north end of the site for those agencies which may evenually come to New York. The total personnel involved in this arrangement might be approximately 2,500. The buildings must be planned with extreme flexibility to allow for indefinite future expansion.

Their libraries would be housed the central library.

C	NFERENCE AREAS	FOR INTERNATIONAL	HEADQUARTERS	54,500
51	CRITARIAT ARBAS	FOR INTERNATIONA	HEADQUARTERS	346,200
u	AISON OFFICES FO	R SPECIALIZED AGEN	CIES AND	
	NON-GOVERNME	INTAL ORGANIZATION	15	27,500
-		TEDIAS AND MITCHED		17 000

446.100

TOTAL

Space Requirements

### Summary of Space Requirements



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100

In view of the present urgent needs of the temporary headquarters, the United Nations, and in view also of our analysis of the build elements involved in the permanent headquarters, the total space require ments should and can be met by construction in three stages.

	Stage 1	Stage 2	Stage 3
		square feet	
Conference Area			
GENERAL ASSEMBLY		42,370	
3 COUNCIL CHAMBERS	46,550		
CONFERENCE ROOMS Nos. 1, 2, 3, 4	46,800		
CONFERENCE ROOM No. 5	32.960	14,700	
LOUNGES (DELEGATES, PRESS, PUBLIC)	32,960 251,000		
SECRETARIAT SERVICE AREA	75,650		
	/ 3,030		
Secretariat Building	816,111		
Auxiliary Elements			
LIBRARY	171,000		
EXHIBITION HALLS (INCLUDED IN LOUNGES)	·		
STAFF FACILITIES:			
SECRETARIAT CLUB AND LOUNGE	12,500	1 1	
ATHLETIC FACILITIES			18,800
THEATRE		6,200	
DORMITORY			4,200
CLINIC	4,100		
POST OFFICE, CABLE, TELEGRAPH	11,000		
RESTAURANTS	76,400		
PARKING	590,000		
Delegations			503,200
Specialized Agencies (NOT INCLUDING PARKING)			446,100
Totals (net square feet)	2,134,071	63,270	972,300

The Lake Success headquarters now houses most of the Secretariat and a conference area consisting of two Council chambers, four conference rooms, and ten committee rooms. The space is insufficient; the Secretariat maintains offices for several of its units in Manhattan, and rents warehouses for storage and shipping off the premises.

Stage 1 of the construction programme is designed to accommodate all these elements: the entire Secretariat and its extensive storage requirements, three Council chambers, four of the five eventual conference rooms, all eighteen of

The General Assembly has held two sessions at its temporary meeting hall at Flushing Meadow. Since this hall is seven miles from the Lake Success headquarters, it has required its own lobby and lounges for delegates, as well as restaurants, and a complete Secretariat service atea, which to a large extent duplicate provisions at Lake Success.

Stage 2 of the construction programme will take care of all functions performed at Flushing

At present, the already established permanent delegations have found temporary accommodations in Manhattan. The specialized agencies are established in various countries; only small liaison offices are functioning at present at Lake Success.

Stage 3 of the construction programme plans in outline accommodations for the future needs the required committee rooms, and the service space for these meeting rooms. Also included are lounges and restaurants for delegates, Secretariat, the public, and the Press, as well as the library, the clinic, the Secretariat club rooms, and parking facilities for all headquarters groups except the specialized agencies.

Moreover, since the plans for these accommodations make full provision for future expansion, there will be temporary accommodation in the Secretariat Building for permanent delegations now renting space in Manhattan and, possibly, some for specialized agencies.

Meadow. The General Assembly Hall is planned for future needs, and its conference service areas will be merged with those already built under Stage 1. This stage also includes the building of the large Conference Room No. 5, the small theatre for recreational and educational use of United Nations personnel and the public, and also the public exhibition area. Additional staff facilities will be provided as required.

### Stage 3

Stage 2

of all offices of permanent delegations and for those specialized agencies which wish to establish permanent headquarters or liaison offices on the site. Restaurants, storage spaces, and other facilities will be part of this stage, as will the additional parking facilities required by the specialized agencies.

# **4** The Architectural Organism

Once the various organs of the United Nations have been classified in terms of building elements—each with its own form, dimension, and system—the next planning consideration is their interaction as functioning parts of a single coherent organism. The following pages treat some of the planning features that apply to the headquarters as a whole and make for its harmonious development.

### The Structure

The first general consideration is the actual structure of the build the *skeleton* capable of carrying them, a framework of steel and conc covered by a durable *skin* of dignified and satisfying appearance.

The building spaces will be of two types: on the one hand, off whose dimensions can be standardized; on the other hand, halls of vary sizes, each with special structural requirements. These variables can systematized within a basic structural framework consisting of units measure, or modules, which will facilitate economical construction a future changes. This framework consists of the foundations support the structure, the main vertical and horizontal steel members support the internal loads, and the special provisions for exterior forces of will ice, and snow.

> First Avenue Bedrock Rock excavation Earth excavation Franklin D. Roosevelt Drive relieving platform East Eiver water level

Vehicular tunnel Cofferdam Piers and columns Sheet piling Piles Rip-rap

### Foundations

The foundation engineers have determined that bedrock of adequate structural strength is sufficiently close to the grade level throughout the site so that, in general, all foundations can rest directly upon this typical rock—so-called Manhattan Schist. Such foundations, which are customary in this section of New York City, can be constructed in the following ways:

(a) At the west or First Avenue side of the site, the rock is close to the surface. The use of the site will probably require that the subsurface areas provide space for parking, mechanical equipment, and other services; consequently, the first step in foundation construction will be *earth* and rock excavation. In this area, the basement floor will be constructed directly on the rock the necessary pits and provisions for drain It is possible that this excavation will extend low the water level of the East River, in will case the foundation will be completely we proofed and protected by a normal cofferdant withstand the water pressure from the river.

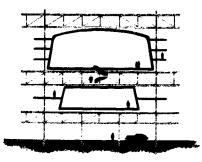
(b) As the slope of the bedrock drops be the lowest basement level, the loads from columns above must be carried down into bedrock by means of piers or caissons, three the surface material and artificial fill. These be either shallow or "open" piers of normal m forced concrete construction, or pneumatic other type of caisson installation.

### Low Buildings

The many meeting halls, extending horizontally over much of the area of the site, present a structural problem that can be solved by widely spaced columns and long spans giving a ma. mum of clear space without structural obstruction. Since these columns are to be carried to the bedrock, the concentration of loads upon them, resulting from their wide spacing, will be economically supported. The wide spacing not only makes possible large open spaces for meeting halls, lounges, and work areas, but also results in an efficient plan for the parking levels. All columns can be so placed that cars need never maneuver close to a column in entering or leaving a parking space. Even in the subsurface parking and service areas which are not directly below other buildings, a relatively wide spacing of columns should also be maintained in order to continue an efficient parking system.

Some of the spans developed in the preliminary engineering studies are more than 90 feet wide and will require deep girders or trusses. The depth of these trusses can in many cases be included within an intermediate floor level, so that the top chord of the truss supports the floor above while the lower chord supports the intermediate floor level. Such construction has been thoroughly analysed by the engineers, who have found that it presents no serious problems. Cantilevered floor construction will be used where it is important to gain more space above areas such as the Franklin D. Roosevelt Drive, where columns are undesirable.

Deep-truss construction will also make it possible to support adequately one large meeting hall directly over another without introducing columns into the lower. The intervening space will be of value not only for service personnel or other circulation but also for mechanical equipment, air-conditioning ducts, access to lighting of the meeting halls, and the like. The ceilings of the halls will, in effect, be hung from these trusses, permitting full development of acoustical treatment, special lighting, etc., and the pos-



sibility of inexpensive alterations when necessary in the future.

Moreover, the wide spans and wide column spacing give maximum freedom in placing such building elements as stairs, elevators, and escalators.

When a roof is not used for terraces, the trusses above meeting halls, particularly over the General Assembly Hall, may follow the general form of the hall itself. Detailed analysis will indicate the most desirable method of constructing these, either transversely with shorter spans or by fewer and larger trusses placed longitudinally.

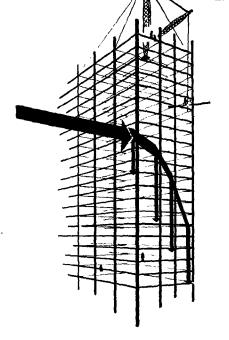
For the purpose of the preliminary engineering design and estimates, conventional methods were followed, and the allowable stresses now common in this type of construction were used. When the final design is made, consideration will be given to the possible use of welding, continuous trusses, pre-stressing, and other recent structural developments.

The basic frame will be of steel, for many reasons, particularly increased speed of erection. As is the case with most modern fireproof buildings, the structural elements are to be encased in concrete.

#### High Buildings

Skyscraper structures differ from other construction primarily in the provision that must be made to withstand wind pressure. While such a structure is self-supporting, it must also be able to resist wind velocity of as much as 80 miles per hour. If the building is narrow and presents a large surface to the wind, this horizontal pressure becomes a major element in the structural design. The structure must have strength to resist this wind pressure and transform it into a vertical thrust toward the foundations. The building must also be rigid enough so that occupants can work without discomfort under any weather conditions.

(a) A structural steel frame has been chosen because it will economically provide the necessary strength and stiffness with least loss of space due to size of structural members. This type of frame has been used for all buildings of comparable height in the New York region, and is known to provide a satisfactory solution to the problem of skyscraper construction. One very important advantage of using a structural steel frame is that it shortens the time required for construction. Steel members can be fabricated and brought to the site while foundations are being prepared; steel erection can begin as soon as column footings are completed. Once started, steel erection will proceed at the rate of at least two floors finished in every three working days. The steel members support the forms for reinforced concrete floor construction so that floor slab installation can be completed at the same rate as the steelwork.



(b) The steel framework will be arranged with lines of columns spaced as required for the efficient interior design of office layout and window arrangement. Each column line will have four columns with two exterior and two interior columns. This arrangement is necessary in order to carry the wind loads into the interior frame of the building, and enables the whole frame to act integrally; the alternative would be to make the exterior columns heavy enough to carry the full load, which would require very heavy deep girders and beams. (The four-column bents give a most satisfactory and economical steel structure for this width of building.) The omission of one line of interior columns would add approximately 15 per cent to the cost of steel, and would make it necessary to increase the height of the building to give the same amount of floor space and the same ceiling heights. Since an increase in height increases the cost of many other items besides steel, the total additional costs would be considerable. To omit all interior columns would raise the cost of steel alone by more than 50 per cent, with additional costs due to a still greater increase in building height.

The accompanying diagram shows how the horizontal force of the wind is vertically directed and distributed by the spacing of the columns.

(c) To provide stability, the framing of the girders between columns will be rigidly connected to the columns. The size of these girders, practically throughout the building, will be determined by the rigidity requirements for wind rather than by the strength required to support ordinary "live" loads (the occupants, equipment, etc.) or the "dead" loads of the structure itself.

(d) A study must be made of the anchorage of the columns to the foundations to resist wind overturning. The preliminary engineering study indicates that no special provision is required.

(e) For floor construction, short-span reinforced concrete slabs have been chosen. These will result in low dead loads and reduced foundation costs. The slabs are to be reinforced with steel mesh, with the main reinforcing running in one direction. This type of construction is easy to install, and is widely used in New York because of its low cost.

### Light, Air, and View

From the beginning of the planning, the principle has been maintained that those working daily at the headquarters must have the benefits of sun and natural light, a feeling of free space and verdure. Imperative technical reasons dictate that the lighting of the meeting halls must, on the other hand, be subject to the most minute regulation in order to meet the requirements of the various information media—photography, cinema, television, and the like. Hence, these halls must have completely artificial lighting. The surrounding lounges and lobbies at d also the spaces for work must, however, be so planned as to profit from the river site and from the park areas adjacent to the buildings.

The most advantageous use will be made of natural light through the latest technical developments for light control. Given a certain intensity of outside illumination, which varies with weather conditions, the time of day and the season, the amount admitted to the interior depends upon the type of glass; the size, shape, and position of the window openings; the ratio of window area to floor area; the ratio of the height of windows to the depth of the rooms; and the windowshading devices. By means of sunshades, windowshades, or venetian blinds, this natural illumination will be diffused and controlled as the needs of the specific spaces require. To reduce the glare of the bright sun or sky vault, sun control is indispensable in buildings with ample glass areas. In addition to the controlling factors at the windows, careful consideration is to be given to such items as the finish of desk tops, office machinery frames and other furniture, and to the colour of and reflection from walls, ceilings, and floors.

The problems of artificial light will be met in the headquarters buildings through: (1) indirect units, by which 90 to 100 per cent of the light from the fixture is first directed to the ceiling and upper side walls, whence it is diffusely reflected to all parts of the room; (2) semi-indirect units, by which 60 to 90 per cent of the light from the fixture is directed toward the ceiling, while the rest is directed downward; (3) direct units, by which fixtures direct practically all the light on angles below the horizontal; and (4) semi-direct units, by which 60 to 90 per cent of the light is directed downward on the working surface. The control of the fixtures will, as far as possible, be subject to individual choice, in order to take advantage of the natural light on clear days and thus conserve the artificial light. The installations will meet both day and night conditions.

The present-day recommended levels of illumination will be maintained in the various rooms and meeting halls by use of the most modern and efficient fluorescent and incandescent lighting equipment. These levels are as follows:

Areas	Foot candles
Office space, General Assembly, Council chambers, committee rooms and conference rooms	30-40
Library reading rooms	30
Library stacks	20
File rooms	30
Lounges, rest rooms, corridors	10
Dining areas	15



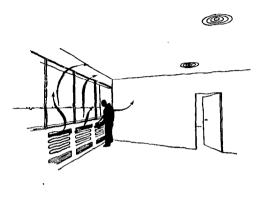
### Air Conditioning

The intensity of the work to be carried on in these buildings, the number of people who will use them, and the variability of the New York climate require the maintenance within the buildings of a comfortable climate unaffected by exterior conditions. Authorities agree that the regulation of temperature, humidity, cleanliness, and motion of the air result in increased worker efficiency. Obviously, it is also necessary to remove accumulated heat, moisture, and smoke from assembly places. In the New York area, almost all recent structures provide year-round air conditioning.

For areas in which the occupancy is primarily sedentary and continuous for a period of several hours, the comfort of the great majority will require, during peak periods, a maintained summer temperature of 78° Fahrenheit and a relative humidity of 50 per cent; at other periods, approximately 76° Fahrenheit and 50 per cent relative humidity. In winter, indoor temperature and humidity are equally important, although humidity may vary. Conditions of 70-72° Fahrenheit and approximately 50 per cent relative humidity have proven successful in the New York area, with a reduction in the relative humidity maintained indoors as the outdoor temperature drops.

To achieve these results, various methods can be utilized; these are based either on the principle of radiation or on the use of circulated air as the heat-absorbing or heat-liberating medium. Engineering studies indicate that the latter system, with separate heating and cooling units at the exterior wall, will best meet the specific requirements of individual control and maximum economy for the permanent headquarters. Individual control is important in the buildings of the United Nations, the occupants of which have a diversified climatic background and may have varying standards of comfort. For the same reason, it will be desirable to permit individuals to open the windows, although it is expected that they will actually do this only rarely since they can go to a window unit and adjust the equipment to meet the exact conditions desired.

In the Secretariat Building, the system of air conditioning can benefit from the depth of the structural steel to allow the passage of ducts that penetrate the steel without reducing headroom. The ample provision of glass area, through which



Air conditioning with individual unit control will be seen magnificent views of river, City aky line, and park, will probably mean a relatively large gain of solar heat unless a practical method is found, by further study, to reduce this heat br shading or special glass. In any case, an office building with a minimum of dark interior space will have a relatively larger heat gain at the perimeter, and require for the perimeter areas (up to about sixteen feet from the exterior wall) a separate air-conditioning system different from the system for the interior areas. Detailed cos analysis by the engineers indicates that differ. ences in the cost of initial construction and operation of air-conditioning due to different orientations of the main building structures are relatively small, so that other factors will be the determining ones.

The preliminary recommendation of the engineers is that ducts of minimum size and maximum air velocity and temperature differential penetrate the steel framing, and that units be placed under the windows with water coils for cooling and heating.

In the meeting halls, lounges, and restaurants, the systems will be of the conventional low air velocity type, because these areas are especially designed to meet specific requirements and have space available for larger, rectangular ducts. They will be automatically controlled.

A central refrigeration plant will be provided to cool the water. No cooling tower will be required because use can be made of water from the East River, which reaches a maximum temperature of about 80° Fahrenheit during the summer.

### **Acoustics**

The control and regulation of sound, especially the sound of the human voice, is of essential importance to the fundamental operations of the Headquarters of the United Nations. Sound must he sustained and amplified in the meeting halls; noise must be reduced in the lounges and work areas, and substantially eliminated from the broadcasting studios.

The chief function of sound control is, however, to strive for the highest possible value of speech intelligibility in all the meeting halls. This will require that:

(a) The reverberation time be rigidly controlled by the proper amount of soundabsorbing materials in the room (including carpets, drapes, furnishings, people), which must be sufficient to reduce the reverberation time to not more than 1.5 seconds;

(b) The shape and dimensions of the room be such as to avoid setting up serious interference patterns or echoes which, if possible to correct, would require extensive acoustical treatment;

(c) The tonal response of the room not cause serious loss of consonant tones nor diston the voice so that it sounds unnatural;

(d) The sound-reinforcing system of the room produce a sound level of 65 to 75 decibels throughout its entire seating area from any microphone without any audible trace of oscillation, and be capable of producing 80 to 85 decibels throughout the seating area to meet any high momentary peak in the speaker's voice.

The closer the room is to optimum shape and design, the smaller will be the expenditure re quired for corrective acoustical treatment. Strue tural, aesthetic, and functional requirements often necessitate deviations from the optimum, but a fundamentally correct design will not only be less costly on acoustical grounds but will also give better acoustical results than any artificially corrected design.



**Council chambers** 



Conference Rooms Nos. 1, 2, 3 & 4



Structural requirements dictate a long, narrow, fairly low compartment with a smaller cubic content per seat than that of the Council chambers, but still requiring considerable treatment.

Can be made very satisfactory acoustically with little applied treatment other than a small amount of absorp-

distributed

tion properly

within the room.

treatment.

With their seating capacity of 700 are much nearer to the acoustic optimum in basic design, but will still need considerable treatment.

With its seating capacity of 3,500 is far from optimum in cubic content per seat. Its design will require special attention to the reduction of cubic volume and to the arrangement and choice of sound absorbent and reflecting areas on walls, ceilings, and other surfaces.

**Conference Room No. 5** 



Committee rooms

Will not require sound-reinforcing systems although some acoustical correction will be needed to preserve their tonal characteristics.

Has a satisfactory cubic content per seat, and will require only a small amount of

Theatre



### **Broadcasting studios**

Two studios for talks—acoustical treatment will be considerable since they must be very "dead." Four generalpurpose studios—since these are larger and their acoustic requirements more "live," they will need more varied treatment. In addition, both types will need complete sound isolation of walls,

floors, and ceilings.

Noise reduction treatment will be generally required for corridors, cafés, restaurants, lounges, work areas involving teletype and teleprinter, conveyor systems, and broadcasting booths. The principal administrative and private offices, secretarial pools, and similar working areas will also require treatment.

#### Telephone

A standard unified dial system with a private branch exchange is a basic element both of internal and external communication.

#### Intercommunicating telephone

A supplementary system of the dial or button type for connecting two individuals, and including multiple stations for conferences, will relieve the regular telephone lines. No switchboard required.

#### Intercommunicating speaker system

Loud-speaker or earphone communications, providing instant two-way contact between offices, could also relieve the regular telephone system. No operator. Pushbutton or lever-control panel.

#### Public address system

A loud-speaker system for paging and dispatching messages in public areas, work areas, or lounges. Can be replaced by visual lights in the meeting halls. Distribution of news and music to restaurants would be on this system.

#### Equipment for dictating and recording

Dispenses with stenographers on call. Conferences and phone conversations can be recorded for filing or replay.

### Writing Instruments

#### Telautograph

Simultaneous transmissions of written messages in original handwriting to any number of points. Persons receiving need not be present during transmission. Permanent record of all messages for filing. Saves messenger service. Maintains security.

#### Teletype

Instantaneous transmission of straight, coded, or foreign ianguage messages, symbols, figures, etc., by electrical impulse. Receivers can make multiple copies or cut sten-

# **Communications**

The nerves of this complex organism are the mechanical and electronic communications systems, internal and external, which tie together thousands of working units, individuals and groups of individuals within the headquarters and throughout the world. Through radio, television, cable, teletype, and other proven developments in the electronic field, the great number of machines and types of equipment required at the headquarters are interwoven with the larger world complex of communications between men and nations.

This communications system has been carefully studied by the technical engineers, in close conjunction with the Advisory Committee on United Nations Telecommunications. The broad communications programme of the United Nations is a part of the report of that Committee. All available types of communications systems are being studied for their specific application to the needs of the United Nations, and it is pertinent to review some of the methods of internal communications affecting the architectural planning.

Signal center (for exter-contact) will be used his equipment.

### eric 'ypewritoz

ter, more even typing; ter number of copies. mexion possible with sev-[] machines, producing while copies.

### b typewriter

reges transmitted by a circuits, wire circuits, to r power lines are ad up and retyped by number of copy typeters at various points.



outives may see and hear is happening at conferet, etc., without being ment. Overflow of public idmitted to meetings can and hear what is going from lounge area. This in can be used in com-tion with microfilm.

#### lle transmission

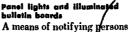
or radio transmission hotos or documents, for ction on a screen or for tity reprofluction by fac∙ e duplicators.

#### pictures and slides

percial | entertainment, rels, ducational or og films for the public uted Nations personnel estres or lounges. Their can be combined with bion instantantion. fices or meeting halls. ion initallations either

ments photographically end and recorded on (16 to 70 mm.). Affords compact filing system, begalive film of all mafrom which any num-of copies or enlargements be mide. Positive of film be projected on screen inspection.

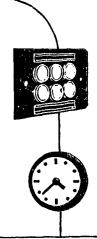
lion visitors or personof the location of various oms, etc., and to pro-Å. mional assistance to lic areas.



of the presence or absence of individuals or groups, and of announcing time and place of meetings or events

#### Electric clock system

Centrally controlled system for standard time synchronization. Used also to announce radio programmes, or as time stamps for docu-ments, correspondence, etc.



#### **Other Instruments**

#### Alarm systems

1. For local interior fire protection, with bell, gong, etc. Each alarm type is for a specific category of emergency and is manually operated.

2. Automatic fire alarm, working on a "fixed temperature" principle, and connect-ing with sprinkler system.

3. Watchman patrol system. Panel light, loud-speaker, or telephone communication, with central control for each check-in station.

### Dumb-waiters, khain conveyors, belt conveyors and pneumatic tubes

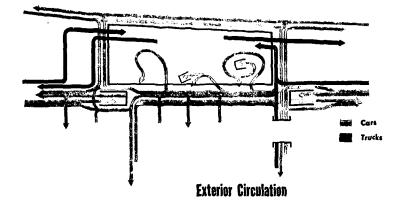
For distribution of documents both vertically and horizontally. A general sys-tem of combined chain conveyors and dumb-waiters for bulk traffic, with augmented services by means of belt conveyors and pneumatic tubes for interdepartmental distribution particularly in relation to the library service.





### Circulation

The planned control of circulation—both horizontal and vertical exterior and interior—at once creates order and gives to each function of an organization its own time and space in which to work. If the entrances to the site and to the various parts of the buildings are wisely placed, the whole composition will function properly: delegates, Secretariat personned Press, and public will function will be adequately accommodated. The horizontal and vertical circulation constitute the blood stream of the organism.



Planning for the movements of the daily population to and from the site involves two entirely distinct streams: vehicular traffic and pedestrian traffic. Each of these streams, for purposes of control and convenience, is again divided into a substream for those employed on the site as delegates or Secretariat personnel and an entirely separate one for the visiting public. In the vehicular stream, there is a third traffic lane for heavy loads and trucks.

The delegates arrive in large numbers immediately before and depart immediately after meetings, usually in official cars or taxis, occasionally in corteges numbering scores of cars. Expeditious handling of this traffic is of primary importance and adequate space must be provided, preferably apart from the entrance for the general public. Peak periods will be during General Assembly sessions.

Members of the Secretariat and the Press arrive mornings and leave evenings in great numbers at a set time. Those who come by car should have a lane separate from other vehicular approaches for direct access to their own parking area.

Vehicular lanes to the Secretariat Building must also allow for the daily movements of the cial and commercial trucking, which must have efficient loading arrangements.

Personnel on foot will arrive mainly from 42nd Street but may use any pedestrian entrance that leads to the Secretariat Building.

When plans for building are definite, allowance will be made for separate circulation and parking for the personnel of permanent delegations and the specialized agencies. Meanwhile, present arrangements are adequate to serve these groups.

Specially invited guests will use the delegates' traffic lanes and garage facilities.

Many daily sightseers and persons holding tickets to meetings, who usually arrive together in large numbers, will enter the site as peder trians; vehicular lanes are planned for the rapid loading and unloading of many persons at one time. From all that has already been said, one conclusion is obvious: the delegates must have a place from which they can easily reach all their meeting rooms and the Secretariat Building. This place is the lounge, key to the composition of the whole conference area.

Upon entering, delegates will usually proceed to the lounge, where they will disperse to their various meetings. This they must be able to do without encountering the traffic of the public, Press, or general Secretariat.

This circulation is basically horizontal, with a secondary vertical movement facilitated by escalators, elevators, stairs, and ramps. The horizontality of this circulation permits an easy solution to the problem of its strict segregation from the movements of Press and public. The latter are placed on higher levels, whence they enter the balconies of the meeting halls.

Upon leaving the area, the delegates must be able to call their cars to their private exits for inconspicuous and expeditious departure.

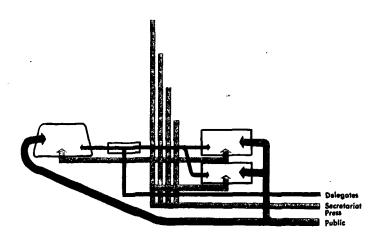
Representatives of specialized agencies attending meetings will, of course, have the use of the delegates' area.

The Secretariat, on the other hand, must be housed mainly in a single building based on vertical circulation. This will be the most efficient and economical means of ensuring maximum ease of circulation among the divisions of the Secretariat. There must also be direct vertical circulation to and from the conference area, to all parts of which (except the delegates' lounge) the Secretariat must have free access.

A detailed engineering analysis has been made of the elevator service which must be provided to meet normal requirements as well as morning, noon, and evening peak loads with a waiting interval of 25 seconds, which is the accepted norm for good capacity in advanced buildings in New York. Four banks of six cars each, centrally located and arranged in alcoves for easy access, will be adequate to handle the capacity of the building and capable of carrying about one-sixth of the population during the morning 5-minute peak. Each bank can serve approximately one-fourth of the floors.

From the designated work areas and lounges of the Press, there must be direct access to all its galleries. The Press must also be able to enter the Secretariat Building and certain defined portions of the delegates' area (including part of the delegates' lounge) for interviews.

Public circulation must be strictly kept from mingling with that of delegates, Secretariat, and Press, save in the case of guided tours. The separate entrances for the public should lead, via lobby, lounge, and exhibition hall, directly to the public galleries in all meeting halls.



### **Relaxation and Recreation**

For many of the personnel—delegates, Secretariat, and Press alike who will have come from the four corners of the earth to work at the United Nations, the headquarters will be something more than a place of work. It must, in a real sense, take the place of their homes as a centre and point of departure for their leisure-hour activities. The headquarters must, therefore, offer them not only healthful working conditions but also opportunities for after-work relaxation and recreation. It must provide pleasant surroundings where they may get to know each other informally —game courts, restful club-rooms, attractive restaurants, and parks.

#### Lounges

Each category of personnel—delegates, Secretariat, and Press—should have its own lounge close to its working area. Each of these lounges should have an equally pleasant, informal atmosphere, good light, and an airy view of the surrounding parks and the river.

The delegates' lounge is of particular importance, not only for relaxation and rest, but also as the central gathering point and principal meeting place where delegates may continue discussions between meetings.

A lounge capable of holding large numbers of persons on special occasions should also be provided for the public.

All lounges should connect with the restaurants and bars for the respective groups.

#### **Roof Terraces**

The wide roofs, with their views over the river and the City, present an ideal opportunity for developing terraces, enclosed and open-air restaurants, and even some facilities for parties and games.

#### Parks

The built-up neighbourhood of the site, and the high structures which may surround it, make it of paramount importance to provide as much open space as possible around the headquarters buildings to set them off. Attractively landscaped, this green base, extending from First Avenue to the water's edge, will fulfill an important aesthetic function as a setting for the buildings, as well as provide as invaluable recreational opportunity for their occupants. Through this inviting park, visitors may stroll among the buildings, while smaller parks and waterfront terraces will be reserved for the exclusive use of the headquarten personnel.

#### **Clubs and Athletic Facilities**

The administration of the Secretariat has encouraged the formation among the personnel of social and athletic clubs of all kinds. Despite their present very limited facilities, these clubs have already become an important factor in the *esprit de corps* of the internationally composed Secretariat. The late hours often required of the staff during emergency periods give added point to the need for proper club-rooms, where games or music may he played or where individuals may relax quietly.

A gymnasium and some game courts should eventually be provided for the physical cultur aspects of a recreation programme.

### **Flexibility and Expansion**

The United Nations is a young and dynamic organization; its potentialities for growth and change are unlimited. Though its structures will be of steel and concrete, they must be planned on so flexible a pattern that their interior areas may be easily and economically rearranged to suit changing needs. Similarly, while the main building masses will determine the composition and use of the land area, much of the space can be kept free for future needed construction that will be in harmony with the pattern already laid down.

#### Flexibility

#### **Conference** Area

To anticipate changing needs, this area can be designed as a basic structural shell whose spaces have multiple potential uses and are internally adjustable and subdivisible.

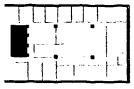
The General Assembly Hall is planned to

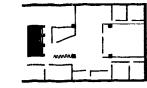
accommodate representatives from seventy Member States. Floor space temporarily in excess may be used to seat special observers.

The observation booths for public information media can be planned for a capacity above present requirements, anticipating future technical developments in a field very important to the United Nations. The open areas planned for public exhibits and for a small theatre can be converted into large meeting halls, should they be required at some future time, or into service areas.

The structural shell of the Council chambers must be so constructed as to permit necessary changes in size, and seating arrangements for delegates must be planned to allow for a fluctuat-

Variable Subdivision by Non-Structural Fartitions





ing number of participants.

One of the conference rooms should be so planned as to be convertible into a Council chamber without any structural change. These conference rooms must have sectional conference table arrangements allowing for increases up to a capacity of seventy delegations.

All committee rooms must have flexible table arrangements and intermediary movable

#### future Expansion

It is possible that the functions of the United Nations may ultimately expand, requiring new organs to be created, or the personnel to grow even beyond present maximum estimates.

#### **Conference** Area

The General Assembly Hall must be planned for the full anticipated capacity of seventy Members.

The basic horizontality of the Council chambers, conference and committee rooms makes possible their extension in a horizontal plane.

### library

The library must be planned for continuous growth and easy extension or, possibly, for removal to a separate structure close to the other buildings. This structure might be erected on some of the reserved space, for example along the southern end of the site, where it might replace the present New York City Housing Authority Building.

#### Secretariat Building

Since the Secretariat Building is a skytraper structure, to which vertical additions would be economically impractical, it must be planned with ample space for expansion within partitions, adjustable to accommodate all sizes of meetings within the required range.

Around the periphery of the service levels will be offices with natural light for the Secretariat personnel serving the conferences. These must be planned as flexibly arranged spaces, capable of subdivision as required and permitting circulation to the various meeting halls above and below. Space must be provided to meet increasing future needs for such services.

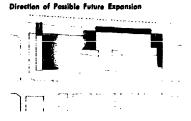
#### The Secretariat Building

As world issues affect its tasks, the Secretariat constantly undergoes administrative and organizational changes that call for the redistribution and reallocation of space. A simple framing structure, with continuous modular fenestration, and a centrally located, efficient vertical circulation, will give complete freedom for such rearrangements of office space.

the building itself. Allowance will be made for an expansion of possibly 55 to 90 per cent over the Secretariat personnel initially occupying the building. This excess space can, in the first few years, house such offices of delegations and specialized agencies as may be placed on the site prior to the construction of separate accommodations in the reserved area. The expansion of the Secretariat should coincide roughly with the removal of these other units to their permanent offices.

# Headquarters of Delegations and Specialized Agencies

At this writing, information regarding the establishment of headquarters on the site by delegations of Member States or by the specialized agencies is too limited for the detailed planning of their accommodations. The entire northern part of the site has been left open for such developments.



# 5 The Plans

The plans that follow indicate the stage which has been reached in the search for an architectural solution. These plans and studies are not perfect, nor final; but they represent the first fruits of the teamwork of the architects and engineers. The search will be a dynamic process continuing up to the moment when the first meeting in the new headquarters is called to order or when the first secretary sits down to her typewriter.

These plans will receive constant improvement from careful investigations among those who are to use them; they will be constantly refined from these very preliminary statements of work in progress. In the limited time available, it was not possible to present in this first report, detailed design studies of the final physical appearance of the buildings.

### Site Plan

All the elements considered in the preceding analyses must be synthesized into an integrated arrangement of buildings, lines of circulation, courts, parks, etc. The size of the site allows for a large free space for a ceremonial and public entrance opening out from the widened 47th Street approach. The General Assembly Hall, situated at at the heart of the site, dominates this "honour plaza" and also opens out upon the area at the southern end of the site, which is the daily entrance for delegates, the Secretariat, and the Press.

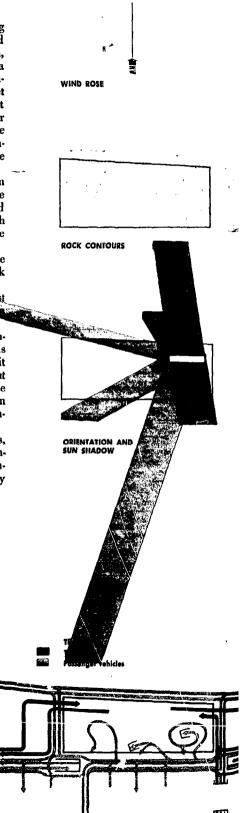
This southern area is created by the location of the Secretariat Building, which is close to the heavy daily flow of pedestrians from 42nd and 43rd Streets and, at the same time, far enough from First Avenue to provide adequate space around its high vertical mass.

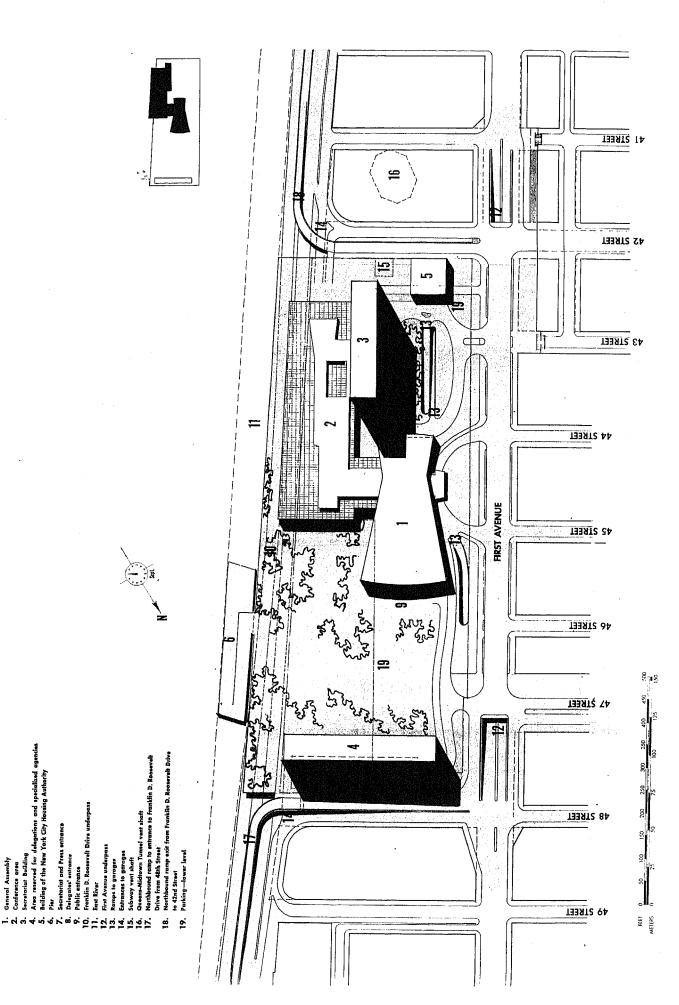
Along the river, profiting fully from the light and ever-changing view, lies the low block of meeting halls.

The park-like terrain, landscaped from Kirst Avenue to the river's edge, will create a group plateau from which buildings will rise.

Among the factors determining the northsouth orientation of the Secretariat Building was the desire to minimize the effect of the shadow it will cast on the site. Since the other important considerations mentioned above placed it at the southern end of the site, any other orientation would have kept most of the site in almost continuous shadow.

Other basic site-planning considerations, referred to previously, such as subsurface conditions, street patterns, functional interrelationships, provision for future expansion, and many others, have entered into the composition.





Area reserved for delegations and specialized agencies Beilding of the New York City Housing Authority Per

Conference area Secretariat Building

Assembly

and Press ontrance

Secretariat Delegates'

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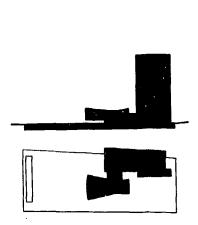
### Lower Levels

Taking advantage of the differences in heights between the Franklin D. Roosevelt Drive and the landscaped plateau created by extending the First Avenue level onto the site, the plans provide as much space as is practical for parking, trucking, and other service needs.

The lowest level serves primarily traffic entering or leaving the site at 42nd and 48th Streets, including north-bound and south-bound traffic from the Drive. This traffic will consist mainly of the cars of the Secretariat personnel and the Press, along with the necessary service vehicles. This lowest level also connects by ramp with the upper levels, and can be made to accommodate the visiting public.

The next higher level, which can be entered directly from the upper entrance plateau, best serves the delegates. Using this level, they may proceed directly from their cars to the meeting halls by escalator or elevator.

The area closest to the river most economically fills the need for higher spaces. Therefore, all trucking, mechanical equipment, and certain building services are concentrated there.

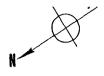


#### FIRST LOWER LEVEL

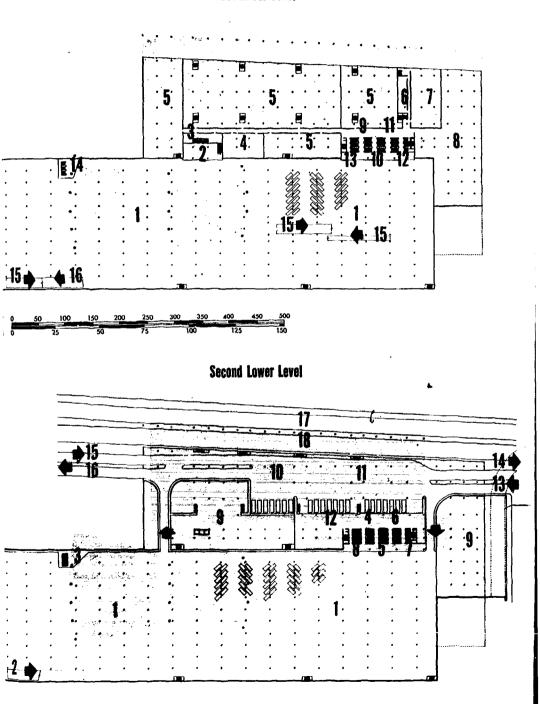
- 1. Parking
- 2. Dispatching and waiting rooms
- 3. Delegates' elevators
- 4. Mechanical repair shops
- 5. Documents: reproduction and distribution
- 6. Library receiving
- 7. Library-binding and repair
- 8. Archives
- 9. High-rise elevators
- 10. Medium high-rise elevators
- 11. Medium low-rise elevators
- 12. Low-rise elevators
- 13. Service elevators
- 14. Public elevators
- 15. Ramps up
- 16. Ramps down

#### SECOND LOWER LEVEL

- 1. Perking
- 2. Ramp down from delegates' level
- 3. Public elevators
- 4. Secretariat high-rise elevators
- 5. Secretariat medium high-rise elevators
- 6. Secretariat medium low-rise elevators
- 7. Socretariat low-rise elevators
- 8. Secretariat service elevators
- 9. Documents storage and issue
- 10. Garage
- 11. Trucking
- 12. Receiving and loading platform
- 13. Entrance from 42nd Street
- 14. Exit to 42nd Street and Franklin D. Roosevelt Drive
- 15. Entrance from 49th Street and Franklin D. Roosevek Di
- 16. Rich to 40th Street
- 17. Franklin D. Roosevelt Drive-north-bound
- 18. Franklin D. Roosevelt Drive-south-bound



First Lower Level



### **Main Entrance Level**

Since the delegates, Secretariat, Press, and public will enter the buildings directly from the First Avenue level at different points, they will be immediately sorted out by means of the different elevators, escalators, ramps, and stairways that bring them to their respective destinations in the buildings. Lobbies ample enough to accommodate the large numbers that may gather on special occasions, and sufficient cloakrooms and other necessary facilities, will ensure the dignity and orderliness of arrivals and departures. In addition, the separation of the delegates' entrances from the other entrances will make for better control, and will allow the delegates to arrive and leave inconspicuously.

Upon entering the buildings, delegates may proceed directly to their lounge by escalator or elevator, or they may continue on the same level to conference and committee rooms. These rooms are directly accessible from the lounge above by stairway or elevator, and they can also be reached directly from the entrance to the Secretariat Building, should the delegates arrive that way.

On this main entrance level are to be found the public information and exhibit facilities of the library.

The Secretariat and the Press will use a single entrance and the same vertical circulation to their respective places of work, since their work is related and both require rapid means of intra-circulation.

The public entrance is designed for flexibility in the installation of exhibits and to allow the public to attend showings of educational films, but above all to lead visitors directly to the public galleries of the meeting halls without crossing the paths of delegates or Secretariat. It is possible, by means of the elevators at this entrance, to restrict visitors to the public galleries of the General Assembly Hall and Conference Room No. 5 when these are being used by other groups, such as the specialized agencies. On the other hand, the ramp does allow the public to pass on to the conference and committee rooms when all parts of the conference area are being used for sessions of the General Assembly.



#### A. DELEGATES' ENTRANCE

- 1. Entrance lobby
- 2. Check-room and toilets
- 3. Information
- 4. Escalator to main delegates' lounge
- 5. Delegates' elevators

#### B. PUBLIC ENTRANCE

- 6. Entrance lobby
- 7. Public elevators
- 8. Exhibition
- 9. Check-room and toilet
- 10. Cinema (or auditorium)
- 11. Dressing rooms, etc.
- 12. Public ramp to conference rooms
- 13. Communications centre for public

#### C. SECRETARIAT AND PRESS ENTRANCE

- 14. Entrance lobby
- 15. Low-rise elevators
- 16. Medium low-rise elevators
- 17. Medium high-rise elevators
- 18. High-rise elevators
- 19. Service elevators
- 20. Escalators for Press

#### D. CONFERENCE ROOM No. 1

- 21. Delegates and advisers
- 22. Public gallery
- 23. Press gallery
- 24. Secretariat
- 25. Booths

#### E. CONFERENCE ROOM No. 2

- 26. Delegates and advisers
- 27. Public gallery
- 28. Press gallery
- 29. Secretariat
- 30. Booths

#### F. CONFERENCE ROOM No. 3

- 31. Delegates and advisers
- 32. Public gallery
- 33. Press gallery
- 34. Secretariat
- 35. Booths

#### G. CONFERENCE ROOM No. 4

- 36. Delegates and advisers
- 37. Public gallery
- 38. Press gailery
- 39. Secretariat
- 40. Booths

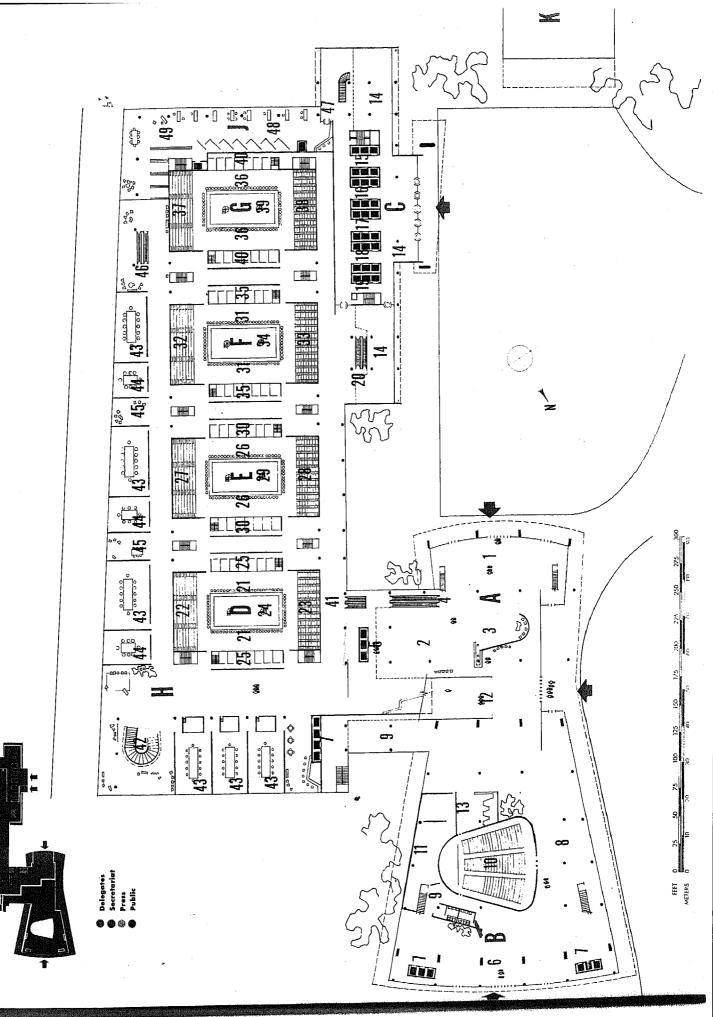
#### H. DELEGATES' AREA

- 41. Escalator from parking area
- 42. Main stairway
- 43, Large committee rooms
- 44. Smaller committee rooms
- 45. Rest reoms
- 46. Escalators to main delegates' lounge
- . LIBRARY
  - 47. Entrance
  - 48. Exhibition area
  - 49. Public information and reference

1 Manual Contact

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### **Second Level**

The ramp and elevators move the public directly up to the public lounge, which faces the river and opens directly into the public galleries of the four conference rooms. The large staircase takes visitors directly up to the public galleries of the Council chambers. This public movement can be controlled if desired, since it must pass through levels serving other groups.

Press representatives also have direct access at this level into the Press galleries of the conference rooms, from the elevators of the Secretariat Building and from their own working area. The public information booths are easily reached, and the circulation of the working Press is kept free from intermingling with that of the public, although Press representatives can make contacts with the public and with delegates at the discretion of the latter.

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#### A. CONFERENCE ROOM No. 1

- 1. Public gallery
- 2. Press gallery
- 3. Booths

#### B. CONFERENCE ROOM No. 2

- 4. Public gallery
- 5. Press gallery
- 6. Booths

#### C. CONFERENCE ROOM No. 3

- 7. Public gallery
- 8. Press gallery
- 9. Booths

#### **D.** CONFERENCE ROOM No. 4

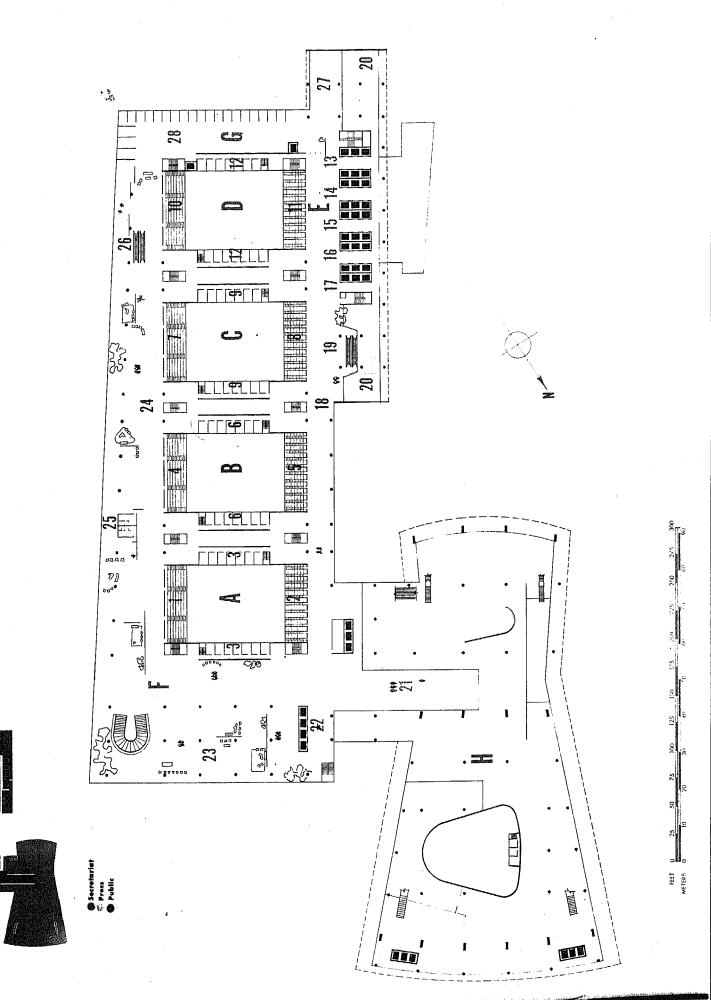
- 10. Public gallery
- 11. Press gallery
- 12. Booths

#### E. SECRETARIAT BUILDING

- 13 Low-rise elevators
- 14, Medium low-rise elevators
- 15. Medium high-rise elevators
- 16. High-rise elevators 17. Service elevators
- 18. Press actions to gallery
- 19. Escalator for Press
- 20. Upper part of entrance lobby
- F. PUBLIC AREA
  - 21. Ramp from er trance
  - 22. Elevators
  - 23. Lounge
  - 24. Public access to galleries
  - 25. Rest rooms
  - 26. Escalators

#### G. LIBRARY

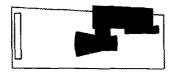
- 27. Reading room
- 28. Study rooms
- N. UPPER PART OF LOBBIES, EXHIBITION HALL, AND CINEMA



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### Third Level

This service level provides working access from the Secretariat Building to the General Assembly Hall and Council chambers without conflict with other types of circulation. The level also provides the large work areas which must have direct access to the very centre of the Council chambers and to the podium area and presidential office suite of the General Assembly Hall. This level (which, incidentally, takes advantage of the space between the heavy girders necessary for the construction of the large meeting halls) makes the servicing of the meetings as efficient as possible and free from all interference. Large space requirements for sound control and recording, for Secretariat and Press work, for storage, and for supplementary committee rooms can also be met on this level. The ever-changing demands for such space can be met most economically through utilization of such open areas equipped with an efficient system of movable partitions.



#### A. DELEGATES' ACCESS TO COMMITTEE ROOMS

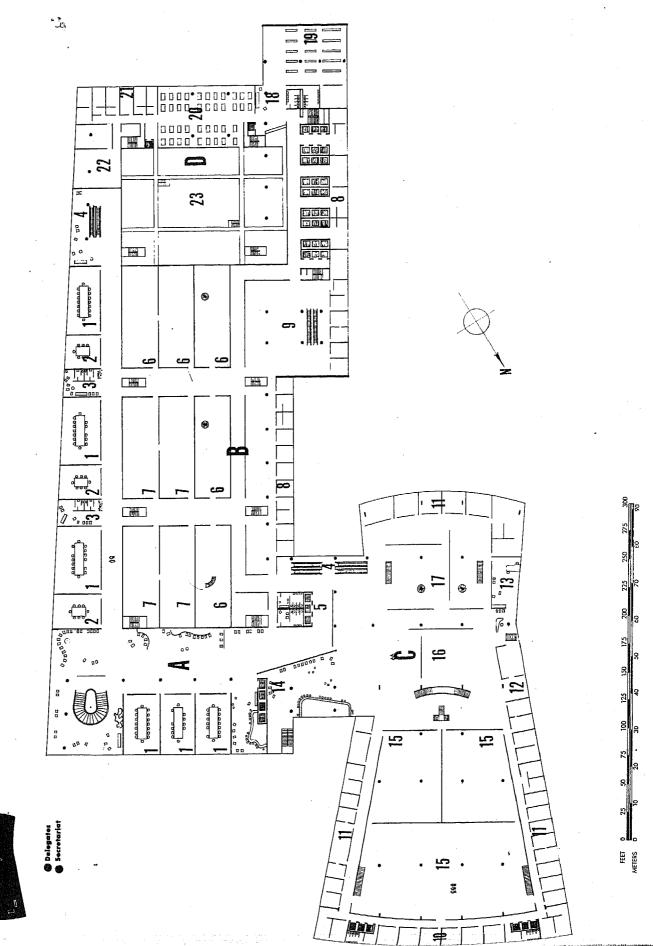
- 1. Large committee rooms
- 2. Smaller committee rooms
- 3. Rest rooms
- 4. Escalators
- 5. Delegates' elevators

#### B. SERVICE AREA FOR COUNCIL CHAMBERE

- 6. Access to chambers, Order of the Day, switchboards, storage, etc.
- 7. Sound control
- Offices for translators, interpreters, and verbatim reporters
- 9. Typing pool

#### C. SERVICE AREA FOR GENERAL ASSEMBLY

- 10. Press offices
- 11. Service offices to General Assembly
- 12. Protocol and liaison offices
- 13. Reception room
- 14. Rest rooms and refreshment bar
- 15. Storage, services, unassigned space
- 16. Access to Ganeral Assembly work space, etc.
- 17. Access to Conference Room No. 3 work space
- D. LIBRARY
  - 18. Lobby
  - 19, Cerd catalogues
  - 20. Catalogues and periodicals
  - 21. Administration
  - 22. Order and acquisition
  - 23. Hacks



## Fourth or Delegates' Level

Arriving at this level by escalator and elevator, the delegates find a single focal point in contact with all their work areas. This central point is developed into the important main delegates' lounge, with its view of the river and park, its quiet, informal atmosphere of relaxed conversation, its refreshment bar and other facilities. Thence, delegates may enter directly into the General Assembly Hall or the Council chambers without proceeding through confusing corridors or complicated passages. Moreover, by descending the escalator or stairs, situated i. several readily accessible points, they can reach the conference rooms without walking long distances.

Authorized Secretariat personnel can proceed directly on this level to establish contact with the delegates. Similarly, delegates may make direct contact with the public just below and with the representatives of the Press, whose lounge and work space are on the level immediately above.

Immediately adjacent to each meeting hall is a secondary lounge which delegates may use immediately before or during meetings. When the General Assembly Hall and Conference Room No. 5 are being used by groups such as the specialized agencies, the secondary lounges attached to these two meeting halls can completely fill this need.

Close to the Council chambers and on the same level. are small suites for officials and delegates who need offices close at hand to avoid having to go back and forth to their regular offices elsewhere. There is a direct connexion between the podium of the General Assembly Hall and the office suites of the President, the Secretary-General, and other officials requiring such quarters close by.

Conference Room No. 5 is so situated as to provide the more ample space required for delegates, the Press, and the public during occasions with especially large attendance. It can serve as a meeting room supplementary to the General Assembly Hall, especially when the latter is being used by organizations that should not have contact with the rest of the conference area. It can also serve as a fourth Council Chamber if one should ever be required.

The library is directly accessible to the delegates. The stack space is adequate for the expected expansion of that unit.



#### A. GENERAL ASSEMBLY

- 1. Soats for delegates
- 2. Podium
- 3. Advisers and accredited observ
- 4. **Press** gallery
- 5. Public lobby
- 6. Telephones
- 7. Toilets
- 8. Public elevators

#### **B.** SECURITY COUNCIL

- 9. Conference area for delegates and
- 10. Public gallery
- 11. Press gallery

#### G. TRUSTEESHIP COUNCIL

- 12. Conference area for delegates and
- 13. Public gallery
- 14. Press gallery

#### D. ECONOMIC AND SOCIAL COUNCIL

- 15. Conference area for delegates and
- 16. Public gallery
- 17. Press gallery

#### E. CONFERENCE ROOM No. 5

- 18. Conference area for delegates and
- 19. Press gallery
- 20. Booths

#### F. DELEGATES' AREA

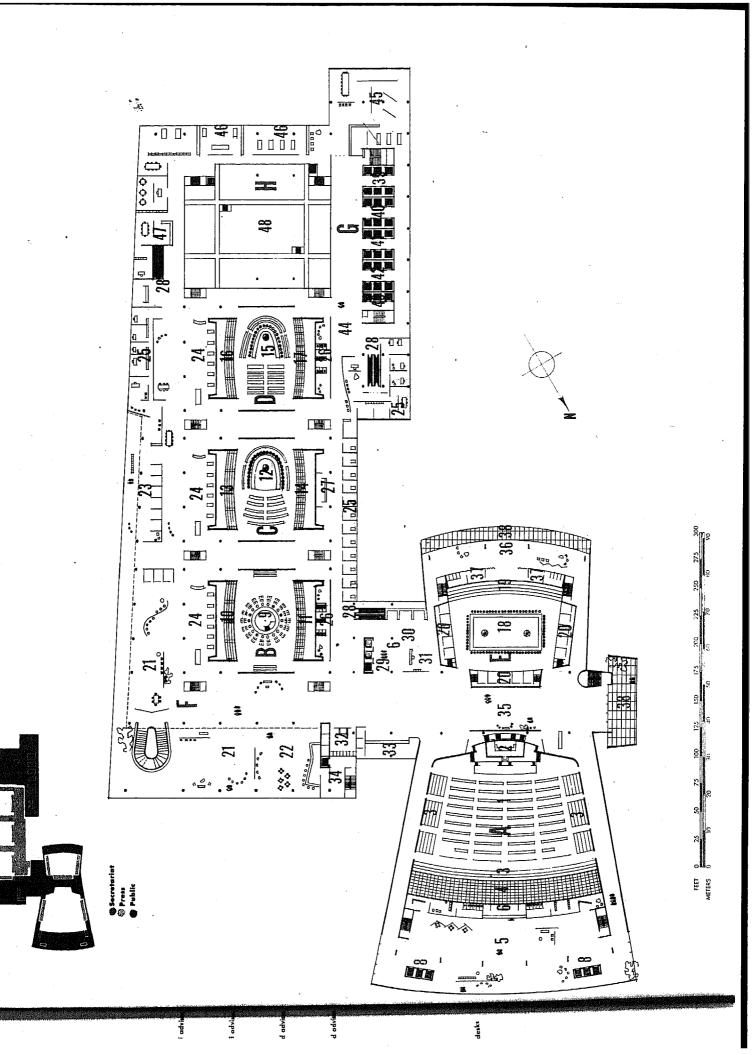
- 21. Main delegates' lounge
- 22. Bar
- 23. **Private rooms**
- 24. Writing rooms
- 25. **Council executive office**
- 26. Toilets
- 27. Check room
- 28. Escalators
- 29. **Delegates' elevators**
- Information and transportation situ 30.
- 31. Reception
- 32. **Telephones** and telegraph
- 33. Document distribution
- 34. Service
- 35. Lobby
- 36. Lounge
- 37. Toilete
- 38. Terraces

#### G. SECRETARIAT BUILDING

- 39. Low-rise elevators
- 40. Medium low-rise elevators
- 41. Medium high-rise elevators
- 42. **High-rise** elevators
- 43. Service elevators 44. Lobby

#### I, LIBRARY

- 45. Map 100m
- 46. Emergency collections
- 47. Delegates' reading rooms
- 48. Stucks



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### Fifth Level

This level provides space for the working Press and for units of the Secretariat most immediately concerned with servicing the Press. On this level, too, the public obtains access to the galleries of the Council chambers, and the library has its vertical continuation.

The lounge area is centrally located so that Press representatives may easily meet with delegates, Secretariat officials, and others. This space, although somewhat isolated from the busy work areas, is nevertheless only a few seconds' walk from the Press galleries. A secondary lounge will provide a relaxed, informal atmosphere a few steps behind the Press gallery of the General Assembly Hall. When this hall is being used by some agency or organization other than the United Nations, this secondary lounge will serve the Press covering these activities.

The work spaces around the perimeter of the structure will provide pleasant working conditions. They are directly connected with the Secretariat Building and, by the many elevators and stairways, with the entrances and exits.

Members of the Press desiring to use the library can proceed there directly.

On the same level, but carefully separated from the other areas, is the lower level of the public lounge, with its access to the public galleries of the Council chambers. Connexion with the upper mezzanine level is by the main staircase, elevators, and escalators.



- A. GENERAL ASSEMBLY
  - 1. Press gallery
  - 2. Booths
  - 3. Press lounge
  - 4. Elevators
  - 5. Toilata
  - 6. Presidential offices
  - 7. President's meeting room
  - B. SECURITY COUNCIL
    - 8. Public gallery
    - 9. Press gallery
    - 10. Booths

#### C. TRUSTEESHIP COUNCIL

- 11. Public gallery
- 12. Press gallery
- 13. Booths

#### D. ECONOMIC AND SOCIAL COUNCIL

- 14. Public gallery
- 15. Press gallery
- 16. Booths

#### E. CONFERENCE ROOM NO. 5

- 17. Press gallery
- 18. Booths
- 19. Press writing rooms and offices
- F. DELEGATES' AREA
  - 20. Upper part of delegates' lounge
  - 21. Controlled stairway

#### G. PRESS AREA

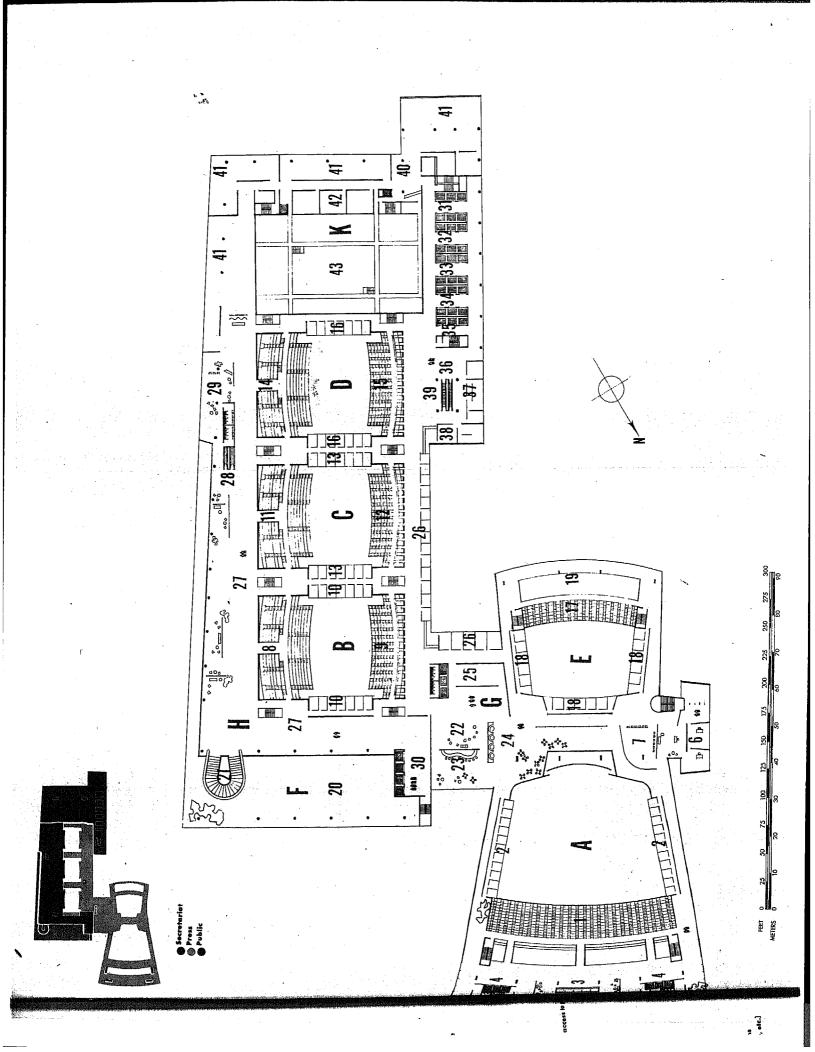
- 22. Lounge
- 23. Bar
- 24. Restaurant
- 25. Service pantry
- 26. Press offices

#### H. PUBLIC AREA

- 27. Lounge, exhibition space, and accessing
- 28. Escalators
- 29. Toilets and rest rooms
- 30. Public elevators

#### . SECRETARIAT BUILDING

- 31. Low-rise elevators
- 32. Medium low-rise elevators
- 33. Medium high-rise elevators
- 34. High-rise elevators
- 35. Service elevators
- 36. Escalators
- 37. Press offices
- 88. Cable offices
- 39. Press writing room
- K. LIBRARY
  - 40. Lobby
  - 41. Departmental reading rooms
  - 42. Projection rooms (microfilm, etc.)
  - 43. Stocks



### Sixth<sup>®</sup> Level

The mezzanine level of the public lounge gives access to the galleries of the Council chambers, and connects with the public lounges and lobbies leading into the public galleries of the General Assembly Hall and of Conference Room No. 5. These latter areas have their own elevators, however, and can be cut off from the main public lounge whenever it is desirable to do so.

Circulation space is provided for large groups, which must be expected on special occasions or during simultaneous sessions in the various halls, and has been arranged to permit free flow without unduly increasing the total space or losing the quiet, informal atmosphere. Full advantage is taken of the views of river and park.

The public reference library connects with the public lounge at this level. Should additional work space be provided for the Press, that space will be directly above their principal work and lounge areas.



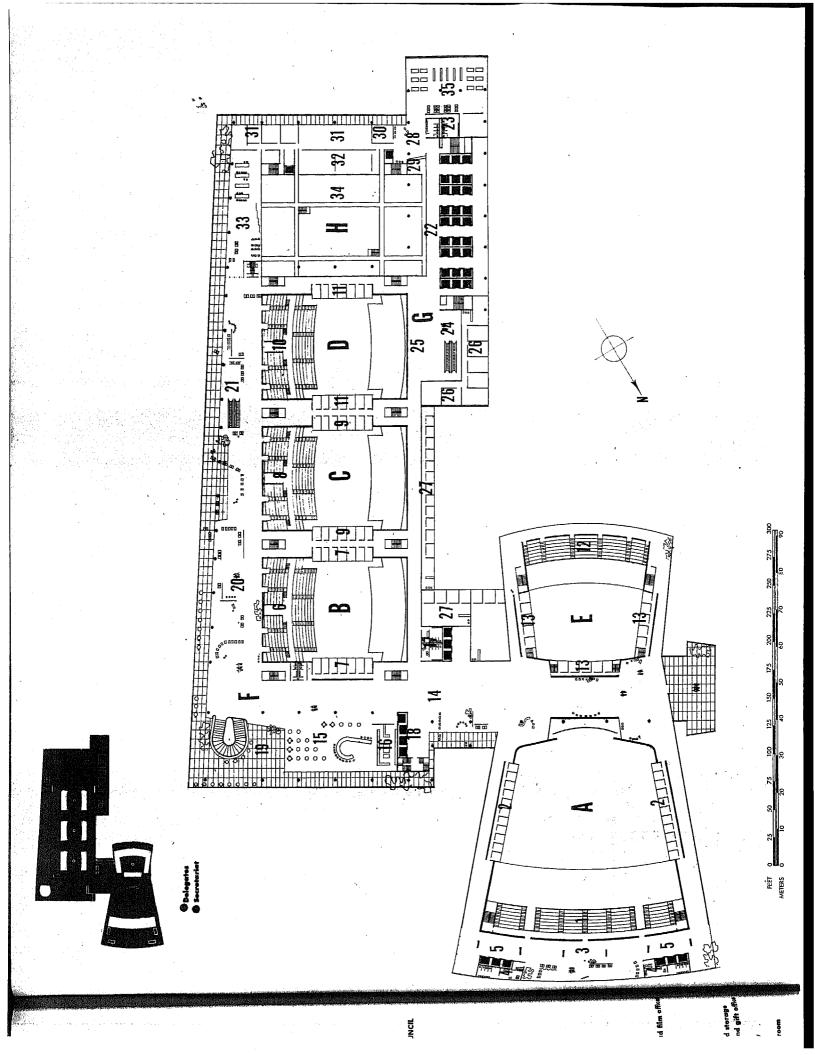
- A. GENERAL ASSEMBLY
  - 1. Public gallery
  - 2. Booths
  - 3. Public lounge
  - 4. Toilets
  - 5. Public elevators
- **B.** SECURITY COUNCIL
  - 6. Public gallery
  - 7. Booths
- C. TRUSTEESHIP COUNCIL 8. Public gallery
  - 9. Booths
- ECONOMIC AND SOCIAL COUNCIL
   10. Public gallery
   11. Booths
- E. CONFERENCE ROOM NO. 5
  - 12. Public gallery
  - 13. Booths

F. PUBLIC AREA

- 14. Lobby
- 15. Restaurant
- 16. Service pantry
- 17. Toilets
- 18. Public elevators
- 19. Terrace
- 20. Public lounge
- 21. Excelators

G. SECRETARIAT BUILDING

- 22. Elevators and lobby
- 23. Toilets
- 24. Escalators
- 25. Lobby
- 26. United Nations radio and film offe
- 27. Press and radio offices
- H. LIBRARY
  - 28. Lobby
  - 29. Information
  - 30. Microfilm projection and storoge
  - 31. Decuments exchange and gift ella
  - 32. Record library
  - 33. Public reference library
  - 34. Stocks
  - 35. Departmental reading room

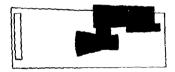


### **Roof Level**

Access is provided at this level to the upper part of the public galleries of the Ceneral Assembly Hall. In the southern half of this unit are the major radio facilities—large and small studios and related offices.

Overlooking the river, the delegates' dining terrace and restaurant open onto roof gardens, which transform these large spaces into extensions of the park below. Magnificent views and the spectacle of the New York skyline at night will be a stirring backdrop for these areas of rest and recreation.

Situated at the southern end of the building are the equally pleasant dining room, lounge, and garden terrace for members of the Secretariat. Central, connecting kitchen facilities provide economy of service.



#### A. GENERAL ASSEMBLY

- 1. Booths
- 2. Public balcony
- 3. Public lounge
- 4. Rest rooms and tailets
- 5. Elevators

B. RADIO STUDIOS

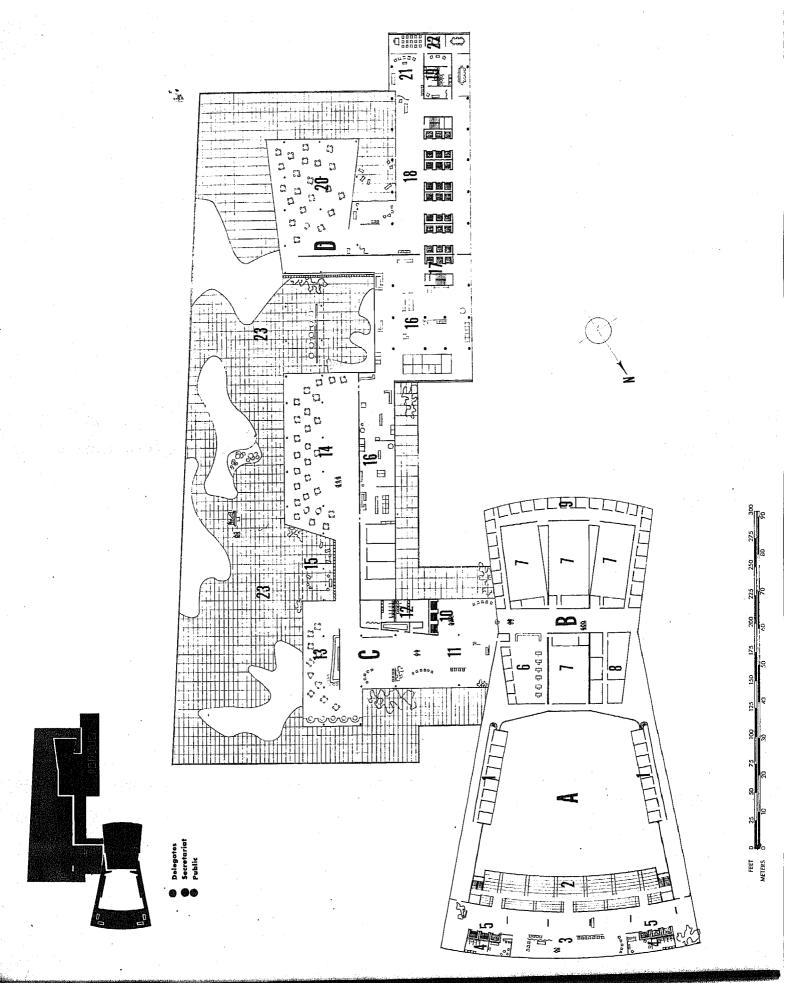
- 6. Offices
- 7. Studios
- 8. Offices for radio correspondents
- 9. Network offices

C. DELEGATES' DINING AREA

- 10. Elevators
- 11, foyer
- 12. Toilets
- 13, Bar
- 14. Restaurant-dining terrace
- 15. Dining terrace
- 16. Kitchans
- 17. Service elevators

D. SECRETARIAT DINING AREA

- 18. Lobby
- 19. Tailets
- 20. Restaurant
- 21. Lounge
- 22. Library
- 23, Roof gardens

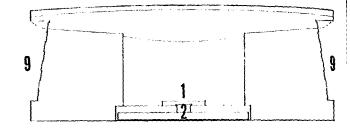


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### **General Assembly Hall**

The General Assembly Hall will be the first mass to strike the eye of the visitor as he enters the site. Rising behind it will be the Secretariat Building, and, lying along the river's edge, the Council chambers and conference rooms will bring these masses together in a single unified composition silhouetted against the East River.

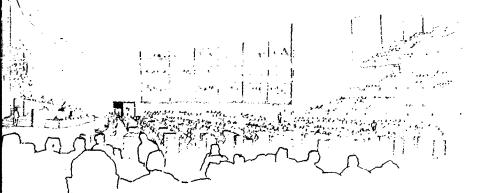


The visitor entering the site from the formal 47th Street entrance will approach directly the main public entrance of the General Assembly Hall, through the paths, lawns, and trees of the northern plaza.

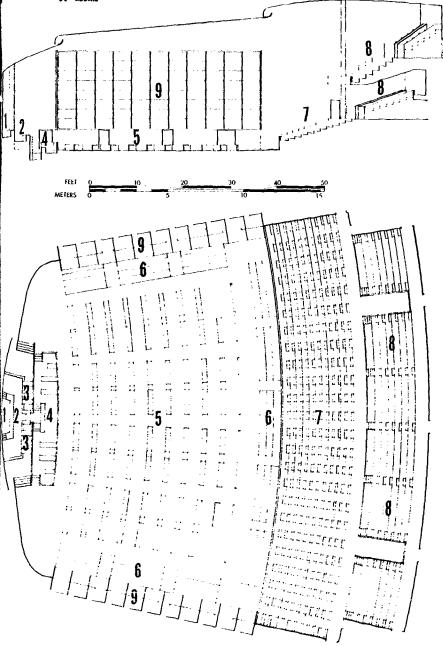
The delegates, upon entering, may go directly by escalator or elevator to their central lounge, where they gather in a single large space. open everywhere to light, sun, and the surrounding landscape and river view. From there they enter the great Assembly Hall, and take their seats at individual desks, grouped for each delegation so that the ten delegates and alternates from each Member State sit together, facing the podium, the focal point of the Hall. In front of the President's chair and a few steps below is the speaker's lectern, on a platform raised above the main floor level and flanked by interpreters. Directly in front of the speaker are the verbatim reporters and other Secretariat personnel charged with recording and servicing the meeting. These persons can go directly downstairs to their work areas without disturbing the meetings.

At the sides and rear of the main floor are seats for accredited observers, advisers, members of the Secretariat, and distinguished guests.

This main floor level will be completely separated from the Press and public galleries, and will be accessible only from the delegates' areas. The galleries are raised above the floor level to keep disturbances at a minimum during the meetings. In its own gallery, the general visiting public will provide a direct link between the deliberations and the people of the world who are being represented in them. But besides this public of actual human beings, there is an even more significant representation of the world public, which in our era has at its disposal extraordinary means of being present at distant events. Along the sides and at the rear of the hall will be the eyes and ears of the world. These are the tiers of technically equipped booths in which will work photographers, motion picture cameramen. radio and television broadcasters. These technicians, as well as the newspaper reporters in their Press gallery, will have direct access to their work spaces elsewhere.



- 1. Podium
- 2. Speaker
- 3. Interpreters
- 4. Secretariat
- 5. Delegates' floor
- 6. Accredited udvisers and observers
- 7. Press gailery
- 8. Public gallery (public balcony above)
- 9. Booths



### **Council Chambers**

The Council chambers are designed for the deliberations of the Security Council, the Economic and Social Council, and the Trusteeship Council. Each of these organs has its own organizational structure and methods of work. However, the differences do not affect the basically iden.ical architectural arrangements; and they can easily be provided for if allowance is made for flexibility in the arrangements of tables, equipment, and other furnishings.

In all cases, the delegates of Member States meet in essentially "round table" discussions, presided over by one of their number and attended by the Secretary-General and by the Assistant Secretary-General in charge of the Secretariat department responsible for serving that particular Council.

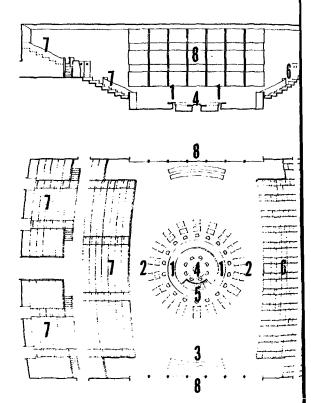
The eleven members of the Security Council meet around a circular table, in an atmosphere of concentrated and intimate work.

The Economic and Social Council, with its

eighteen members and as many as thirty of participants from the specialized agencies by other organizations, requires a different, yet  $\mathfrak{g}$ compact, arrangement of conference tables.

The Trusteeship Council membership i variable, as is the number of participating rep sentatives of Trust Territories. Even more fai bility in seating arrangements is therefore a quired.

Around the central deliberations of all the Councils revolve the same servicing functions the Secretariat and the observing presence Press and public. In all three, the basic princiis maintained of allowing the Secretariat personel to descend to their work areas directly futheir assigned space inside the circular or seccircular conference table itself. This cent space for interpreters, verbatim reporters, uothers is somewhat lower than the delegase seats, so that the arrival and departure d



- 1. Delegates' conference table
- 2. Advisers
- 3. Accredited observers
- 4. Secretariat
- 5. Stairway to Conference Services area
- 6. Press gallery
- 7. Public gallery
- 8. Booths

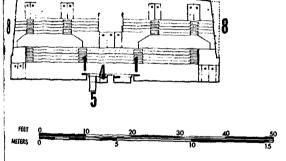
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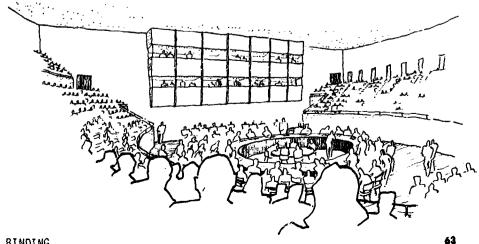
Secretariat personnel will not disturb the delegates or interfere with their view of one another.

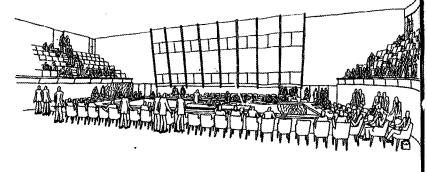
Along two sides of each Council chamber are the booths for the simultaneous interpreters and for television, movies, and still cameras. While the position of the Council at the curved table poses a difficult photographic problem, the placement of booths on two sides will ensure a good view of all participants.

The Press gallery is raised above the floor of the chamber, to permit direct access from the Press lounge and working quarters. The fact that the public gallery faces it at the same level will reduce to a minimum the effect of disturbing movements there and permit access from public lounge areas. Thus, delegates enter and leave a Council chamber without contact with the other groups, and either pass directly into their lounges for conversation and relaxation or leave the building directly and inconspicuously.







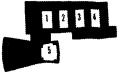


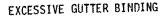
### **Conference Rooms**

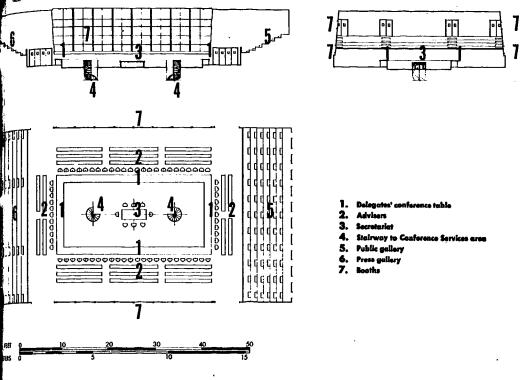
Since the full membership of the United Nations sits on each of the six Main Committees of the General Assembly, the first problem posed by the conference rooms is to arrange for the seating of seventy representatives, with their advisers and assistants. And since their meetings are also "round table" discussions, requiring that the representatives be seated around an oval, elliptical, or rectangular table, adequate space allowance for each person will require rooms of considerable size.

The architectural solution must, therefore, provide adequate space, arranged without predetermined impediments, so that the flexible arrangement of furniture and equipment can determine the most practical method of eventual operation. The central space for the Secretaria is bound to be more than adequate but will not, as in the plans for the Councils, he lowered. A one level floor will facilitate flexible furniture ar rangement.

Booths and microphones for simultaneous interpretation must be provided, as well as public information booths. The provision of boots along two sides of the rooms, and of Press as public galleries at either end, are similar to provisions for the Council chambers. In the general plan arrangements, the conference rooms an placed side to side in order to minimize duplication of facilities, especially in the booths.





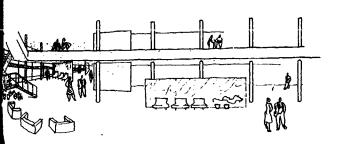


### **Delegates'** Lounge

While the delegates will disperse throughout the buildings to carry on their duties—to the halls for meetings, to small offices or meeting noms adjacent to the halls for their detailed usks, to lobbies, corridors, and secondary longes just outside the halls for conversationsthe single, central main lounge will unify all beir activities and will be the very heart of the whole structure. It will be reached most directly from the entrance, and from it the delegates will pass to their meeting rooms, most of which are either on the same level or on one other level that can be reached by escalator or elevator. The bunge will provide all the amenities for a quiet and relaxed meeting between world travellers and for their intimate discussions on affairs of

world import. Physically, the lounge is isolated from the busy atmosphere of the City, raised above its streets and overlooking the parks and river. The restriction of the level above to a mezzanine will combine a sense of spaciousness and openness with the more informal and intimate atmosphere to be found under the balcony.

Whenever they may desire to do so, delegates may make immediate contact with Press representatives and the general public by going directly to the special lounges provided for Press and public. Similarly, contact with the Secretatiant Building and with the library is easy since there is direct period access to both from the lounge as well as from any of the delegates' level<sub>3</sub>.



### Secretariat Building

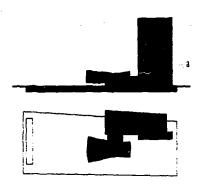
The members of the Secretariat and of the Press will walk tot Secretariat Building from buses, subways, and Grand Central State and will enter the open area at the southern end of the site. The delege on foot or in cars and taxis, also arrive in this area, removed from complications of contact with the visiting public.

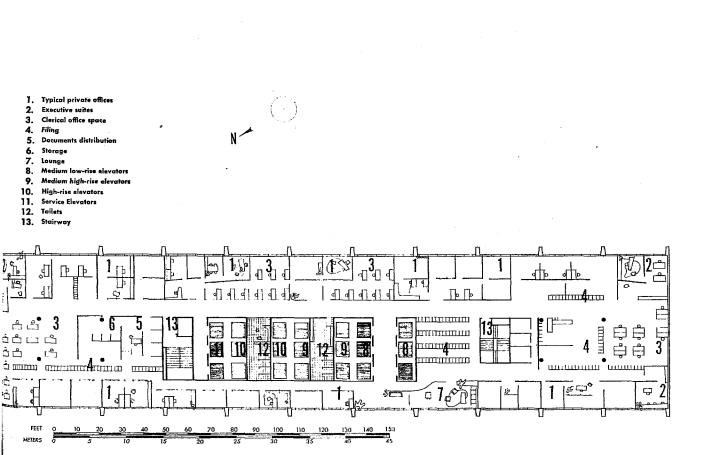
The contrast between the vertical Secretariat Building and the ba zontal General Assembly Hall creates a striking architectural challes Physically, the Secretariat would seem to dominate the General Assembly But the architectural problem is precisely to establish the proper basis between these two elements, and to give the true impression of the unlying relationship of functional importance and symbolic significant

This vertical structure, in which as many as five thousand persons will work daily, is developed from the basic consideration of proper lighting, ventilation, visibility, circulation, and communication. The conditions calculated to meet one employee's needs ideally will, with minor variations, be ideal for the rest of the five thousand. The multiplication involved will, however, be influenced by structural and other practical factors. The Secretariat Building must appear as a unified mass raised in space with harmonious proportions of width, depth, and height.

The floor space can be laid out on any pattern of office or other use, depending upon the varying needs of the occupants, by means of movable, non-structural partitions. While the five substantive departments will require almost clusively small administrative and secretai office spaces, the Departments of Public Information, of Conference and General Services, a of Administrative and Financial Services in need, in addition, large open offices for ma employees and heavy office equipment, accu modations for special technical units, services store centres, mechanical and maintenance sho and the like.

Studies of the alternative uses of a space will show their workability in term the exact nature of the functioning organizato be installed. Suggested space utilizaschemes are therefore presented to assist analysis of the basic structure.





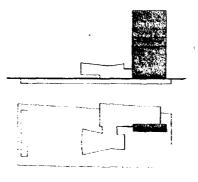
### (a) Typical Office Floor

The administrative and research offices, secretarial offices, and filing and storage space are the typical space installations.

Some offices will be in suite arrangements, extending in depth from the exterior walls up to the general corridor, while many others will be single offices. The elevator banks, therefore, have been placed closer to one side than the other to permit both arrangements on the same floor. The location of the corridor itself is not fixed but is determined by the office layout of each floor. The central spaces will provide the necessary stairs, toilets, storage and filing spaces, and permit a layout open to the exterior walls for accounting, clerical, and other large work rooms. Secretariat Building

### (b) Typical Floor for Assistant Secretary-General

To meet special needs, some floors will require a layout of more closely interrelated office space. This layout indicates a possible arrangement of reception space, the central office of an Assistant Secretary-General, with his assistants and advisers grouped around him, conference and meeting rooms, and auxiliary areas for clerical storage and filing.



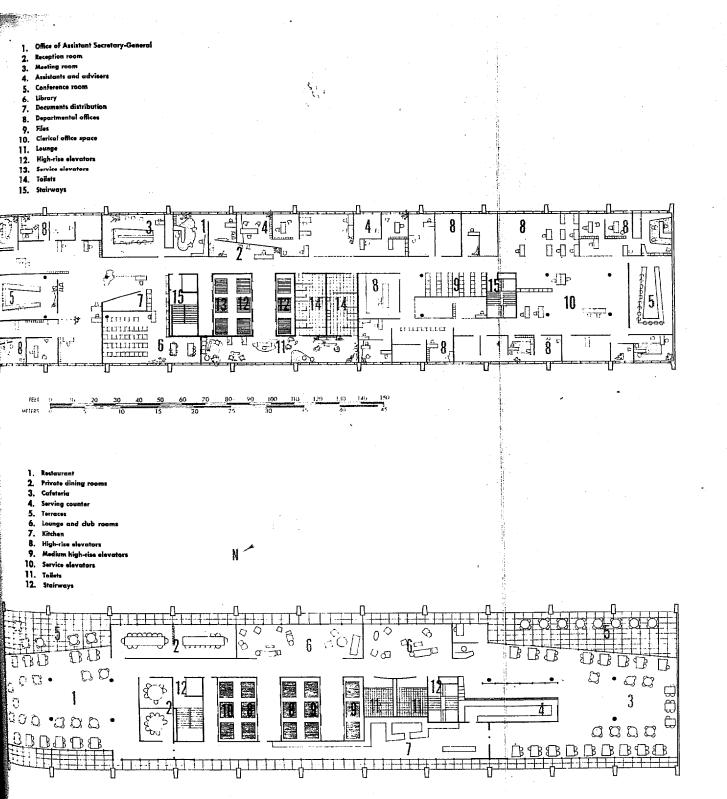
### (c) Typical Restaurant and Cafeteria Floor

Skyscraper structures, because of their great height, normally pose special problems in connexion with utilities and elevators. It is therefore customary to group the floors into zones. Express elevators proceed economically to each zone, serving it locally. Pipes carry central main feed lines to each zone, where they branch out to serve each floor in the zone. The areas of contact between zones have usually been in themselves half-floors or "pipe galleries"; however, because of the space needed for air-conditioning, fan rooms, and other mechanical equipment, these intermediate floors require more height.

It is suggested that these intermediate levels be also utilized for restaurants, cafeterias, and lounges, which building occupants could reach easily without unduly increasing the elevator traffic. These areas, very pleasantly treated & lofty terraces, would give the whole building a unique character growing out of its own special nature, with less impersonality than the average rented office building.

This plan shows a possible restaurant, cafeteria, and lounge layout, with all areas directly air-conditioned from the fan rooms above. At other levels, the eating areas might be smaller and other desirable staff facilities might be introduced on the same floor.

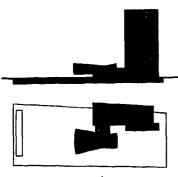




### Sections

The three-dimensional aspects of the space created within the building masses are illustrated by cross and longitudinal sections. While the basic scheme of the conference area is horizontal, the elements have been arranged, with escalators and elevators at strategic points, so as to minimize the amount of walking required. It can be seen, however, how the horizontality has been preserved to insure segregation of different groups of persons and to obviate conflicting circulation patterns. The horizontality applies equally to the economical utilization of the lower levels, where differences in level between the various exits and entrances permit a simple vehicular and pedestrian circulation scheme.

The other major three-dimensional consideration is the shape of the meeting halls, which are based on acoustically practical forms. The space of these halls has been so arranged that the general structural system is simplified to reduce cost, and, in addition, all available space is efficiently exploited.

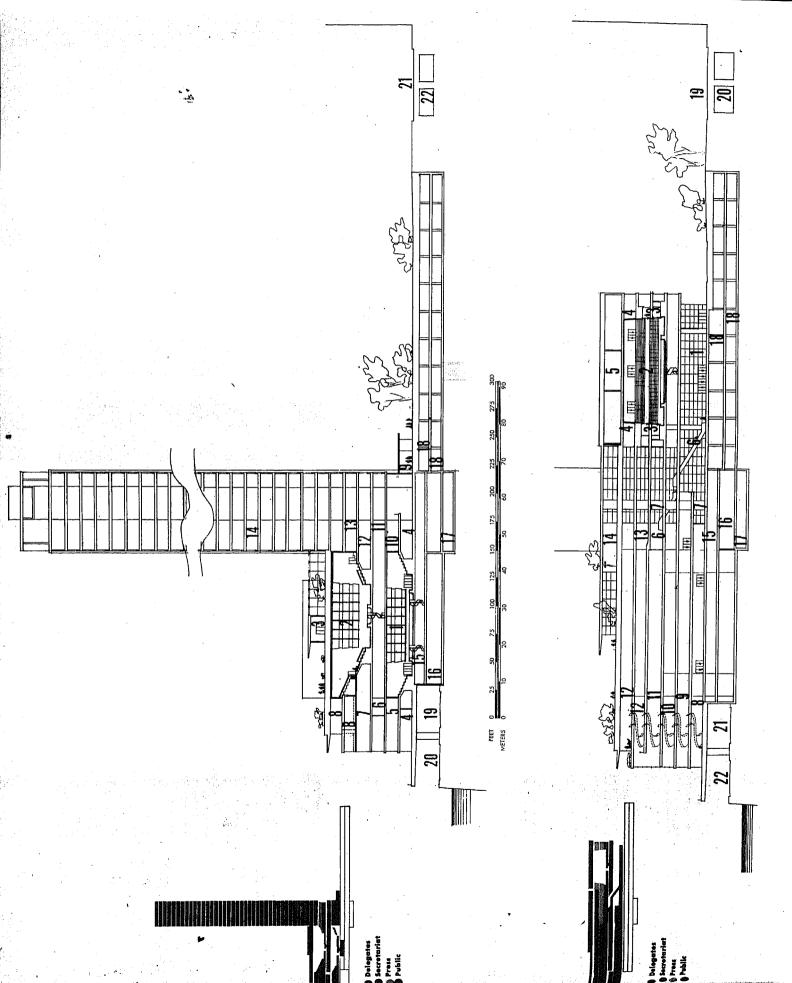


1

- **Cross-Section** (a)
- 1. Conference room
- 2. Council chamber
- 3. Restaurants
- Committee rooms and delegates' access to conference rooms
- 5. Public access to conference rooms
- 6. Committee rooms
- 7. Main delegates' level and access to Council chamber
- 8. Public access to Council chambers
- 9. Secretariat entrance
- 10. Press access to conference rooms
- 11. Conference Services level
- 12. Delegates' access to Council chambers
- 13. Press access to Council chambers
- 14. Secretariat
- 15. Documents production and other services
- 16. Shipping, receiving, garage, and shops
- 17. Maintenance and machanical services
- 18. Parking levels
- 19. Franklin D. Roosevelt Drive—south-bound
- 20. Franklin D. Roosevelt Drive-north-bound
- 21. First Avenue
- 22. Proposed tunnel under First Avenue

## Cross-Section (b)

- 1. Delegates' entrance lobby
- 2. Conference Room No. 5
- 3. Booths
- 4. Public access to gallery
- 5. Radio control and studios
- 6. Escalators to delegates' lounge
- 7. Delegates' elevators
- 8. Committee rooms and delegates' access to conference NH
- 9. Public access to conference rooms
- 10. Committee rooms and Conference Services level
- 11. Delegates' lounge and access to Council chambers
- 12. Public access to Council chambers
- 13. Press access to Council chambers
- 14. Restaurants
- 15. Documents production and other services
- 16. Shipping and receiving
- 17. Maintenance and mechanical services
- 18. Parking levels
- 19. First Avenue
- 20. Proposed tunnel under First Avenue
- 21. Franklin D. Roosevelt Drive-south-bound
- 22. Franklin D. Roosevelt Drive—north-bound



## Longitudinal Section (c)

- 1. General Assembly
- 2. Podium
- 3. Delegates' floor
- 4. Booths
- 5. Press gallery
- 6. Public galleries
- 7. Public lounge and access to galleries
- 8. Press area and access to galleries
- 9. Delegates' access to meeting holis
- 10. Services to General Assembly and storage
- 11. Public entrance
- 12. Posking
- 13. Cinema
- 14. Public lobby and exhibition space
- 15. Ramps to public lounge
- 16. Escalators to delegates' lounge
- 17. Delegates' entrance
- 18. **Conference Room No. 3**
- 19. Booths
- 20. Conference table
- 21. Press gallery
- 22. **Public gallery**
- 23. Radio studios
- 24. Offices

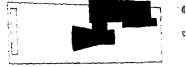
## Longitudinal Section (d)

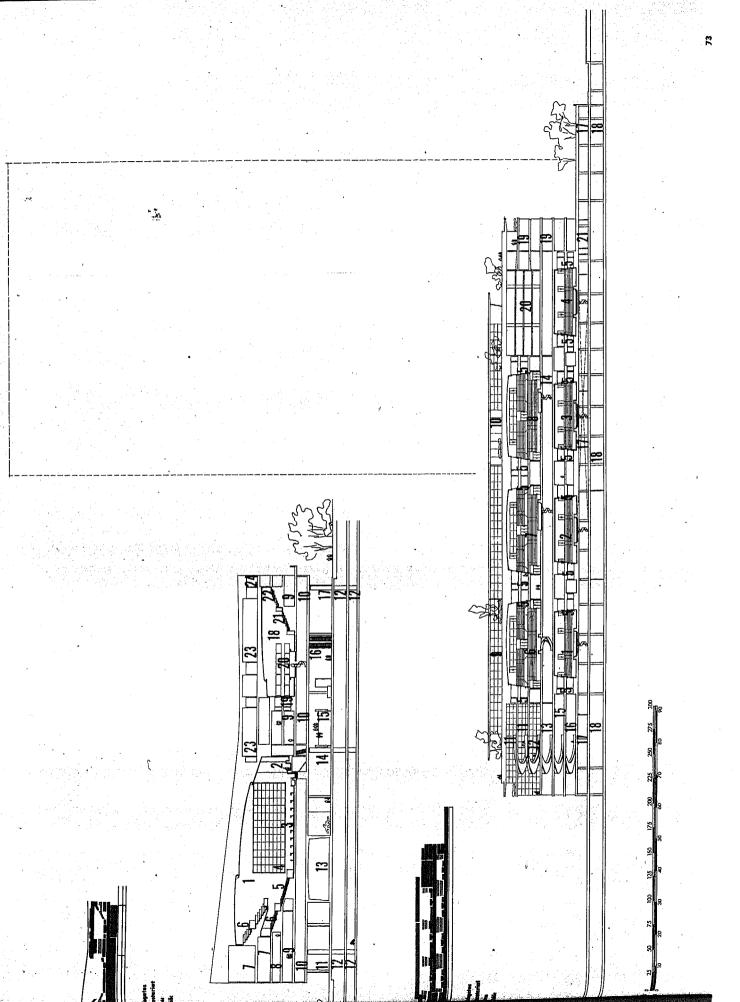
Z,

- Conference Room No. 1 1.
- Conference Room No. 2 2.
- Conference Room No. 3 3.
- Conference Room No. 4 4.
- 5. Booths
- Security Council Chamber 6.
- 7. Trusteeship Council Chumber Economic and Social Council Chamber
- 8.
- 9, Pelegates' restaurante
- 10. Secretariat restaurants 11. Public access to Council chambers
- 12. Delegates' launge and access to Council chambers
- 13. Delegates' access to committee rooms
- 14. Conference Services level
- 15. Fublic access to conference and committee rooms
- 16. Delegates' access to committee rooms
- Documents production and distribution, parking, etc. 17.
- 18. Parking, shipping, storage, etc.
- 19. Library offices and reading rooms
- 20. Library stocks
- 21. Archives







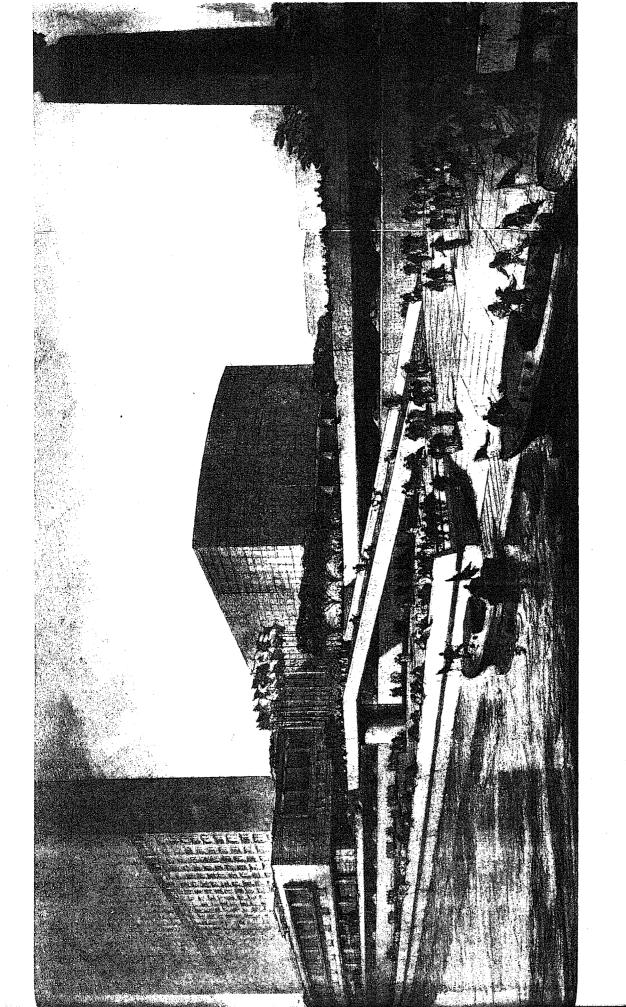


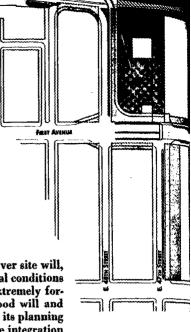
ARCHITECTURE that is worthy of the name cannot be classified as either utilitarian or monumental. Every human gesture, all human action, is a symplonic rendering of a complicated association of ideas. The hiker who carves his walking stick from a hazel branch, the engineer who conceives a bridge or a machine. the architect who builds a shelter or a temple. are engaged in creating a symphony that is dominated by one intellectual goal: to do the work well. And work well done is the blending of the beautiful, the functional, the physical, and the economical; there is not only one need to be satisfied but a series of needs which make themselves fel: successively and in a hierarchic order. The aesthetic need is as imperative as the most objective material needs. The lyrical is a human function of the same order as walking or breathing. We cannot, therefore, admit the possibility of a choice between a crassly utilitarian architecture and a hollowly monumental architecture.

In the final analysis, architecture is a visual event, something to be seen within and without. But it is also to be lived in. and is made of real objects-organs-which are co-ordinated into an organism. The United Nations has set its architects the task of building its headquarters, that is, of providing its representatives with a tool that can help them-in Assembly Hall, Council chambers, conference and committee rooms-to guide the world toward its destiny. It must be an efficient tool for the purpose, but it must also show the majesty and beauty of the purpose.

On the headquarters site of the United Nations, in the spaciousness afforded by the East River will rise contrasting architectural masses-the General Assembly Hall, the lowlying meeting halls, the verticality of the Secretariat Building. Among these salient elements of the architectural composition, a harmony of proportion is to be created. Rarely has such an opportunity Leen presented to bring into a harmonious whole masses of such significance and on such an imposing scale; to establish, after a century of mounting urban disorder, a landmark of order in the heart of a great city.

The order of the plan is here established, and it will enable a beginning to be made where it is most urgently needed. It is possible to begin immediately with the construction of the Secretariat Building, thus answering the heartfelt wish of those responsible for the moral and material direction of the United Nations. That wish is to leave behind, as soon as possible, the difficulties and burdens of a temporary, ill-equipped headquarters, and to settle down at last in permanent quarters that are designed for efficient, healthy, and pleasant work toward the common goal of world peace and progress.





## Programme of the City of New York

The organism which is to come into being on the East River site will, like all organisms, live in an environment of physical and social conditions over which it cannot have complete control. It is therefore extremely fortunate that the City of New York has entered with such good will and energy into the problems of control, constantly co-ordinating its planning with that of the United Nations. Upon the City will depend the integration of the site with its surroundings, through the countless technical ties of traffic, utilities, construction, zoning, and the other tangible and intangible factors which must all be knit together if this project is to become a reality.

The role of the City in the overall planning is best expressed in the statement made by Mayor William O'Dwyer on 21 May 1947:

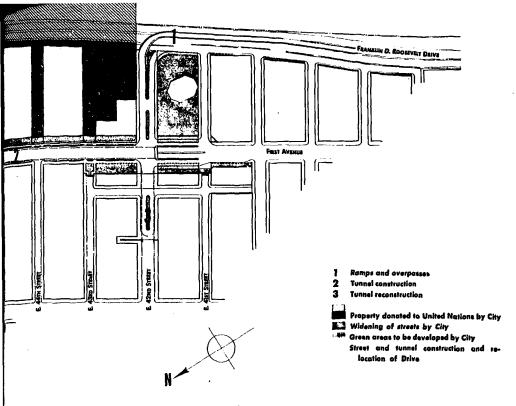
"As hosts to the United Nations, the City of New York has obligated itself to spend a total of approximately \$15,000,000 in improvements, access, street widenings, etc., around the site in Manhattan. These new city projects are progressing on schedule to keep pace with the United Nations programme.

"At my suggestion, the Board of Estimate appointed Robert Moses, as City Construction Co-ordinator, to represent the City with the United Nations site improvement officials, and he has directed his own staff as well as special consultants in this work, which has been carried on in close co-operation with Borough President Hugo E. Rogers and his assistants. The Borough President will be responsible for the actua' execution of much of the work, which involves many other agencies and utility concerns, including the Consolidated Edison Company.

"The steps necessary for the acquisition of land and its transfer to the United Nations, in accordance with the conditions of the Rockefeller gift, are passing through the various City agencies on schedule. The Board of Estimate Calendar is scheduled to authorize the proper officials to take the necessary action to complete the transaction on May 22nd. "Preliminary design of the physical changes in the area have been substantially completed by the consulting firms of Andrews and Clark, and Parsons, Brinckerhoff, Hogan and Macdonald, who were retained by the Construction Co-ordinator for this work, and by the engineering staff of the Office of Borough President Rogers.

"These plans include a tunnel under First Avenue with portals at 41st Street and 48th Street. This tunnel will carry commercial and non-local traffic through the United Nations site. In order to construct this tunnel, it will be necessary to re-route the electric, gas, telephone, water, and other utilities now occupying the tunnel area. Details for this re-routing have been worked out with the various City agencies and utility companies. It will be necessary to relocate many of these utilities through the area by re-routing them in a strip of land on the easterly side of First Avenue that will be given to the City by the United Nations. The construction schedule calls for the installation of the new utility lines immediately after the buildings facing First Avenue have been demolished. With the completion of that operation, the excavation for the tunnel will start. It is estimated that the cost of the tunnel and utility changes will be \$7,500,000.

"Forty-Seventh Street will be widened between Second Avenue and First Avenue to a



160-foot street. In this area will be incorporated a broad tree-shaded, park-like promenade, an east-bound roadway separated from a service road on the north side by a mall in which trees will be planted. This improvement is estimated to cost about \$1,000,000.

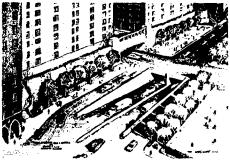
"Two formal parks will be constructed between 41st and 43rd Streets on the west side of First Avenue below new stone-faced walls. These parks will replace old buildings west of the Avenue.

"The present narrow 40-foot tunnel structure in 42nd Street between First and Second Avenues will be reconstructed to the full 100lost width of 42nd Street. This artery will be one of the main approaches to the United Nations area. This feature of the improvements is estimated to cost about \$1,500,000.

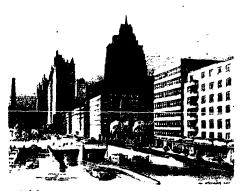
"Arrangements whereby the United Nations will acquire the newly constructed New York City Housing Authority building at 42nd Street, east of First Avenue, have been completed. The United Nations will acquire this property on a tental-purchase basis and will retain the building temporarily for use as office space by the United Nations agencies now occupying commercial space in the Manhattan area.

"The Franklin Delano Roosevelt Drive will be reconstructed between 37th and 51st Streets. A ramp structure to permit the exit of north-

Proposed Tunnel Entrances on First Avenue







At 48th Street

bound traffic will be constructed at 42nd Street and a similar structure to permit the access of north-bound traffic will be constructed on 48th Street. Access to the south-bound traffic will be available at grade on 42nd Street and egress from south-bound traffic at 48th Street. The reconstructed Drive between 42nd and 48th Streets will be under an esplanade to be built by the United Nations with treatment similar to that now existing in Carl Schurz Park.

"The work on the Franklin Delano Roosevelt Drive will be paid for by the United Nations at an estimated cost of approximately \$3,000,000.

"Both Borough President Rogers and Commissioner Moses are enthusiastic about the cooperation they have received from . . . the site consultants of the United Nations and from all the related City Departments whom I have instructed, with their staffs, to do everything possible to expedite the completion of work at and around the site so as to make the United Nations completely satisfied in their new home."

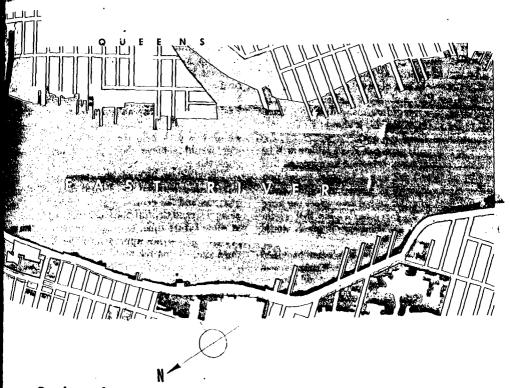


Green area developments already existing or user Passible future green area developments

#### Zoning

The pattern of buildings in the area immediately surrounding the site is bound to be greatly changed by the coming of the United Nations to the site. It can be expected that public, semipublic, and private groups will gradually rebuild the area. The State and City authorities have already taken steps, in addition to the New York City programme of reconstruction, to regulate the general redevelopment so that it will be kept in harmony with the dignity and purpose of the United Nations. The zoning pattern for land use and building height is already being revised. The basic elements of the present amendment to the New York zoning laws are to change the area around the site from unrestricted use to office and restricted retail business use along First Avenue, and to residential use on both sides of First Avenue north of the site, except for a small amount of local retail use. This restricts constrution to types of buildings not out of keeping with the United Nations Headquarters.

In addition, the New York State Legielature has enacted legislation giving the City authority to regulate and limit signs, billboards, and advetising devices and other potentially unsightly displays. This authority extends across the Ess River to the surrounding areas of Queens as well as around the site itself in Manhattan.



### **Future Development**

The plans for the headquarters site, and New York City's programme for reconstructing the approaches to the site, are perhaps only the first necessary stage in the inevitable redevelopment of a very large section of New York. Cities do renew themselves, contrary to the belief of those who fee from them. The United Nations headquarters site project, itself a small-scale prototype of sound urban planning, can become part of a large nedevelopment and thus serve as the precipitating cause of a long-range transformation of the City around it, and perhaps of other cities throughout the world.

For this reason, it is not too soon, even now, to begin to outline some of the possibilities that may be achieved by the common efforts and joint planning of the United Nations and of the federal, state, and New York City authorities.

The setting of the United Nations Headquarters should, of course, reflect its function as the focus of the whole world's common interests; it must have a certain dignity and grandeur. The task of the planners, therefore, is not merely to all a practical need for proper working space, but also to establish its independent entity and maintain a certain distance from disturbing surroundings. This need can be filled architecturally only if the surroundings are brought into a satisfactory relationship with the headquarters site and it complete freedom is retained for planning into the future. In other words, the headquarters must always be thought of as the centre of an indefinite larger area. The programme already planned by the City of New York is a magnificent gesture of co-operation. It calls for real financial sacrifices and, as a realistic achievement of immediate objectives, it is both sound and far-seeing. For that very reason, it is important now to look as far ahead as possible, because the stimulus which the anticipated construction of the United Nations Headquarters has given to the surrounding section of East Side Manhattan will create an extremely intensified development in the very near future unless efforts are made to control it.

A long-range plan for zoning and regulation of this development should be started now, although it need not all be put into effect immediately. The United Nations Headquarters may be expected to remain here for a great many years. From decade to decade, the neighbourhood will undergo great change. The first tendency, as soon as greater building activity becomes possible, will be that of rebuilding much of the neighbourhood, extensively and closely. Inevitably, the interests of the City and of the United Nations, in controlling this rebuilding along desirable lines, will, in the main, coincide; it should be possible to co-ordinate these interests.

The economic aspect of this problem will be a major consideration. It cannot be expected that the City of New York would be able, under prevailing circumstances, to make impossible financial sacrifices in order to put into effect the aims herein outlined. To carry out a plan that would hurt justifiable private economic interests would also be impossible.

While some allowance has been provided for additional building on the site, it may happen that the space requirements of the United Nations will eventually grow on a scale that would make necessary the acquisition of additional land. This should be left open as a practical possibility, and adequate areas in the neighbourhood should be carefully studied with this end in view. The same is true of an area across the East River in Queens, where the best possible use is not being made at present of an easily accessible location. The possibility of replanning this land across the river for residential areas, including a reserve for recreational and cultural needs, might be considered. Such replanning would also add to the beauty of the present headquarters site.

Naturally, at this stage, it is impossible to discuss detailed plans, but some preliminary ideas might be expressed. The present planned land use within the site will give the impression of a park within which the United Nations build. ings are placed. It may be possible to develop further the riverside park belt created by the Franklin D. Roosevelt Drive, linking together the East River Park, the housing developments, the hospitals, and the residential sections. Placed within this park belt, the United Nations build ings would achieve their proper architectural importance.

Studies can be made to bring about a better relationship between the United Nations Head. quarters and the central area of New York City around Grand Central Station. It may be possible, at some future time, to create an even more impressive pedestrian approach to the United Nations site, so that the buildings and the river heyond may be seen in a single view from the very heart of the City.

One hopes, therefore, that there may develop, as an extension of the City's programme, an urban unit of park, water space, and residences, a unit properly related to the surrounding buildings and creating an effective setting for the United Nations Headquarters. A unique opportunity is herewith presented for creating a civic centre without equal in the whole world and, simultaneously, for an urban reorganization of important parts of this great metropolis, in line with the hopes which are held by the far-sighted men who have the development of this City in their hands.

# 6

# Housing of United Nations Personnel

The resolution of the General Assembly recognizes the fact that the personnel of the United Nations, recruited from all its Member States, and their families must in many cases sacrifice home ties and accustomed comforts to come to New York, some of them for long periods of time. It is therefore incumbent upon the planners to consider the problem of finding for these persons homes that are conducive to a happy family life, safe for their children, convenient to their place of work, and suitable to their income. Some rather rigorous limitations confront the planners of a housing programme.

First, it will have been seen from all the previous studies and plans that there will be no room for housing available on the site itself, although the New York metropolitan area potentially is a great reservoir of residential developments of all kinds.

This, however, brings us to the second major limitation, namely, the current acute housing shortage in the metropolitan area and the unstabilized conditions of the building industry. A broad inquiry was undertaken to estimate the current shortage and the rate at which relief might be expected, but authorities differed too widely on figures of supply and demand to permit sufficiently valid conclusions.

Finally, it has not yet been possible to obtain a definite decision as to which of the specialized agencies will establish permanent headquarters in New York. Even among those which probably will do so, there is considerable uncertainty as to the number of staff members involved. As to the members and staffs of the national delegations, it has been difficult to arrive at a reliable estimate of the population involved. At present, not more than thirty Member States maintain permanent delegations in New York, and twentytwo of them supplied some information regarding the number, salaries, and present residences of their personnel.

The first step in developing a housing programme is the compilation and analysis of all pertinent data. Despite the limitations mentioned above, we can thereby establish a method of analysis which will be useful in handling more complete data in the future, and make some general recommendations which can be develop into definite plans when conditions become matchilized.

#### Commuting

With the headquarters site eliminated at housing possibility, the first consideration terms of other residential sites was that of the commuting distances.

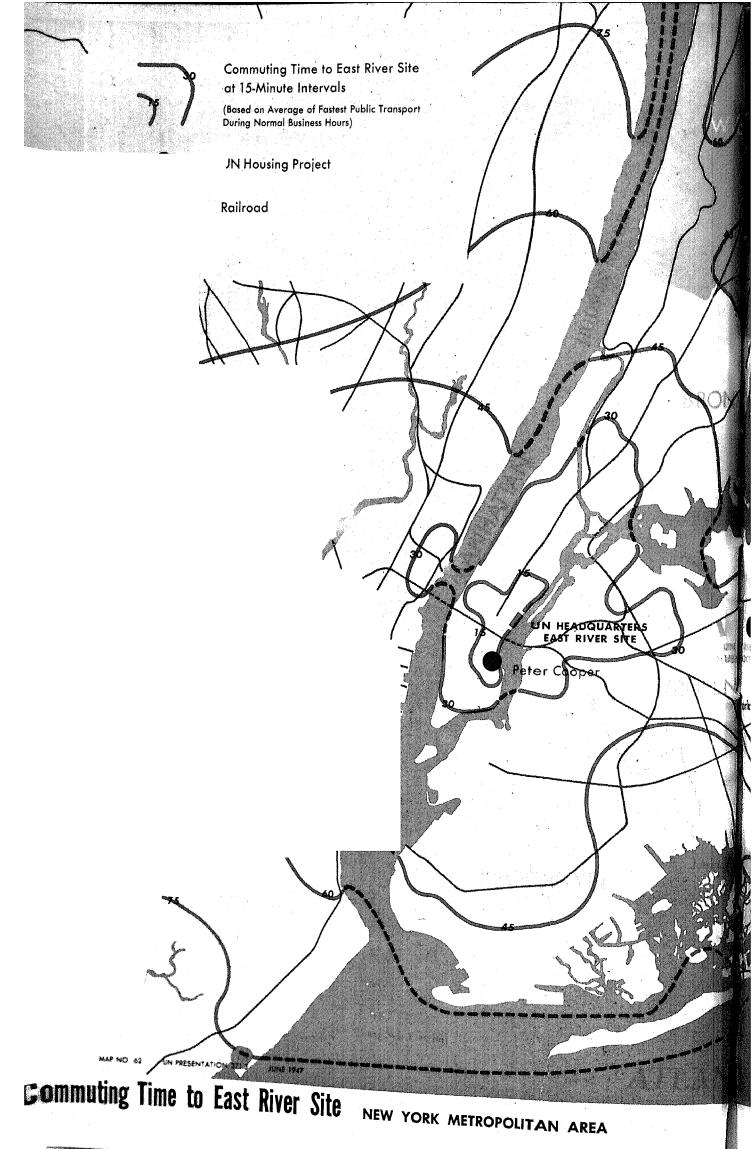
An exhaustive study was undertaken to d termine the present residential pattern of d 2,420 members of the Secretariat about who information was available. The accompanyin map of residential distribution shows where d members of the Secretariat lived at the time is the study (April 1947). The dot distribution takes into account those to whom space was a signed, at that time, in the four housing projac available to United Nations personnel—Pet Cooper Village, Fresh Meadow, Parkway V lage, and Great Neck housing. It was also a justed to allow for the closing of the Lido Beat Hotel in June 1947.

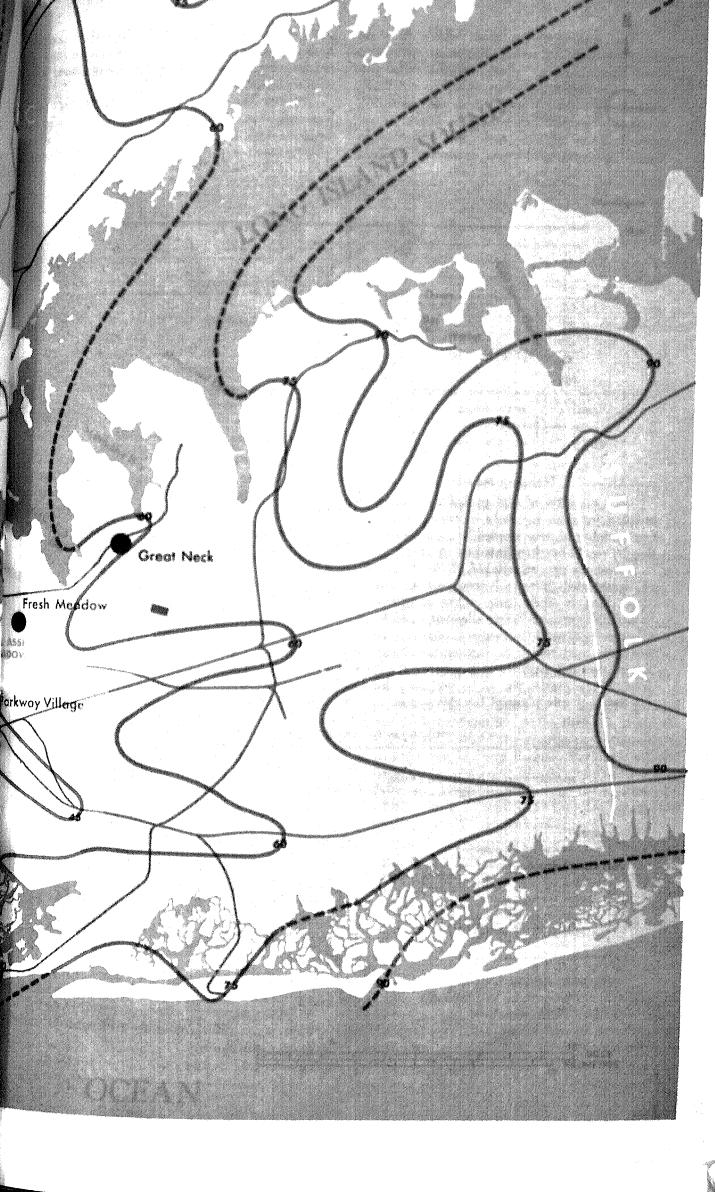
Superimposed on this map are two isochra ometric lines, showing the average limit of on hour travel distance to Lake Success and i the East River site, respectively. Both lines a based on the use of the fastest public transponbuses, trains, subways—during normal busine hours. If private automobiles were used, the lim naturally could be considerably extended to i clude much greater areas, but it was felt that assumption should be made, in a study of th kind, that Secretariat personnel would have the use of private cars to reach the permanent hear quarters.

NEW YORK METROPOLITAN ARI Residential Distribution of Secretariat Personn

(AS OF MARCH 19

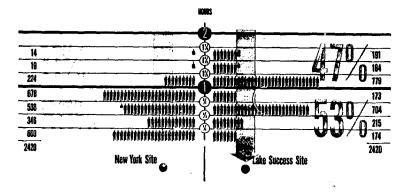






The accompanying chart shows how the shift from Lake Success to Manhattan will affect travel time, as far as the present residential pattern is concerned. It is interesting to note that, whereas more than 47 per cent of the Secretariat, using only public transport, now has to travel more than onc hour to reach Lake Success, less than 11 per cent would have to travel more than one hour to the East River site from their present homes. It should be further noted that all four of the housing projects fall within the one-hour line of the new site.

From the standpoint of commuting convenience alone, it is apparent that the transfer of headquarters from Lake Success to Manhattan will in itself greatly improve living conditions.



#### **Housing Needs**

An analysis of the probable demand for housing involves not only a knowledge of the total number of units needed but also a classification by rental brackets based on income.

A study was undertaken of the distribution of Secretariat personnel according to real income, that is, their base salary categories as modified by cost of living allowances, children's allowances, rental allowances, expatriation allowances, and rebate on income tax. It was assumed that the majority of persons in the lowest four salary grades would be recruited locally. No housing was planned for this group, or for persons with base salaries of \$10,000 and over. The results of the statistical study on a properly weighted basis show that 48 per cent of the population qualified for housing will have a weighted average *real* annual income between \$3,650 and \$5,500; 40 per cent will have between \$5,500 and \$11,000, and approximately 12 per cent between \$11,000 and \$14,225.

Since the proportion of single to married persons and the number of dependents varies considerably in each of these three income classes, a further analysis was made of each group to show the probable distribution, which is indicated in the following table:

	(in U. S. Deilars)						
WEIGHTED AVERAGE REAL ANNUAL INCOME: (CORRESPONDING BASE SALARIES);	\$3,650-5,500 (\$2,360-3,770)	\$5,500-11,000 (\$3,970-7,450)	\$11,000-14,225 (\$7,870-9,700)				
	(in Percentages)						
SINGLE	74.5	38.3	33.9				
MARRIED WITH NO DEPENDENTS	15.3	25.6	21.5				
MARRIED WITH 1 DEPENDENT	7.1	20.3	20.5				
MARRIED WITH 2 DEPENDENTS	2.9	12.9	14.3				
MARRIED WITH 3 DEPENDENTS	0.2	5.4	6.2				
MARRIED WITH 4 DEPENDENTS	0.0	1.7	2.7				
MARRIED WITH 5 DEPENDENTS OR MORE	0.0	0.8	0.9				
	100.0	100.0	100.0				

DISTRIBUTION OF FAMILIES BY INCOME AND SIZE

An estimate has been made of the number of rooms that will be required for each of the categories. These standards are somewhat more generous than those set forth in the housing bulletin issued by the United Nations on 7 February 1947. It is felt that the latter standards were designed to meet the current housing emergency, and that long-range planning should be based on what is desirable rather than on what is immediately obtainable.

北市

AND OF PARISY	RECOMMENDED NUMBER OF ROOMS						
SIZE OF FAMILY	Mialmum	Maximum					
SINGLE	2 (LR, K'te, BR)	21/2 (LR, K'te, DA, BR)					
MARRIED WITH NO DEPENDENTS	3 (LR, K, BR)	31/2 (LR, K, DA, BR)					
MARRIED WITH & DEPENDENT	31/1 (LR, K'te, DA, 2 BR)	41/3 (LR, K, DA, 2 BR)					
MARRIED WITH 2 DEPENDENTS	41/2 (LR, K, DA, 2 BR)	51/2 (LR, K, DA, 3 BR)					
MARRIED WITH 3 DEPENDENTS	51/2 (LR, K, DA, 3 BR)						
MARRIED WITH 4 DEPENDENTS	61/2 (LR, K, DA, 4 BR)	7 (LR, K, DA, 4 BR)					
MARRIED WITH & DEPENDENTS	7 (LR, K, DR, 4 BR)						
NOTE: LR —Living Room. K'v—Kickenette (not included in roo K —Kicken, DA —Dining Al'ove (counted as ½ ro DR —Dining Room. BR —Bad Room (single or double, de							

The proportion of income that should be spent on rent, under present economic conditions in the New York area, varies both with the number of dependents and the amount of income. While there may be wide variations from any assumed standards due to individual problems and tastes, the following was taken as a good average guide:

PROPORTION OF IL COME SPENT FOR RENT

INCOME GROUP:	\$3,650-5,500	\$5,500-11,000	\$11,000-14,225
SINGLE OR MAKRIED WITH NO DEPENDENTS	1/4	1/5	1/6
MARRIED WITH 1 OR 2 DEPENDENTS	1/5	1/6	1/7
MARRIED WITH 3 OR MORE DEPENDENTS	1/6	1/7	1/8

There are at present approximately 2,700 members of the Secretariat. It is estimated that by the middle of 1948 this figure may rise to 3,500; by the middle of 1949, to 4,500; and, by the middle of 1951, to the ultimate planned size of 5,265. The twenty-two national delegations maintaining headquarters in New York from which information was obtained, have on their payrolls at present 1,130 persons. It is estimated that if and when seventy delegations are established in New York, their staffs may total 2,400 persons. Sinularly, it is estimated that approximately 2,500 persons may be working for those specialized agencies that have some likelihood of establishing permanent headquarters in New York and for the liaison offices of the others. This makes an estimated total maximum population of 10,165 persons. In order to relate this figure to a housing programme, certain further assumptions must be made.

from this total the 2,163 present members of the Secretariat whose present homes lie within one hour's travel distance of the East River site. It can be assumed that, under prevailing conditions, a maximum of one hour's commuting time to work is not excessive. The resulting total of 8,002 persons can be further reduced by the number of individuals, particularly in the lower salary grades, who will probably be recruited locally, as well as by the number with base salaries of \$10,000 and over. Assuming the same proportions as were taken for the present Secretariat personnel, there remain to be housed approximately 5,629 families. At the time this study was undertaken, 743 of the apartments eventually to be available in Peter Cooper, Parkway Village, Great Neck, and Fresh Meadow had not yet been definitely assigned. Deducting these, there remains a total of 4,886 families for whom new housing should be considered.

In the first place, there can be subtracted

SIZE OF UNITS	TOTAL NO. OF	NUMBER OF UNITS Between indicated limits of monthly bent per room																			
(ROQMS)	UNITS	\$10	\$10 \$15 \$20 \$25 \$20 \$35 \$40 \$45 \$50 \$55 \$60 \$65 \$70 \$75 \$60 \$88 \$90 \$95 \$100										00								
2 21/2 3 31/2 41/2 51/2 61/2 7	1,302 1,294 491 837 546 246 25 45		8 17 3 9	10 100 61 22 31	93 95 165 5	27 38 173 108 103	332 109 145 223	164 502 78 115 12	391 144 40 119	307 97 35 157	114 36 127 11	125 5 45 1	38 62 11	2 42 8	6 34	36 13	38	34	19	13	
TOTALS	4,886		37	230	358	449	809	871	694	596	288	183	115	52	40	49	53	34	19	13	

DISTRIBUTION OF UNITS BY SIZE AND BY RENTAL BRACKET

The probable distribution of the required 4,886 units, both as to number of rooms per unit and as to average monthly rent per room, is tabulated above. The calculations have been based on the following assumptions: that the salary scales, allowances, and tax rebates for the specialized agencies and national delegations will be similar to those for the Secretariat; that the number of single and married persons and dependents will follow the same distribution; that the relation of size of units to size of family, and proportion of income to be spent for rent, are as given above.

The 4,886 units analysed above may also be thought of as providing 15,079 rooms for 9,410 persons. It must be emphasized that this table represents only a preliminary statement of what the ultimate problem may be. Too many assumptions have had to be made for it to be taken as a recommended working programme.

#### Conclusions

With these qualifications in mind, consideration may now be given to means of supplying this demand. Three possibilities are open.

With the cost of building as high as it is today, it is not reasonable to a sume that individual private construction can profitably be undertaken in New York City for units to rent monthly for less than \$40 to \$50 per room. It may safely be assumed, however, that private construction will, in time, absorb the demand for housing above that bracket. This would take care of 842 families, or 17 per cent of the total to be housed.

Institutional investment housing, with construction standards similar to those for Peter Cooper Village, can now be counted on to provide for the families who can pay monthly from \$30 to \$50 per 100m. If such a project or projects were undertaken through one of the large insurance or banking concerns, it would provide living quarters for the middle 2,970 families, representing 61 per cent of the total.

To reach the remaining 22 per cent, or 1,074 families, who must rent at the monthly figure of \$30 per room or less, tax exemption, long-term tax-exempt financing, and vacant land in outlying districts must be considered. A large-scale project, with construction standards similar to public housing projects in New York City, could probably be built on this basis to rent for between \$17 and \$30 per room monthly. It has been assumed that those families shown in the above table to require units at less than \$17 per room monthly would either have to pay a larger than indicated share of their income for rent or have to receive additional subsidy. A low-cost housing project such as this might well be undertaken by the United Nations itself with the advice and co-operation of City, State, and federal housing agencies.

The above possibilities may be considered in connexion with the map on page 84, showing the commuting time from the new site at 15-min. ute intervals. Naturally, most of the land in the inner zones is already built up, but a number of studies have been made showing desirable areas where extensive demolition and redevelop. ment would be economically feasible. Partica, larly attractive possibilities are situated in Queens along the shore of the East River opposite the headquarters site. In the outer zones, there is available a vast acreage of open land awaiting large-scale development. It is interesting to note how much of the suburban areas of New Jersey, Westchester County, south-western Connecticut, and western Long Island will be brought into easy commuting range by the removal of the head. quarters to Manhattan.

The above suggestions may be used for longrange planning in which allowance is made for seizing upon good opportunities as they arise, such as reductions in present land costs, stabilization of building costs, fulfilment of the conditions assumed as the basis for estimating needs in this study, and so on. The programme outlined above is intentionally conservative, and could be greatly accelerated if, for instance, building costs come down, which is considered very likely.

As for the immediate problem, the United Nations has at present agreements and understandings covering approximately 1,735 apartments in the four projects of Peter Cooper Village, Fresh Meadow, Parkway Village, and Great Neck. While completion of these units has not been as rapid as early building schedules indicated, it is believed that, as they do become available, they will largely fill the immediate needs of the Secretariat. In the meantime, there may be shortages. These, undoubtedly, are a serious matter to the individuals concerned, but, in view of their temporary nature, are not sufficiently serious to warrant extensive further building plans at this time.

The best housing policy for the United Nations to follow would appear to be the following: to meet the current demand with existing commitments as they become available; to do everything possible to expedite completion of these units: to negotiate, if necessary, for small blocks of additional units to meet actual shortages as they occur; and to review carefully the suggested long-range programme when both the estimate of requirements and the means of meeting them have become clarified.

# 7

Preliminary Cost Estimate and Statement on Financial Arrangements

#### **Preliminary Cost Estimate**

Overall estimates have been based on the cubic content of the structures, at 1947 unit prices for comparable structures in the New York area, and on engineers' estimates of foundation and structural costs and cost of mechanical and electrical equipment. The building costs cover the necessary site improvements (landscaping, roadways, lighting, etc.); the lower parking and service levels and access to them; the conference area, including the General Assembly Hall; the Secretariat Building and the library; their necessary furniture, furnishings, and communications systems; the alterations to the Franklin D. Roosevelt Drive permitting direct access to and from the site; and covering the Drive to the bulkhead line; and the necessary funds for the work of the Director of Planning and his staff, and for the fees of the engineers and builders. A sum of \$1,825,000 has already been allocated for demolition of the existing structures, for the relocation of tenants at present on the site, and for preliminary planning and engineering work.

As the planning work progresses, every el. fort will be made, by continuous analysis of requirements, to reduce space demands and, consequently, to minimize the costs involved.

ESTIMATED	RUDGEI

C314	WATED BUDGET		
	CUBIC FEET	SUB-TOTALS	
SITE IMPROVEMENTS (LANDSCAPING, ROADS, LIGHTING)		\$1,230,000	
LOWER LEVELS (PARKING AND SERVICES)	12,125,000	8,462,000	
SECRETARIAT	11,986,000	18,276,000	
CONFERENCE AREA (LESS GENERAL ASSEMBLY)	7,067,000	12,880,000	
LIBRARY	1,985,000	2,780,000	
			\$43,628,000
GENERAL ASSEMBLY	7,622,000	11,432,000	1
		<u> </u>	55,060,000
FURNITURE AND FURNISHINGS		2,866,000	
COMMUNICATIONS EQUIPMENT		2,632,000	
			60,558,000
CHANGES TO FRANKLIN D. ROOSEVELT DRIVE, INCLUDING COVERING TO THE BULKHEAD LINE		7,437,000	
			67,995,000
DEMOLITION, REMOVAL OF TENANTS, PLANNING BUDGET, ENGINEERS AND BUILDERS FEES, ETC.		7,624,500	
			75,619,500
NEW YORK CITY HOUSING AUTHORITY BUILDING		1,500,000	
			77,119,500
CONTINGENCY-10%		7,711,950	
		GRAND TOTAL	\$84,831,450

#### **Financial Arrangements**

Serious study is being given to various possible methods of financing to provide sufficient funds for construction of the headquarters. At this time no definite recommendation can be made, since more study must be given to the problem by authorities competent to deal with United Nations financial matters. Some possibilities can, however, be indicated briefly.

The most desirable method of financing the project would appear in some respects to be by contributions from Member Covernments, on a scale somewhat similar to that agreed upon for their contributions to the 1946 and 1947 budgets and to the working capital fund. Such an arrangement, which would have the advantage of basing contributions on the approved standards of ability to share in the costs, is in keeping with the fiscal practices followed by the United Nations in all other projects. It is in accordance with Article 17 of the Charter, which provides that the Organization's expenses shall be borne by its Members as apportioned among them by the General Assembly.

The disadvantage of the contribution method lies principally in the burden which it places upon many Governments of having to contribute heavily at a time when dollar exchange is difficult for them to obtain because of post-war economic conditions.

Financing by government loans from one or more Member Governments is a possibility which is being seriously considered. This method would involve an agreement between the United Nations and one or more Governments under which loans could be made at fixed interest rates for specified lengths of time and could be liquidated gradually. The burden on all Member Governments would thus be less onerous. Moreover, since money would be readily available when needed, no serious delay in the construction programme would be necessary.

The views of all Member States are not known at this time, but the United States Government and others are already giving the matter some study. There appear to be no insurmountable difficulties associated with such a solution of the problem, provided that Governments able to make the loan express a willingness to do so. Details need not be unduly complex, and the plan seems to be feasible.

A third alternative, which should be given some consideration, is the possibility of a United Nations bond issue backed by the assets and the pledge of the Organization. Such bonds might be sold in all Member States, and could perhaps be made tax-exempt by the various Governments.

A fourth possibility under consideration is a loan from private sources, guaranteed by Member Governments or by some form of mortgage on the assets of the United Nations. Some interest in this is being shown by investment firms, insurance companies, and other large lenders. The terms on which money could be obtained would depend upon provisions for amortization of the debt and upon the kind of guarantees to be obtained from Member Governments. To make a loan attractive, pledges of good faith would be necessary from the legislatures of the Member Governments; perhaps some of the larger nations could be requested to guarantee the entire debt jointly. The term of the loan might be fixed at fifteen or twenty years.

A variant of the above financing possibilities might involve the formation of a corporate structure outside the United Nations, and therefore not enjoying its immunities. Bonds could perhaps be issued with the guarantee of the Member Governments. Such a scheme might permit the world public, by financial participation, to express confidence in and support for the Organization.

Consideration has been given to the possibility of obtaining a loan from the International Bank for Reconstruction and Development. This is considered unlikely, however, because of the provisions of the Bank's charter.

Study of the various alternatives is continuing and will be intensified in the weeks preceding the opening of the second session of the General Assembly. At present, it may be concluded that the most likely solution to this important financial aspect of the programme would be a combination of methods somewhat as follows: the contributions of the Members can be raised appropriately during the next three years to provide a portion of the funds; some government loans can perhaps he arranged; and some private loans with suitable guarantees are likely.

## Conclusion

It is with some trepidation that these plans are submitted for the consideration of the General Assembly. They are an abrupt crystallization in the course of the creative process of continuous experiment, during which problems and ideas are ceaselessly being tested by plans and designs.

The Headquarters of the United Nations is, nevertheless, already beginning to implant itself on the East River site. The clearing of the site and digging of foundations is under way even as the detailed designs are being developed. The steel can be rising while the final architectural details are being made precise.

In the limited time at his disposal, the Director of Planning has been unable to compile complete and definite information on possible alternative plans that might reduce space and costs and on alternative financial plans, but his Office is at present engaged on such studies and will report on them at the earliest possible time. The next steps will be:

the submission of design studies of the exterior and interior appearance of the buildings;

precision of the plans to eliminate any unnecessary spaces or features, and to revise the arrangements of the building elements by further consultation with the Secretariat personnel and delegates who will be using them;

completion of all engineering studies based on the plans as developed to date;

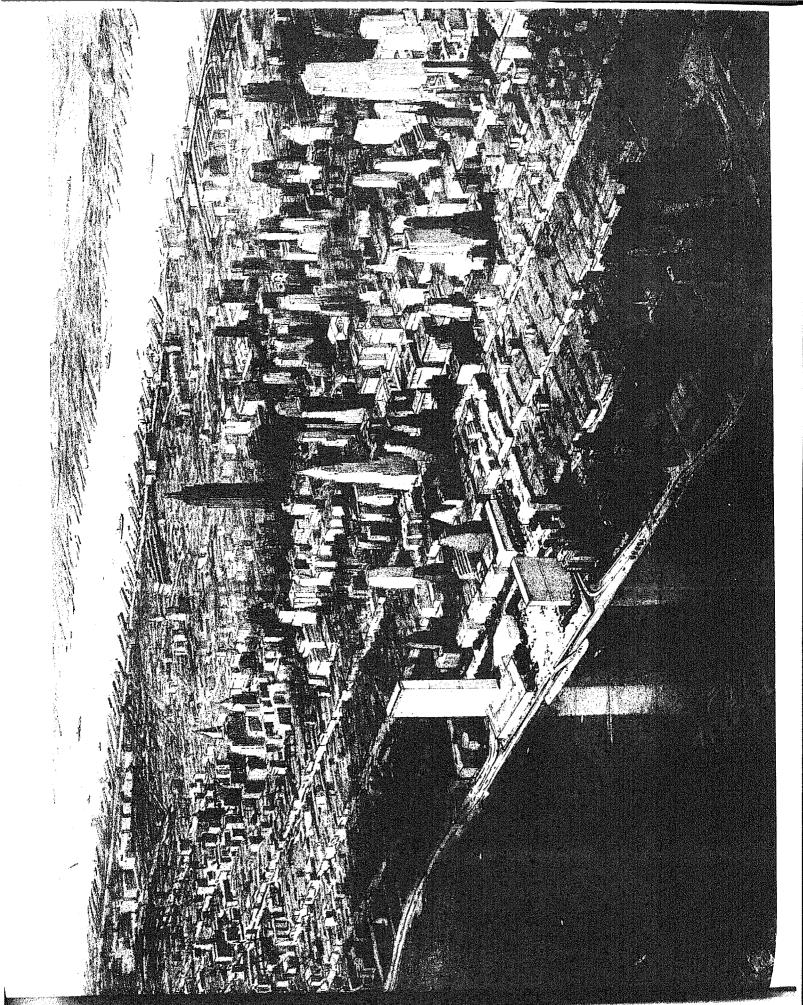
estimates of exact costs based on this further study;

development of final recommendations for financing.

Consequently, it is anticipated that an additional report will be made, to carry the present report through the next steps.

Meanwhile, submitted herein are the basic principles and features for the planned growth, on the East River in the City of New York, of a workshop for world peace and progress. Because growth is a living and unending process, it is hoped that every stage of it will be, for the peoples of the world, a symbol of their common aspirations.





## Annexes

Annex A

Letter and Memozandum from Mr. John D. Rockefeller, Jr., to the Permanent Headquarters Committee

(Document A/Site/50)

December 10, 1946

H. E. Dr. Eduardo Zuleta Angel Chairman of the Permanent Headquarters Committee United Nations

Lake Success, New York

Dear Dr. Zuleta Angel:

I have followed with deepest interest the effort of the United Nations to find a permanent home in the United States.

New York is a center where people from all lands have always been welcomed and where they have shared common aspirations and achievements. It is my belief that this City affords an environment uniquely fitted to the task of the United Nations and that the people of New York would like to have the United Nations here permanently.

For these reasons I have ventured to obtain a firm offer covering property located on the East River in the midtown area, which, should it serve your purpose, I would be glad to give to the United Nations. If this property can be useful to you in meeting the great responsibilities entrusted to you by the people of the world, it will be a source of infinite satisfaction to me and my family.

I am enclosing a memorandum setting forth the terms and conditions of my offer.

Sincerely yours,

(Signed) JOHN D. ROCKEFELLER, JR.

#### Memorandum

December 10, 1946

This memorandum sets forth the terms and conditions of the offer made by me in my letter to you dated December 10, 1946.

I have acquired a firm offer from Webb and Knapp, Inc. to sell to the United Nations within thirty days from December 10, 1946 at \$8,500,000, the following property between First Avenue and Franklin D. Roosevelt Drive:

1. The Western portion of the block between 42nd and 43rd Streets.

2. All of the four blocks between 43rd and 47th Streets.

3. Two small parcels in the block between 47th and 48th Streets.

In addition representatives of the City of New York have assured me of the desire and willingness of the City to acquire and give to the United Nations the balance of the block between 47th and 48th Streets.

To make possible the acquisition of this property by the United Nations, should they decide to accept said offer and to make it the site of their permanent headquarters, I hereby offer to give to the United Nations the sum of \$8,500,000, on the following terms and conditions:

(a) That the gift shall be made at the time of the closing of the purchase of said property.

(b) That the City of New York shall agree to give to the United Nations 43rd, 44th, 45th, 46th and in Streets between First Avenue and Franklin D. Roserd Drive upon terms which shall permit the United Nations to close any or all thereof to passage and otherwise to use them for its own purposes without restriction a

(c) That the City of New York shall agree to acquire and give absolutely to the United Nations at the balance of that city block bounded by First Average 47th, 48th Streets and Franklin D. Roosevelt Drive to covered by the firm offer of Webb and Knapp, Inc.
(d) That the City of New York shall agree to give the total state.

(d) That the City of New York shall agree to give to the United Nations all rights to bulkheads and pien along the river frontage of the East River between day and 48th Streets.

(e) That each of the said agreements of the  $i_{ij}$  of New York shall have been concluded in form sais factory to the parties in interest at or prior to the  $i_{ijk}$  of the making of my said gift.

(f) That prior to the making of my said pit assurances satisfactory to my attorneys shall have been given to me that the said gift from me will be free and clear of all taxes of the United States, the State of New York or any other taxing authority having juridiction with respect thereto.

(Signed) JOHN D. ROCKEFELLER, ja

#### Annex B

## Resolution Adopted by the Board of Estimate of the City of New York

(Cal. No. 1, 13 December 1946)

WHEREAS, An offer has been made to the United Nations by Mr. John D. Rockefeller, Jr., to donate the sum of \$2,500,000 for the purpose of making available to the United Nations as a permanent headquarters a site within the Borough of Manhattan, located and bounded by 42nd Street, 48th Street, 1st Avenue, and East River, and shown upon the map annexed hereto,

WHEREAS, Such offer and the conditions upon which it has been made to the United Nations are set forth in a memorandum dated December 10, 196. addressed to Dr. Eduardo Zuleta Angel, Chairman of the Permanent Headquarters Committee, and signed by Mr. John D. Rockefeller, Jr., a copy of which is hereto annexed; and WHEREAS, Such conditions require that the City

WHEREAS, Such conditions require that the City of New York agree to give certain public streets twversing the area to the United Nations upon terms which will permit the United Nations to close such streets or otherwise restrict their use for its own purposes, and that the City agree to give to the United Nations certain other real property within the site area and certain rights to bulkheads and piers along the river frontage between 42nd and 48th Streets, all st more particularly set forth in the said memorandum dated December 10, 1946; and

dated December 10, 1946; and WHEREAS, The United Nations has indicated its wish to accept the said offer if the City will agree to the conditions imposed; and

WHEREAS, The members of the Board of Estimate of the City of New York are unanimously desirous of co-operating fully in accepting the conditions imposed relating to action by the City of New York in order to promote and make possible the acceptance of said offer to make available such permanent headquarters site to the United Nations in the City of New York.

Now, THEREFORE, BE IT RESOLVED, That the Board of Estimate of the City of New York, in accordance with the conditions contained in said offer, agrees: 1. To give to the United Nations 43rd, 44th, 45th, 46th and 47th Streets, between the East boundary of First Avenue and the West boundary of Franklin D. Roosevelt Drive, upon terms which shall permit the United Nations to close any or all thereof to passage and otherwise to use them for its own purposes without restriction or limitation.

2. To acquire and give absolutely to the United Nations all the balance of that city block bounded by First Avenue, 47th Street, 48th Street and Franklin D. Roosevelt Drive not covered by the firm offer of Webb and Knapp, Inc.

3. To give to the United Nations all rights to bulkheads and piers along the river frontage of the East River between 42nd and 48th Streets.

AND BE IT FURTHLE RESOLVED, That the Board of Estimate will take all steps and adopt all measures necessary in the exercise of its powers, and will recommend action and legislation by other agencies, if necessary, in order to carry out the provisions herein set forth.

#### Annex C

## Resolution 100 (I) Adopted by the General Assembly

#### I. THE GENERAL ASSEMBLY,

TAKES NOTE, with a feeling of sincere gratitude, of the offer made by Mr. John D. Rockefeller, Jr., in a letter dated 10 December 1946, to give to the United Nations the sum of \$8,500,000 (US), on certain terms and conditions, to make possible the acquisition by the United Nations of a tract of land in New York City in the area bounded by First Avenue, East 48th Street, the East River and East 42nd Street;

Notes also the assurance given by the City of New York to fulfill the terms and conditions applicable to it on which the aforesaid offer has been made, and the assurances given by the representative of the United States of America with respect to certain other terms and conditions of the aforesaid gift;

#### **RESOLVES, THEREFORE:**

1. That the offer of Mr. John D. Rockefeller, Jr., hereinabove mentioned, be accepted subject to the terms and conditions therein stated;

2. That the permanent headquarters of the United Nations shall be established in New York City in the area bounded by First Avenue, East 48th Street, the East River and East 42nd Street;

3. That the Secretary-General be authorized to take all steps necessary to acquire the land hereinabove described together with all appurtenant rights, and to receive the aforesaid gift of \$8,500,000 (US), and to apply the said gift to the acquisition of the land as provided in the terms of the offer;

4. That the Secretary-General be authorized to lease the structures now on the site until the work of demolition is undertaken, or to undertake demolition, as appears more appropriate;

5. That nothing in this resolution shall be deemed to restrict the authority of the Secretary-General to take any action which he may otherwise be authorized to take;

6. That part I of the resolution adopted at the thirty-third plenary meeting of the General Assembly on 14 February 1946 relating to the permanent headquarters of the United Nations, is hereby repealed.

#### II. THE GENERAL ASSEMBLY RESOLVES:

1. That the Secretary-General is hereby requested to prepare recommendations with respect to the matters set forth below pertaining to the establishment of the permanent headquarters. He is further requested to prepare a report on these matters to be distributed to the Members of the United Nation on or before 1 July 1947 for consideration at the next regular session of the General Assembly:

(a) General plans and requirements for official buildings and other necessary facilities;

(b) Arrangements for accommodations, housing developments and related facilities, on or off the site, for personnel of the Secretariat, specialized agencies and national delegations and their staffs, and for the families of such personnel;

(c) Approximate costs of construction and development;

(d) Financial and other arrangements;

(e) Any other matters pertaining to the development of the site which the Secretary-General feels the General Assembly should consider at its next regular session.

2. In carrying out the responsibilities set forth in paragraph 1 of this resolution, the Secretary-General shall be assisted by:

(a) An advisory committee consisting of representatives of the following Members:

Australia, Belgium, Brazil, Canada, China, Colombia, France, Greece, India, Norway, Poland, Syria, Union of Soviet Socialist Republics, United Kingdom, United States of America and Yugoslavia.

(b) Consultants and experts who, at the request of the Secretary-General, shall be designated by the Government of the United States of America, or by Governments of other Member States, or local authorities.

SIXTY-FIFTH PLENARY MEETING, 14 DECEMBER 1946.

#### Annex D

#### Letter from the Secretary-General to the Mayor of the City of New York

22 March 1947

Honourable William O'Dwyer Mayor of the City of New York City Hall New York, N. Y.

Dear Mr. Mayor:

In developing plans for the establishment of the United Nations Headquarters on the Manhattan site which was offered by Mr. Rockefeller and accepted at the last session of the General Assembly, considerable progress has been made. My representatives have been in consultation with your officials and have reached a point at which it is appropriate to inform you of the various plans and programmes which have been formulated.

Acting under authority and instructions given to me by the General Assembly, and with the advice and consent of the Headquarters Advisory Committee of representatives of sixteen nations, I have established a Headquarters Planning Office. Mr. Wallace K. Harrison has been appointed Director of Planning and a staff of architects and engineers has been assembled to plan the headquarters development. I have authorized the expenditure of approximately \$700,000 for preliminary drawings, estimates, research, specifications, and some detailed drawings.

In addition to this initial outlay of funds, I am ready to authorize a commitment of \$125,000 to be made available to the Office of the President of the Borough of Manhattan for the purpose of making preliminary plans for alterations to the East River Drive.

I have authorized the Director of Planning to proceed with plans for demolition of property on the site as soon as legal arrangements are completed and to make preliminary estimates relating to the earliest possible construction of a building unit on the site which can accommodate the United Nations activities now housed at Lake Success. For the cost of demolition, excavation, and related work, I am budgeting \$1,000,000.

We have examined the programme which the city officials are presenting to the Board of Estimate and find it satisfactory. In order to enable me to inform the competent organs of the United Nations, I would be grateful if you could give me a formal notification of the action taken by the City of New York and its plans with respect to the area surrounding the United Nations Headquarters site.

I should like to take this opportunity to express to you and the Boa d of Estimate my deep appreciation and gratitude for the excellent spirit of co-operation of Mr. Moses and other officials of the City of New York, and the very valuable assistance which they are giving to us in this great project.

Sincerely yours,

TRYCVE LIE, Secretary-General.

#### Annex E

Letter from the Mayor of the City of New York to the Secretary-General

June 17, 1947

Honorable Trygve Lie Secretary-General United Nations Lake Success, N. Y.

#### Dear Mr. Lic:

Your letter to me of March 22, 1947, approving the program of actions to be taken by New York City and the United Nations to carry out the development in and adjacent to the United Nations site, requested that I keep you informed of the progress made by the City on its phase of that program.

I am pleased to be able to tell you that the following is the status of our program:

1. In compliance with the Rockefeller gift:

a. The City has vested title in the balance of the block bounded by 47th Street, 48th Street, First Avenue and the Franklin Delano Roosevelt Drive. The deed of transfer has been prepared and is awaiting action by the U. N. Legal Department.

b. Final action by the City on the closing of 43rd to 47th Streets, inclusive, will be taken on June 27th.

c. The assignment of the right of occupancy of the waterfronts awaits the completion of United Nations plan showing the details of the covering of Franklin D. Roosevelt Drive. The covering of this drive is an indispensable requisite if the City is to be expected to place the through traffic on First Avenue underground.

- ground. 2. The Board of Estimate has approved the release by the City of its interest in the former lands underwater within the site.
- 3. Transfer by the City to the U. N. of the strip of land west of the Franklin Delano Roosevelt Drive has been passed by the Board of Estimate and is awaiting action by the United Nations Legal Department.
- 4. Transfer of City playground property between 42nd and 43rd Streets has been approved by the Board of Estimate and is awaiting action by the United Nations Legal Department.
- 5. The City plans to vest title in property for the widening of East 47th Street between First and Second Avenues on August 27th.
- 6. The City is now negotiating with the property owners for the acquisition of land needed to widen 42nd Street between First and Second Avenues.
- 7. The widening of 39th and 40th Streets has been abandoned.
- 8. The City plans to vest title in property needed for the widening of First Avenue on August 27th.
- 9. The grant of easements over and in Franklin Delano Roosevelt Drive is awaiting detailed plans for the covering of the Drive by the United Nations.
- 10. The development plan of the site does not require access to the elevated roadways on 42nd and 48th Streets. It is understood, however, that parking space for 2,000 cars will be provided within the site.
- 11. The development plan does not require access to the First Avenue Tunnel.
- 12. The grant of an easement over the subway vent on 42nd Street is awaiting detailed plans from the U. N.
- 13. A resolution restricting erection of advertising and business signs in the adjacent area in Manhattan and in the opposite area in Queens has been passed by the Board of Estimate.
- 14. The zoning changes agreed upon with your representative regulating the height and bulk of buildings in the area adjacent to the site are now in effect.
- 15. Action is being taken to grant tax exemption to the U. N. site.
- No action has yet been necessary by the City for condemnation of properties or leaseholds within the site.
- 17. Agreements have been reached between us for the acquisition by the United Nations of the New York City Housing Authority Building on 42nd Street. These agreements can be concluded after July 1, 1947.

In addition to the above tabulated actions, the City is progressing with plans for the construction of the First Avenue Tunnel, the Franklin Delano Roosevelt Drive reconstruction, the widening of 42nd and 47th Streets and of First Avenue and the relocation of the utilities in First Avenue. The preliminary steps to relocate the residential tenants have been taken.

#### Sincercly,

(Signed) WILLIAM O'DWYER. Mayor.

#### UNITED NATIONS PUBLICATIONS

Report of the Headquarters Commission to the Second Part of the First Session of the General Assembly of the United Nations (document A/69, October 1946), 144 pages.

This report covers the investigation by the Headquarters Commission of sites suitable for the United Nations permanent headquarters in the Westchester and Fairfield Counties in the States of New York and Connecticut respectively. With illustrations, charts and maps, it is available in English, French and Russian editions Each \$2.00

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