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PROJECT FOR A CITY  
IN THE AMAZON VALLEY

by

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PROJECT FOR A CITY IN THE VALLEY  
OF THE AMAZON RIVER

INTRODUCTION

For more than four hundred years, the virgin regions of the Amazon plains in South America have been known as the most richly endowed in the world, where rivers form a veritable network of natural lines of communication that converge in the Amazon river and thus flow into the Atlantic Ocean.

In the Republic Of Peru are the highest portions and there rises the great river in the lofty peaks of the Andes Mountains.

For many years there has been immigration into the valley and now various peoples are found established along the river banks. At present the settlements have spread along the river only, logically enough, because of the facilities of river transportation.

As immigration increases, it is becoming necessary to establish modern cities that will offer all essential conveniences to the inhabitants.

For this reason, it is planned to found a city to house 100,000 persons, in a regions where it is calculated 500,000 can live; that is to say, wherein 20 per cent of the population can easily live. For this purpose, first of all, the area of the proposed city will have to be cleared and subdivided into lots for public and private use.

The important factor of river transportation must be taken into consideration and it will be encouraged primarily to assure cheap transportation to the commercial centers of South America, North America, and Europe.

Direct lines of transport ships will allow the shipping of products of the region to all the markets of the world.



## GEOGRAPHICAL DESCRIPTION

The site for the proposed city has been selected on the left bank of the Amazon River, very close to the mouth of one of its largest tributaries. It will be situated on the highest elevation, with a wide outlook over the surrounding area, so the city will rise above all the towns to be build around it or on the opposite banks of the river. The location of the city is very important, from the viewpoint of its military defense. Aerial and naval bases can be established close to the city, in special aerals, for the land around is flat for a radius of many miles.

**TOPOGRAPHY** The land is, for practical purposes, completely flat and may be compared to a large table, with a slight slope toward the river. This condition is very favorable for the building of highways into the forests, and for water, sewage, and refrigeration systems.

**THE RIVER** The river itself is of extreme importance,

because it is the principal means of communication and the vital artery for the city and the region in general. The river provides a close connection, not only with countries outside, but between local centers, for many other tributaries flow into its main stream. The width of the river below the city, is more than three miles and the depth varies between 15 and 250 feet. It has a natural channel, which makes constant dredging unnecessary, and which is open during all times of the year. The channel may be estimated at some 100 feet wide by 30 to 50 feet deep. During the rainy season, which begins in December and ends in April, the water level rises above 50 feet. It has been said that occasions the water has risen as high as 100 feet.

During the dry period from May to November, large, sandy beaches appear along the river, but disappear when the rains begin again.

Rain does fall, though not abundantly, during the dry season. This has an important effect on navigation in tributary rivers. If constant navigation on these streams by river steamers is desired, it will be necessary to dredge different portions to maintain a constantly open channel.

PHYSIOLOGY AND GEOLOGY      The outline of the country is that of a plain. The soil is quaternary and was produced by a very powerful and more or less recent alluvion. It is certain that it rests on a secondary strata, since that constitutes the plain in the lower parts of the valley, where the Amazon flows into the Atlantic. It is not possible at present to determine the age of the soil by means of the few fossils so far found there by geologists.

BOTANY                      These regions are covered in their entire extent, by the heavy, virgin forests of the tropics, containing hard and soft woods of all kinds, medicinal and dye plants, and some tropical fruit trees.

In the vicinity of the proposed city are found rubber and sernamby trees, and small plantations of sugar cane, rice, corn, tobacco, coffe, etc. There are some trees also, native to the region, like quinine, cinnamon, vanilla, and other tropical shrubs.

CLIMATE                      In general, the climate of the city and its territory is warm and damp. The average temperature is 84 degrees, but this is lowered by the rains.



The seasons are not well-defined, winter being considered the period when the rainfall may surpass 130 inches. Summer is the season of little rain and the real heat of the tropics. In spite of the existence of mosquitoes, epidemics occur but rarely, since hygienists have studied the land and freed it from the effects of insect bites.

Winds blow usually from the west to the east, and as in seaports, the breezes come along the coast from the south.

## LOCAL HISTORY

The first inhabitants were the copper-colored natives of the country, until about four hundred years ago, arrived the first colonists of the white race, the greater number of whom were Spaniards. In addition to Spanish immigration, the last 50 years has brought also French, German, English, Italian, and Portuguese. Nationalities from the Mediterranean form 80 per cent of this group.

The majority devoted themselves to commerce on a larger or smaller scale, but some engaged in lumber and rubber production, and others in river transportation and shipping to the exterior. At present there is constant trade in the principal world markets, but on a very small scale compared with what could be developed with the present population and capital. In the region around the proposed city, there are now some 10,000 inhabitants; that is, one person per square mile. Communication is maintained to the exterior by ships that go some distance up the river, by aeroplane, the wireless, and the radio.

## CHARACTERISTICS OF THE PEOPLE

The inhabitants have good standards of living and are always eager to acquire all modern improvements which reach them rapidly, considering that the country is situated almost in the heart of South America, where neither transcontinental railroads or highways have penetrated. However, this region has succeeded in getting close to centers of greater culture and commerce, by means of the aeroplane and the radio.

The people readily assimilate the customs of the Americas and Europe, through the cultural and commercial relations maintained with these nations. Although the Roman Catholic religion, brought over by the first Spanish colonists, still predominates, there is entire freedom of worship.

There is no special social problem because those of the native race have mixed with the white race, while some few mongolians and negroes are rapidly disappearing by their union with the whites. Before the law all have personal liberty and no one is persecuted because of his ideas or beliefs.



GOVERNMENT The location selected for the development of the city forms part of a Department in a centralized republic, with legislative, executive, and judicial powers. The president of the republic is elected every five years by popular vote. The president appoints, in accordance with the Constitution, the Prefect of the Department, and he is the administrator. The proposed city and outlying regions represented, politically speaking, almost a district of the department.

## FUTURE GROWTH OF THE CITY

As has been said previously, the proposal is to establish first a cleared area in a suitable location along the Amazon River, near all the points of greatest possible commercial wealth, with easy transportation, in a healthful climate, and with land which will facilitate building. It is understood that the population will increase continually by the addition of more colonists who will acquire property and build their homes within the boundaries of the city. It is natural that they will choose their lots within the section circumscribed by the city. The municipal government will give them conveniences such as water, sewage, light, refrigeration, etc. As it is calculated that the city is for the housing of 100,000 persons, it may be said that this number marks the maximum allowed by municipal regulations, with the object of preventing more than twenty per cent of the region's population from being centered in the city. The remaining population will reside in industrial communities to be established adjacent to the city,

on the shores of tributary rivers, or in the interior of the forest, and for instance, on plantations of rubber, sugar cane, tobacco, and rice, on cattle ranches, at lumber camps, paper mills, etc.

Briefly, an attempt will be made by legislation, to avoid congestion of population in one single city. In this manner the population will regularly be distributed as much as possible.

THE FORM OF THE CITY      The plan of the city is rectangular in shape, while it encloses a semicircle, such as in found in many other towns located on river banks or on the sea-coast. Expansion is unlimited since many other smaller communities may be be linked with the city by means of highways. These communities will be small cities, since they will have to be situated near plantations and highways leading to the city. Considering the fact that the city is provided with the best systems of sanitation, transportation, and direct connection with outside markets, and since the other towns will necessarily remain smaller because of their location, it is easy to assure the greatest development for the proposed city.



## POPULATION OF THE REGION

As has been said, the increase in population will continue with the arrival of immigrants coming to reside in the centers previously established, such as saw-mills and plantations of rubber, sugar cane, rice, etc. At the same time, the preparation of the city will be carried on so the colonists may obtain their lots and build homes which will entitle them to vacations near their work, education for their children, and culture and recreation for themselves.

Meanwhile, there will be constructed from the rents of the community, public buildings, roads, docks, warehouses, and everything necessary for the founding of a modern city.

Briefly, there will be established a comfortable city which is not the capital of a nation, but of a region, and for that reason does not require the use of the most noble and costly materials, but the most economical ones which will satisfy the needs of a modern community.

## DISTRIBUTION OF LAND

Naturally the distribution of the zones reserved for public and private use can not be made until after the land is

cleared of trees and underbrush, which will be the first task undertaken. The second will be bringing in heavy machinery for facilitating the construction of roads, streets, and buildings.

As may be seen from the plan of the city, it has been divided into three well-defined sections: Commercial, Industrial, and Residential.

Zones are also designated for docks, aerodromes, civic center, university, and stadium.

The three sections are closely linked by a network of avenues and streets which will radiate from the docks where passengers and cargoes are unloaded.

The zones previously mentioned for public use, such as the civic center, university, stadium, etc. are united by a carefully arranged system of streets to permit that easy flow of traffic which is a basic principle for the existence of the city.

## THE STREET SYSTEM

The functioning of this city located in a tropical region is determined by the importance of the life within it. This is reflected in the streets themselves and their arrangement, which forms the skeletal framework of the city and indicates the direct and easy transportation of both persons and merchandise, within means of safety, health, and economy.

**STREET ARRANGEMENT**      The arrangement of streets has taken into consideration provision of light, air, convenient access, and traffic needs in general. Consequently, the most efficient movement of traffic will bring the greatest convenience for all the population. Naturally the activities of the city will be drawn toward special points of interest, which may be called focal points.

**FOCAL POINTS**      These points always determine the pos-



ition and direction of the main streets and perform a most important factor in the city plan. One of these centers is the Commercial Section, where are grouped commercial houses, stations, stores, banks, theatres, restaurants, etc. An easy movement of traffic toward this center is necessary to avoid congestion. So the commercial center will also include stations for ship, bus, and airplane passengers.

The other focal points are: the Industrial Section, the Civic Center, the University, and the Stadium of the Residential Section.

All these points mentioned above are connected one with another by wide, straight avenues that will accommodate traffic according to need.

TYPE OF STREETS      Since the city lies on a plain, a regular pattern was chosen for the streets, a concentric arrangement leading to the main arteries which connect the focal points. The handling of traffic is further facilitated by the Semicircular Avenue of the city, by Central Avenue, and Malecon Avenue along the water front. The latter connects the city with the neighboring towns

and may be called a super-avenue.

Other streets are perpendicular to the river, with rectangular blocks divided into two by an alley, which, in the commercial districts, helps provide light and loading zones. In residential sections these passageways are wider and provide light as well as space for recreation.

#### AVENUES AND STREETS

The avenues are laid out with a center strip of garden, a plant that makes for easy, certain and economical movement of traffic. The main streets are connected with one another and give easy access to the city center or other important centers. The smaller streets have merely a local value, being tributaries of the Avenues and Streets which form the main arteries, and primarily offer safety to the people of the Residential Section. The curved streets are suited to traffic needs and relieve the monotony of straight roadways.

#### STREET WIDTHS AND INTERSECTIONS

The street width is measured from property to property and varies with the service requirements

made of it. The lesser streets are from 50 to 60 feet in width and the principal streets are 80 feet. Avenues are from 100 to 120 feet wide, allowing ample space for automobile traffic, sidewalks, and garden. All are adaptable to specific and varying needs.

The pavement is wide enough for lanes for 4, 6, or 8 automobiles, the latter number being possible on Central Avenue. In residential sections, space is provided for 3 automobile lanes.

**SIDEWALKS** These vary from 4 to 10 feet wide in the Residential Section, the narrowest being in the district of private homes and providing for the passage of two persons. Sidewalks in apartment house districts will be from 6 to 8 feet wide. In the Commercial and Industrial Sections, they will vary from 10 to 15 feet in width.

The width of parkway or garden strips between sidewalk and pavement will be from 5 to 10 feet, according to requirements.



## TRANSPORTATION

**TRAFFIC CONTROL**      The projected plan for the city is determined, not only by the character of the streets, but by the needs for regulating and directing traffic.

In consideration of these factors and calculating the number of motor vehicles as 10 per cent of the population, or 10,000 vehicles, means have been provided for avoiding a traffic problem. The arrangement of streets has been carefully made for this proportion of motor vehicles, so as to furnish speedy and safe transportation for the populace. One means to this end is the location of parking places and garages.

**GARAGES**      This special need has been solved, in the commercial center where there is naturally the most traffic and activity, by providing particular space for garages for the storage and parking of autos. Though specially built for the purpose, these buildings will not be higher than the seven stories.

prevalent for dwellings and will each one have a capacity for 500 automobiles. In the Commercial Section will be located four such garages. Two will be near the passenger stations and the other two near the Civic Center.

**TRAFFIC AT INTERSECTIONS**      The city Traffic Committee will further insure safety on the streets, by installing lights and markers to regulate traffic at intersections. These mechanisms will be the ones commonly in use and all standardized as to color, lettering, and location.

**AUTOMOBILES**      The most modern methods of transportation have been designed for this city. Automobiles for individual uses, busses for collective transportation, and trucks for the transportation of merchandise. Autos, especially, are most important in distributing the populace along the principal streets and in the business center. Forseeing the needs of such service, provision has been made for easy right-of-ways between the focal points, such as the commercial and industrial districts, the Civic Center, the Stadium, and the University. It is obvious that automobiles will be primarily for local use.

**BUSSES** As has been previously suggested, busses are the transportation which will be developed by the city, since they have the advantages of speed, ease of making stops, and unlimited flexibility as to routing. Because of these advantages, we have eliminated from the city, trains, streetcars, or other electrical means of transportation. Busses will have to carry passengers between the city and adjoining towns.

**TRUCKS** Truck service will complement the buss system, thus offering the best transportation for goods, especially between the Industrial and Commercial Sections, but also between docks and factories, and from them to other parts of the city.

**STATIONS** Naturally, stations and depots are factors contributing much to the efficient working of the system already planned. Buss depots are to be located in the Commercial Section, fronting the warehouses and docks, but also near the garages. These stations will be just as high as the garages and will consist of a system of elevators that will allow a rapid and efficient transportation service.



WAREHOUSES These will be built near the docks, to facilitate the rapid movement of supplies between the docks and other parts of the city. Bus Stations and Warehouses will be described in detail in the Commercial Section to follow.

## PUBLIC SERVICES

Transportation needs such as we have described are paralleled by requirements for water supply, sewage, refrigeration, power, and light. These services, then, will be provided with the necessary security. In large systems of public utilities one must also consider the building of power houses, pumping stations, purification plants, and reservoirs, all of which will be installed outside the city limits. These structures will be placed in such a manner that they will lend an attractive aspect to the city plan.

**WATER SUPPLY** This public service comprises works for receiving and purifying the water, situated east of the city; reservoirs to the north; and works for distribution, which will run north and south, in consideration of the topography of the country. The basic security of the system planned rests on the unlimited water supply of the Amazon River. From this source, a system of pumps will raise the water

to purification and filtering tanks, and then to reservoirs of 25,000,000 gallons capacity.

The surroundings of the reservoirs will be developed into recreation parks; even the pump houses, tanks, and reservoirs will be spots of beauty and recreation for the population of the city.

**SEWAGE**      The introduction of a water supply, necessitates a correspondingly efficient sewage system, for the welfare of a modern city.

Such a system is basic in the preservation of health, on which depends the future development of the community. The system devised is a main factor in sanitation and the prevention of disease, both for local inhabitants and those in the surrounding country. Obviously, an efficient sewage system must consider the durability of pipelines, the depths at which they are laid, and the corresponding diameters of pipe. These problems may be easily solved since in this planned city, we know in advance the density of the population, the consumption of water, the height of buildings, and most importantly, the consumption of water in each locality of the city. These amounts may be calculated, since we know what areas are devoted to residences, to business buildings, to industries, or to places of amusement.



As for the collection of sewage, this has been arranged for by three distinct pipelines, all running perpendicular to the river, and leading directly to the main sewer, which runs parallel to the course of the river. This sewer will empty into the Amazon River east of the city, with all necessary safeguards as to hygienic requirements.

LIGHT, POWER  
AND  
REFRIGERATION

For supplying power, light, and refrigeration in the city, electricity will be brought long distances by transmission lines. The electrical power will be produced by a dam on the river tributary, coordinated with a transmission system. Thus an average of 50,000 kilowatts is available for the city and even more for the surrounding region, for light, power, refrigeration, in dwellings as well as in commercial and industrial establishments.

TELEPHONE, RADIO  
AND TELEVISION

As the development of public service progresses, these utilities will naturally be corollaries of the established electrical system. The central telephone exchange, accommodating a service for 10,000 telephones, will be

advantageously located in the northern part of the city, that is in the Residential Section, far from much noise, smoke, or dirt. The detailed plan for the telephone system will be worked out according to the distribution and character of the population. The telephone lines will follow more or less the same circuits as the traffic routes.

A radio and television station located in the Commercial Section will permit rapid communication between the city and foreign countries. In addition to this central station, will be other smaller ones for local and regional service, located in the Residential and Industrial Sections.

**TUNNELS** In districts where traffic in both directions is very heavy, the use of tunnels will facilitate this movement. However, because of the care in plotting the street system, not many tunnels will be needed, except in the Industrial Section to connect factories and the docks without interrupting traffic on Malecon Avenue, which unites the city with nearby towns.

**FIRE STATIONS** Sites for the erection of fire stations have been designated, in consideration of the vital role they play in safeguarding the city.

The main station has been located in the Commercial Section, between the business buildings and the waterfront. Smaller stations will be placed in Residential and Industrial Sections, preferably in locations of easy exits and light traffic.

**HOSPITALS** Adequate hospitalization has been arranged for with one large hospital in the northern part and two additional ones in the eastern and western parts, within the residential sections of the city. Smaller and special hospitals are planned for each district.

**POLICE STATIONS** The Central Police Station will be in the Commercial Center, opposite the Central Fire Station. Smaller ones are to be located in each district and with the same precautions as were observed in the location of fire stations.

**CEMETERIES** A large cemetery will be laid out, east of the city and about two miles beyond the city limits. This will be a beautiful and monumental establishment, provided with a modern crematory and otherwise in keeping with the sanitary requirements of our



time. A mausoleum will contain a system of metal vaults with depositories for ashes and bearing the names of the deceased. This arrangement will also serve as a permanent record of the mortality rate of the city.

**PUBLIC INCINERATORS** Incinerators will be constructed outside of the city limits, to the south east, and preferably along the river, with necessary provisions for sanitation and within rapid communication with the city as well as nearby communities.

## THE COMMERCIAL SECTION

As the name indicates, this part of the city will be especially devoted to commercial pursuits, for which the following divisions are planned.

**DOCKS**      The development of the commercial area will necessarily demand good docks to assist in economical transportation and rapid transfer between water, land, and air transportation.

Estimating the port shipments at 1,000,000 tons per year, the harbor has been laid out in an area of about 2,500 acres. This area will include docks, warehouses, grain elevators, and dry-dock. Because of the annual rise of the Amazon River to around 50 feet above its normal level the docks will be built as floating platforms and elevators and cranes on land will be used for the loading and unloading of cargo.

**AIRPORT**      The airport is located near the commercial center and the passenger depots. This

location will facilitate rapid service both in the handling of passengers, as well as mail and freight. The field is sufficiently large for the landing and taking-off of regular sized airplanes, and also includes sites for hangars, repair shops, and passenger depots. The location of the airport was made with regard to convenience of landing and taking-off of planes, to air density according to sea-level, to velocity and direction of winds, cloud conditions, etc.

The port for hydroplanes is directly connected to the airport. There will be floating hydroplane hangars, but the passenger depot and restaurants will be on land, facing the river. Since the airport includes facilities for both airplanes and hydroplanes, it not only has the advantage of a central location in the city, but contributes distinctly to the orderly and beautiful pattern of the city as seen in an aerial view.

DEPOTS Passenger depots are provided for airships, river boats, sea-going vessels, and land transportation. They are arranged so as to provide easy and rapid transfer from station to station, from planes to busses, from busses to ships, etc. It will



also be noticed that these depots are conveniently located near hotels, custom house and post office.

**STREET SYSTEM**      The main artery of communication in the Commercial Section is Central Avenue, which divides the city into two parts and as a huge axis, connects the Commercial Section with the Residential Section. The other principal artery is Malecon Avenue, along the river front, which joins the Commercial with the Industrial and Residential Sections and communicates with the nearby towns along the river bank.

**PUBLIC BUILDINGS**      The outstanding public buildings of the Commercial Section are the Custom House, Post Office, Central Police Station, whose close proximity offer both convenience and security to this section.

## THE INDUSTRIAL SECTION

The facilities of modern transportation allow great freedom in the location of industrial plants. Placing the Industrial Section within the city limits makes for a considerable saving of human energy and time, as well as a resultant higher rate of production in the industrial themselves.

**ACCESSIBILITY**      The Industrial Section, located in the eastern portion of the city, is devoted to all classes of manufacturing of products for the city and the surrounding region. The location has been determined so as to keep noise, smoke, or offensive odors from reaching other parts of the city. The accessibility of the Industrial Section avoids the need of going through business or shopping districts to reach it by long or circuitous routes. The section is divided into the two following parts.

**HARBOR**      This includes the docks proper with warehouses and granaries, all especially con-

structed for an industrial zone and for the speedy handling of goods from ships to trucks.

**FACTORIES** These include plants for the manufacture and packing of foods, clothing, and other products for general consumption. Adjoining the Industrial Section is to be an Industrial School for the children of the workers and for the training of skilled factory employees.

**STREET SYSTEM** The arrangement of streets provides easy and safe means of travel between factories and the residential section nearby, where most of the workmen will live. Rapid communication has also been made possible between this section and the commercial section as well as with adjoining towns. Sites within the Industrial Section have been set aside for parks and recreation centers for the workmen and their families.



## THE RESIDENTIAL SECTION

The residential area, covering more than three-fourths of the city, is furnished with a system of easy travel communication with the other sections. It includes the Civic Center, Stadium, and University, all of which are connected by wide avenues lined with beautiful residences.

**HOUSING** One of the chief problems in planning the residential section was to protect each community from noise and the confusion and dangers of traffic. The given arrangement of streets and avenues with easy access to all focal points and recreation spots helps to solve this problem. Furthermore, all care has been taken to provide the most advantageous and attractive division of property lots, with due consideration for the topography of their location and the needs of water, sewage, and refrigeration services.

**TYPE OF HOUSES** Naturally, the type of houses built

is determined not only by modern needs, but by the special requirements of a tropical climate. It is planned to use structures of reinforced concrete and glass, provided with refrigeration and in architectural types in keeping with those of the public buildings. Ample gardens will comprise the principal means of beautification for each residence.

**DISTRICTS** Certain districts will feature houses of a definite size, that is, for one or two families. These subdivisions may be recognized on the plan by the size of the property lots. Such a zoning system permits a more accurate estimate of the needs of each district in regard to parks, playgrounds, churches, schools, clubs, theatres, stores, and markets. Bearing in mind the convenience of the populace, one residence district is placed near the Industrial Section, and another, for the greater proportion of the population, near the Commercial Section.

**RECREATION CENTERS** Within the Residential Sections are innumerable parks and plazas which beautify that district and add charm to the city. The city will have approximately 6,200 acres

for a municipal park system. Recreation centers will include 43 parks, 14 playgrounds, 5 golf courses, and 5 large natatoriums at the disposal of the populace. Adjoining the Residential Section are the Botanical and Zoological Parks designed to contain jungle specimens and serve as permanent displays as well recreation centers. Included in this suburban group of features will be the Agricultural School and the Military Field, both located outside of the city limits in order to provide ample space and suitable environment for their activities.



## BEAUTY AND DECORATION

The natural location and topography of the land are the basic factors in determining the beauty of the city. Added to this is the provision of large open spaces such as streets and parks, to avoid a congested appearance, and the further charm coming from artistic plantings of well-cared for trees, shrubs, and flowers.

To preserve ideals of beauty, some architectural control over both private and public building will be necessary. Designs for public edifices and monuments, and for private dwellings, will be subject to approval or revision by a Committee of Special Control, whose functions will be explained later. In general, it will concern itself with preserving the appearance of the commercial center of the city, by regulating the height and grouping of buildings, and the designing of facades, so as to produce a harmonious effect.

INDIVIDUALITY IN ARCHITECTURE      There will naturally be  
an individual develop-  
ment in the style of buildings according to their

purpose. Public buildings, especially, will have an opportunity to demonstrate the best architectural expression and serve as inspiration for the rest of the city in this regard.

**BEAUTY IN THE DISTRICTS**      The districts within the various sections will also be subject to building restrictions that will be preventive rather than creative. For instance, an orderly arrangement of buildings, garden frontages, and a certain uniformity of roof lines will add to the appearance of these districts.

**BEAUTY OF STREET DESIGN**      Another factor contributing to the appearance of the city is the street designs, where pleasing lines and perfectly balanced curves make for convenience and beauty. Obviously the wide intersections, sidewalks and garden strips lend an air of spaciousness.

**DECORATIVE PLANTINGS**      The outstanding element of decoration of streets, parks, and private grounds will be gardens and trees. Some

regulation will be necessary in the selection of trees suitable for commercial or residential districts and for avenues and streets. Again, very careful selection and planting of trees in parks, plazas, and school grounds will serve as examples and inspiration for planting on private property.

**THE WATERFRONT** The portion of the city along the waterfront will receive special attention, since a recreation park and public buildings with a long promenade are planned for this site. The scenic value and natural beauty of this location commend it to this use.

**CIVIC BEAUTY** All these factors will create a high standard of civic beauty and public pride. Each building that rises will be placed in an appropriate setting and the general appearance of the city will inevitably have a beneficial effect on the standard of living in the community. The physical charm of the city will be a constant source of pleasure and inspiration to the populace, since within its commercial aspect, the outstanding characteristic of the city on the Amazon will be its beauty.



## PUBLIC BUILDINGS

In this classification we are noting only the main groups of buildings for public use, such as the Civic Center, the University, and the Stadium. The University will have a capacity for 2,000 students. The Stadium will have a seating capacity for 25,000 people. Following is a detailed description of the first mentioned.

**CIVIC CENTER** This is the principal group, connected by wide, straight avenues to all the focal points of the city and including the City Hall, the Government Building, Court House, Central Library, Theatre, and Auditorium.

In this center the City Hall is distinguished by its tower, which is outstanding in the sky-line since it is the highest of all commercial buildings in the city. This edifice will be of reinforced concrete and glass, with a cement facing in light gray. The first floor and the basement will contain the offices

for the utilities serving the city. The second floor will house the offices of the Mayor, City Council, and directoral department, while the third floor will be reserved for technical offices. The main stairway is austere simple, tiled in marble, and leads to the large foyer and galleries of the first floor from which elevators communicate with the upper floors. The tower has walls of reinforced concrete faced with cement and will have both an elevator and a spiral stairway leading to the very top.

The commission in charge of construction will determine the variety of granite and woods to be used. In general, these materials will be from the local region, especially the woods to be used for the interior decoration. Red cedar or mahogany will be used for all doors and woodwork in the City Council chambers. The use of huito, a white hard wood, and tahuari, itauba, huacapú, all hardwoods, and other soft woods similar to maple, myrtle, and fir will demonstrate the wealth of the country in fine lumber.

Similarly, trees and shrubs in the main Plaza and civic gardens will be specimens brought from even the remotest sections of the forests, in order to display the richness of the plant life of the Amazon Valley.

BUILDINGS OF EDUCATION  
RECREATION AND  
CULTURE

Our city will offer exceptional advantages in education and culture. In addition to the University campus, the public school buildings will serve an estimated enrollment of 30,000 students in 45 grade schools, 2 Junior High Schools, and 3 Senior High Schools.

Twenty churches will supply places of worship for approximately 20,000 or 25,000 persons of different religious faiths. The Central Library with its 5 large branches and 10 smaller community branches will have a capacity of 150,000 volumes.



## ADMINISTRATIVE PLAN

The plan for the City of the Amazon, like that of all cities, is made elastic enough so it may be adjusted to many changes. Consequently an efficient and active municipal organization is necessary and there will be a permanently centralized Planning Commission.

**PLANNING COMMISSION**      The function of this Commission of control will be to (a) protect the general city plan while making necessary adjustments; (b) administer the laws necessary for carrying out civic projects; (c) supervise the financing of the works. The Commission will also have the power to approve the division of districts as need arises to bring them into conformity with the general plan.

**CONTROL OF LAND DIVISION**      It is admitted that, not even with the best plan, is it possible to foresee every development. For this reason

the districts are subdivided with some view to the future, with provision made for parks and other public works. This task will fall to the lot of the above mentioned Planning Commission, who will see that the subdivisions agree with the civic plan and with the location and boundaries of parcels of land.

**DISTRICT ADMINISTRATION**      The districts will need to be managed by an administration of liberal restrictions. Only thus can one avoid the encroachment of commercial, industrial, or other pursuits, beyond their prescribed areas.

**RENTAL SYSTEM**      These expenses for the works or public improvement will be met by the usual sources of income and according to regular municipal procedures, in addition to that derived from rentals based on localities and situations. Much economy may be introduced by this method as a better and more scientific development for the land. This system based on location may also include control for future development, with the permanent establishment of smaller section of the city, with sufficient progress, and with the work calculated to meet the cost.

This is naturally a complicated organization

offering numerous services and conveniences, and consequently having a high maintenance cost. Therefore, the responsibility of these functions is assumed by the Municipal Government.

**MUNICIPAL GOVERNMENT** As the true representative of the community, the Municipal Government safeguards public needs and public funds collected by this rent system, so that they will be kept within the limits of what the community is able to pay. Rental rates will be determined somewhat by generally accepted standards, and with carefully administered expenditures, will cover the cost of the construction of public works.

Obviously the administration will need to handle public money as efficiently as possible. Since both the collections of rentals and the execution of public projects will consume a certain amount of time, the city plan needs to control a long term financial program. Particularly, it is necessary to know how municipal expenditures are to be made.

**MUNICIPAL BUDGET** With such a plan to carry out, it would seem that the city budget will be very complicated. In certain aspects it really is,



but the budget is simply knowing and examining the sources of income outside of the budget. Briefly, the budget of the City of the Amazon is a complete financing plan for the municipal government.

ANNUAL BUDGETS        There will be an annual budget, but these will be supplemented by budgets covering longer periods, known as budgets of capital, or "Improvement Programs". This form of budget will be made from the time when work is begun on public projects.

## FINANCIAL PROGRAM

The foregoing program is not sufficient, however, for the current plan of operations and the Improvement Fund, on an annual basis. The issuing of bonds will do much to stabilize the city in the years to come. Adjustments must be made so that the burden of taxes and rentals will not come in one particular year. For this reason, projects and improvements must be selected in the order of their importance and be timed with other finances, so as to keep within the reasonable possibility of payment.

The only solution, then, is to prepare a long term financing program.

LONG TERM FINANCING      In order to carry out a long term plan of public works, a wise selection of projects is necessary. This will necessitate delaying certain works in favor of other more vital or more profitable ones. Consequently, improvements will begin with buildings and streets, leaving playgrounds and parks until later. Thus an adequate and forceful plan

will simplify civic improvements over a long period of time. This modern method of conducting public finances has been used very successfully in many progressive cities, both large and small.

**MAKING A LONG TERM PROGRAM** Each project proposed must be studied in relation to a definite improvement program designed for a five to ten year period. It is nearly impossible to calculate community resources accurately for more than five years and in more than ten years many indirect factors will influence both cost and rents.

The most satisfactory results may be obtained by the following procedure. First: make a program and budget for a five-year period, detailed year by year and project by project. This should be supplemented by an estimate of total cost, based on a group of projects to be constructed in the ensuing five years.

Second: make at the beginning of each year, an exact and detailed program, project by project, an annual budget, and the adjustments of the given program to that budget. A general budget for the five and ten year period should be added. This procedure will assure the municipality of a permanent, detailed program and budget for each



ensuing year as well as one for five years, and a general program for the years. If possible, this plan might be extended over a period of twenty-five years, which would cover the construction of the public works planned.

**WHO PREPARES THE PROGRAM** The best method of getting the program of public works prepared may consist in the cooperation of the chief administrative official of the city, the Financial Body, and the Planning Commission.

The Mayor or City Manager will, in the last analysis, be the executive responsible for the long term financing program. Also, as chief authority for the city and for the budget, he will participate in executing the whole program. Furthermore, the Mayor and the City Engineer or Director of Public Works will likewise be members of the city Planning Commission, to create the greatest possible cooperation.

**PUBLIC COOPERATION** In order to secure public understanding of the city plan and improvements, the community will have the privilege of naming and successively electing an Improvement Program

Committee composed of well-informed citizens, as an aid in assuring public support. This Citizen's Committee should be representative of the various economic interests of the city and region, as well as of the civic and social life of the community.

Genuine cooperation between the city Administration, the Planning Commission, and the Citizen's Committee, will lessen the difficulties which may arise in executing a construction program in a manner acceptable to every one.

It is also advantageous for the Administration to have a plan for future development. Members of this municipal body can assist greatly in eliminating certain evils which almost always beset public undertakings. **First:** by solving problems of public finance at regularly scheduled meetings. **Second:** by replacing personal interest with public interest in all that concerns the program of development and in behalf of the City and the region in general.

## REGIONAL PLAN

Now we have seen what is included in the plan of the City of the Amazon, economic capital of the region and situated 2,000 miles from the mouth of the Amazon River. Let us also take a general view of the situation in regard to the development of this region.

As a result of its location, the city will have various navigation systems connecting it with the exterior and river steamers will connect it with the adjoining towns, islands, and communities on tributary rivers. The economical service of river navigation will be paralleled by automobile highways, joining the city with other towns on the river banks, industrial communities, and plantations.

Briefly, the plan for the city and the region as a whole calls for facilities of transportation, immigration, electric power, and industrial development.

INDUSTRIAL POSSIBILITIES    The project of a city as an industrial center, with transatlantic steamship lines, longitudinal and transverse



highways, situated in an enormous and fertile valley with hundreds of square miles of level land, offers outstanding industrial possibilities.

In the first place, the Amazon River in its whole extent offers excellent fresh water harbors where ships may be manoeuvred on their own power. The routes of rivers tributary to the Amazon offer easy communication with even the most remote districts of the region.

Because of these advantages, it is planned to locate in definite places along the rivers, industries to develop the natural resources, as well as agriculture and stock raising.

**BASIC INDUSTRIES**      The many resources of the region will bring, among other industries, the establishment of wood manufacturing plants. It is estimated that the mills can handle several million feet of lumber per day and give employment to some 80,000 persons. The source of supply for this industry is the large stands of both fine and ordinary timber, consisting of more than 40 varieties.

Another industry based on an inexhaustible supply of raw material and water is the manufacture of wood

pulp, paper, and paste-board. These industries, giving employment to some 15,000 people, and profiting by their river frontage and nearness to high grade wood, will be able to manufacture wood pulp for exportation, as well as paper of the highest quality.

Fishing and canning will comprise another of the major industries, especially along the tributary rivers. This industry should easily employ 40,000 people.

Plantations of rubber, balatta, gutta-percha, and other natural products of the jungle, will be intensively developed and provide a living for 80,000 persons. Plantations of cotton will employ 40,000; those of coffee 40,000; of medicinal plants 10,000; and those of tobacco 15,000.

Stock and wool raising and similar industries will also furnish occupation for 5,000 persons and poultry raising for 5,000.

The raising of grain of various kinds is one of the largest industries and will offer a living to 80,000 people, while the fruit and vegetable industry will use 40,000.

**IMMIGRATION** Knowing the possibilities of industry, agriculture, and stock raising, we can

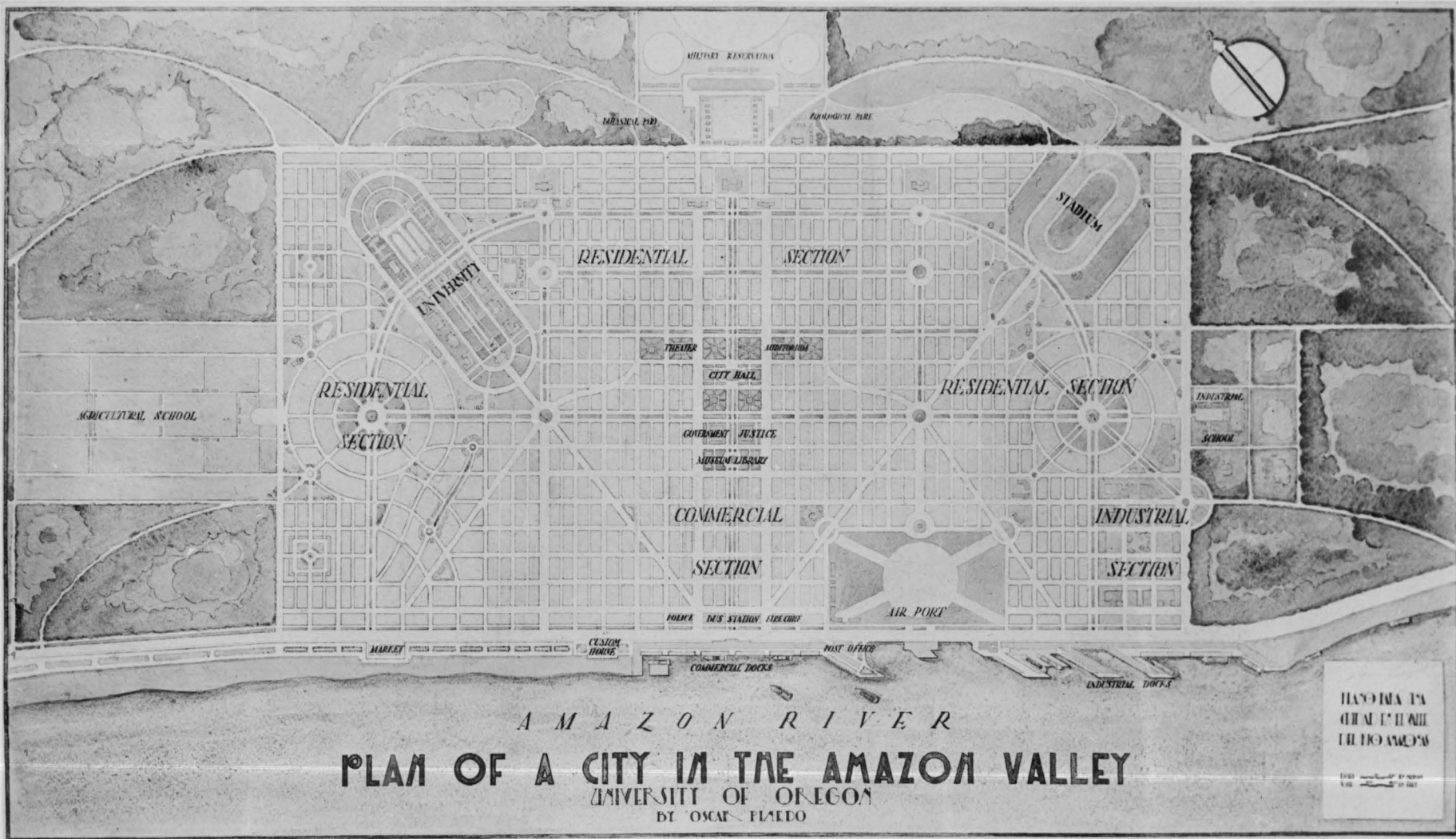
realize that the regional development will depend on the important factor of population. This brings us to the problem of immigration, and selection of immigrants will be a vital subject of study. Such a study will also concern itself with legislation designed to secure as immigrants, persons of definite standards of education, health, economic independence, and certain racial stocks.

In connection with a immigration plan, development of water transportation will require attention. This will necessitate cooperation between the numerous transportation services that form part of the exterior commerce, and which, with the governmental services, will open the Amazon Valley for prosperity in the hands of men desiring peace, work, and happiness.



PLATE NUMBER ONE

The general plan of the City shows principally the three sections: Commercial, Industrial, and Residential, connected by an excellent system of avenues and streets for the easy, efficient, and safe movement of traffic.



AMAZON RIVER  
**PLAN OF A CITY IN THE AMAZON VALLEY**  
 UNIVERSITY OF OREGON  
 BY OSCAR FLAJO

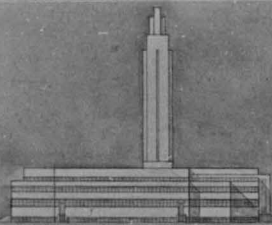
HAZIMA PA  
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PLATE NUMBER TWO

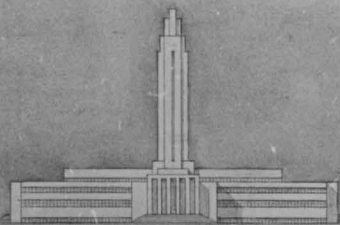
The plans, facades, and sections show the different aspects of the City Hall, designed for public service in development of the City and the surrounding region.



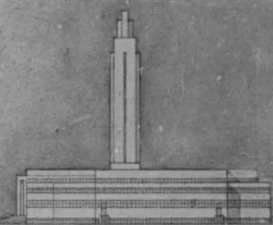
# CITY HALL OF AMAZON CITY



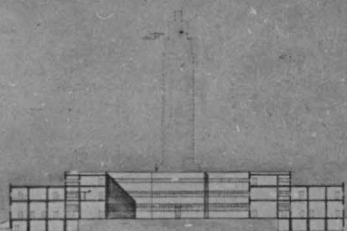
ELEVATION N.W.



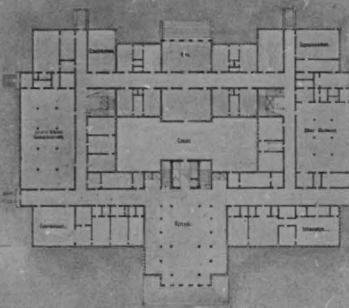
ELEVATION S.W.



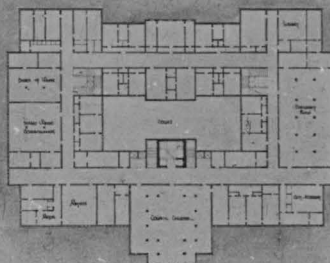
ELEVATION S.E.



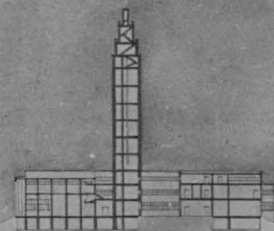
SECTION



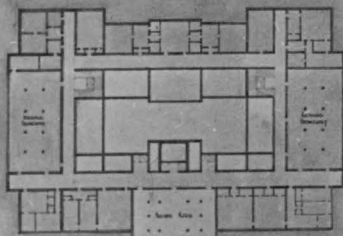
FIRST FLOOR PLAN



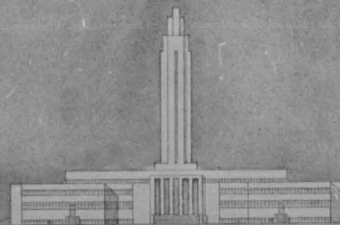
SECOND FLOOR



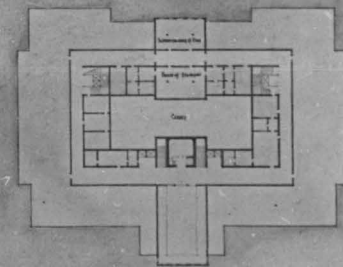
SECTION



THIRD FLOOR



ELEVATION N.E.



THIRD FLOOR

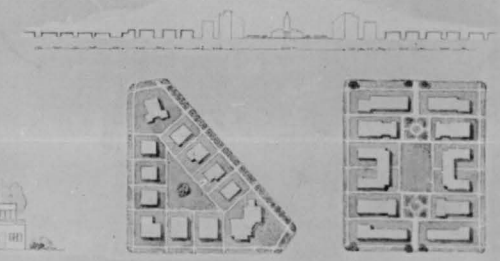
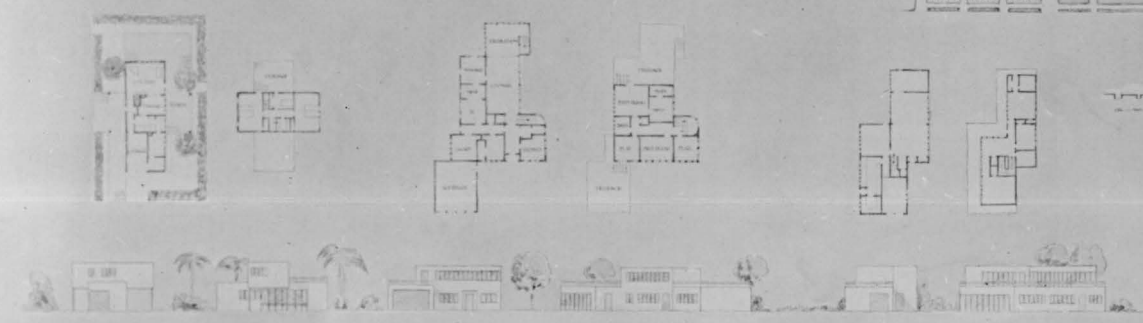
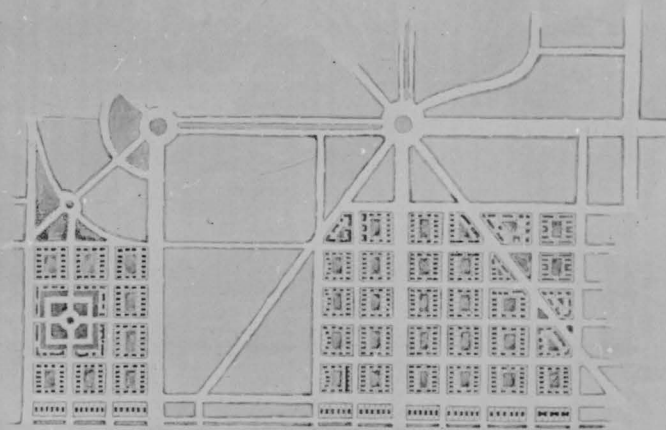
BY OSCAR PINEDO

UNIVERSITY  
OF  
OREGON

PLATE NUMBER THREE

The Housing Plan indicates the division of the districts, subdivision of blocks, and type of houses. The skyline shows the heights of commercial buildings as compared with the City Hall.

# Housing for an Amazon City



UNIVERSITY OF OREGON

by Oscar Pinado/1950

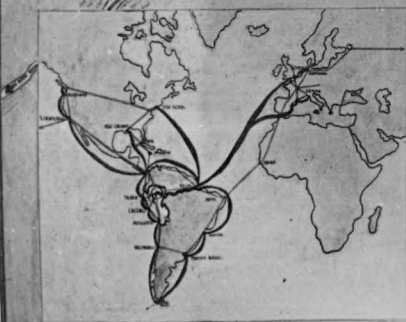
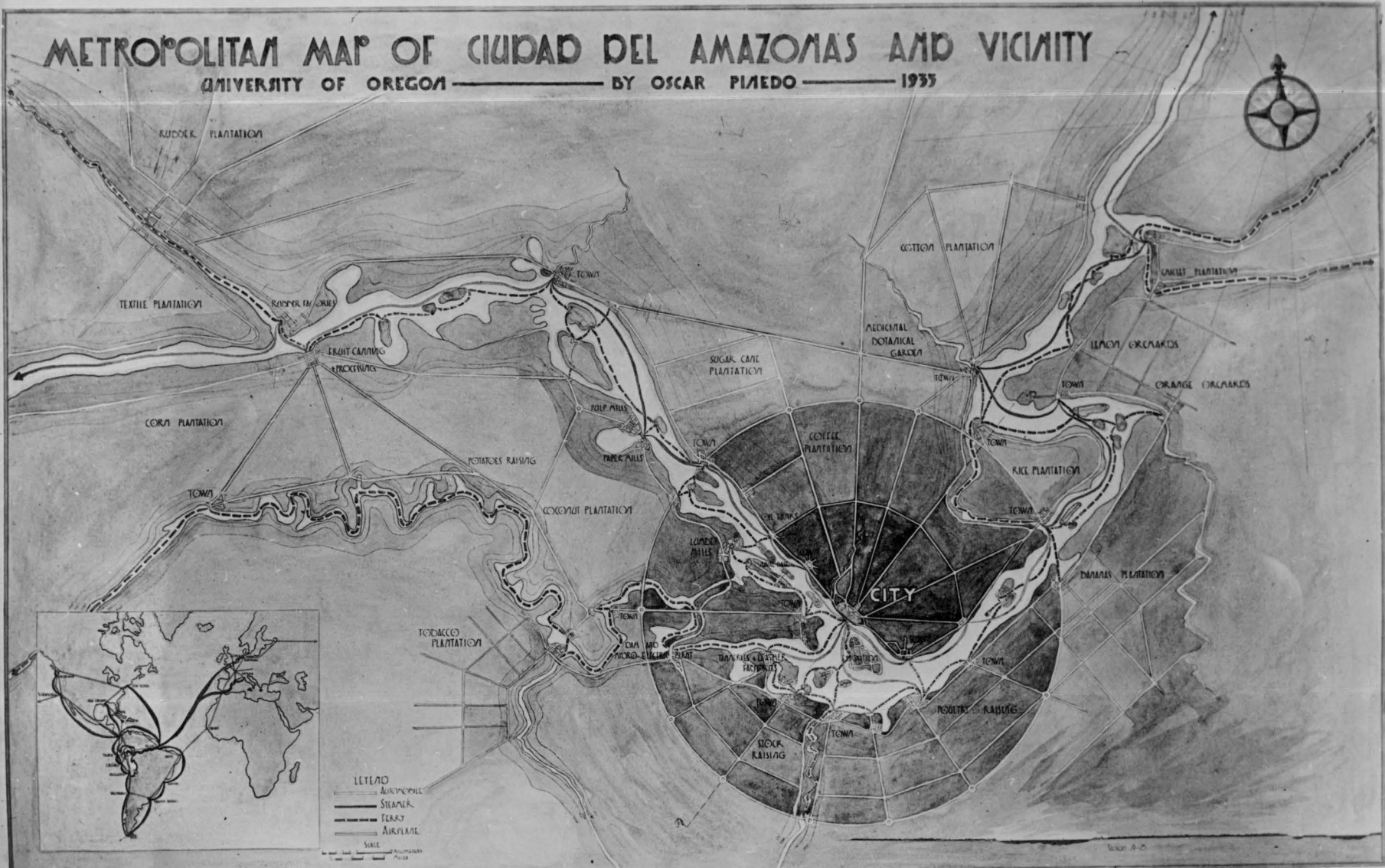


PLATE NUMBER FOUR

The Regional Plan represents the City in relation to adjoining industrial towns and plantations, as well as lines of communication by water, land, and air, connecting it with the outside world.

# METROPOLITAN MAP OF CIUDAD DEL AMAZONAS AND VICINITY

UNIVERSITY OF OREGON — BY OSCAR PINEDO — 1935



- LEGEND
- RAILROAD
  - STEAMER
  - TRUCK
  - AIRPLANE
  - RAIL
- Scale: 1:100,000

Sheet A-25

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Typed by Oscar Pinedo