

Chapter 9

MARKET FACILITIES

9-1. General

A new market area is proposed for inclusion in the overall redevelopment of Barranquillita as one of the six major projects. The market is intended to benefit street and public market vendors as well as the existing and proposed commercial zones.

9-1-1. Relocation and Reorganization

The public market is currently located along the Mercado Canal between Cra 42 and Cra 44. The sanitary condition of the current public market is seriously deteriorated due primarily to the contamination of the Mercado Canal. The streets are not paved and the maintenance of the structures is negligible. The Canal has become not only a physical barrier, but a psychological barrier which decreases the public's interest in going to the market to buy their products and other commodities.

It is proposed that the public market be relocated to the south-west part of the project area.

The relocated market area is bordered on the west and north by two proposed pedestrian streets, Calle 28 and Cra 42, respectively. Calle 6 borders the east end of the market area. The market area is L-shaped; one block of the southern border (from Calle 28 to Calle 9) is Cra 38 while the remaining blocks (from Calle 9 to Calle 6) are bordered by the proposed Arriba Canal Park and wharf area. This locates the eastern-most block of the new market facility in between the wharf and the inter-municipal bus terminal.

This location will improve market accessibility, remove the barrier between the central district and the market now created by the contaminated canal, and provide a newer, cleaner environment.

It is also proposed that street vendors, who are currently located on the sidewalks and streets of the central district, also move to the new market area. Their stands disrupt both pedestrian and vehicular traffic in the central district as well as detracting from other commercial enterprises.

Although the vendors in the public market have an organization responsible for administrative functions, this organization is poorly managed and provides few benefits to the vendors. Street vendors, on the other hand, have no organization to provide accountability for their sales, rental of space, licensing, etc.

In addition to the proposed relocation of the vendors, the creation of an administrative body is proposed. Reorganization will improve profitability, accountability, and provide needed benefits to the vendors within the new market system.

9-1-2. Market Accessibility

The relocation will benefit vendors by moving them closer to wharf and bus terminal facilities. Commodities will be received at these two facilities and easily transported to the marketplace.

Not only will the relocation improve the vendors' access to goods and commodities shipments, but the new location facilitates customer access to the marketplace. Both the bus terminal and the network of pedestrian streets increase customer accessibility.

Benefits to be gained due to relocation and the increased accessibility it provides are projected as higher profitability for both the individual vendors and the market organization as a whole.

9-1-3. Public Market and Open Market

It is proposed that the market be divided into two areas: one area to be known as the Public Market where vendors in the current public market will be relocated; the second area, to be known as the Open Market, is where street vendors, currently located in the central district, will be relocated.

The public market vendors and street vendors sell many of the same goods and commodities. However, the two groups of vendors are differentiated in the following respects:

a. Organizational Structure

Public market vendors have an administrative organization, whereas street vendors do not currently have one.

b. Location

Vendors in the public market are located in close proximity to the canal which at one time had provided shipping access to the market area.

Street vendors are located in close proximity to the central district's commercial area to take advantage of the number of shoppers in the area.

c. Number

1,600 vendors are now located in the public market next to the Mercado Canal.

Approximately 7,600 street vendors currently have stands and carts in the area around the Mercado Canal.

The factors characterizing the two groups separate them as much as their locations on either side of the canal do. The street vendor competition has contributed to the deterioration of the public market. Separation and competition are both planning considerations.

9-1-4. Market Facilities Planning Considerations

When the factors which characterize and differentiate the two vendor groups were considered, the two were separated for planning purposes. Initial planning premises took into account current organizational structures, apparent location preferences, and the number of vendors to be accommodated.

The market will relocate current public market vendors in five enclosed structures in the eastern-most block of the market area in between the bus terminal and the wharf. These five structures are known as the Public Market. The Public Market provides the vendors with access to the wharf shipments they had prior to the Mercado Canal contamination, and it provides an organized facility separated by Calle 8 from the area where the street vendors will be located.

Street vendors will be organized west of Calle 8 in the market area. Their area is known as the Open Market. This name is descriptive of the different physical structure of the area (no enclosed buildings), and also of the flexibility it provides. The Open Market will be located in a three block area within three distinct types of selling areas:

- a. An open plaza providing flexible organization of stalls and carts
- b. Roofed extensions of the pedestrian network which will form corridors to the vendor stalls arranged around them
- c. Roofed structures with flexible stall distribution inside

The Open Market will be located in close proximity to the current and projected commercial districts.

FIG. 9-1 shows the locations of the Public Market and Open Market. Also indicated is the pedestrian network which will lead pedestrians from one area of the market to another. Also indicated in FIG. 9-1 is the location of the proposed commercial district which will be discussed in more detail in section 9-4 (Importance of Public and Open Market to

Overall Redevelopment of the Project Area).

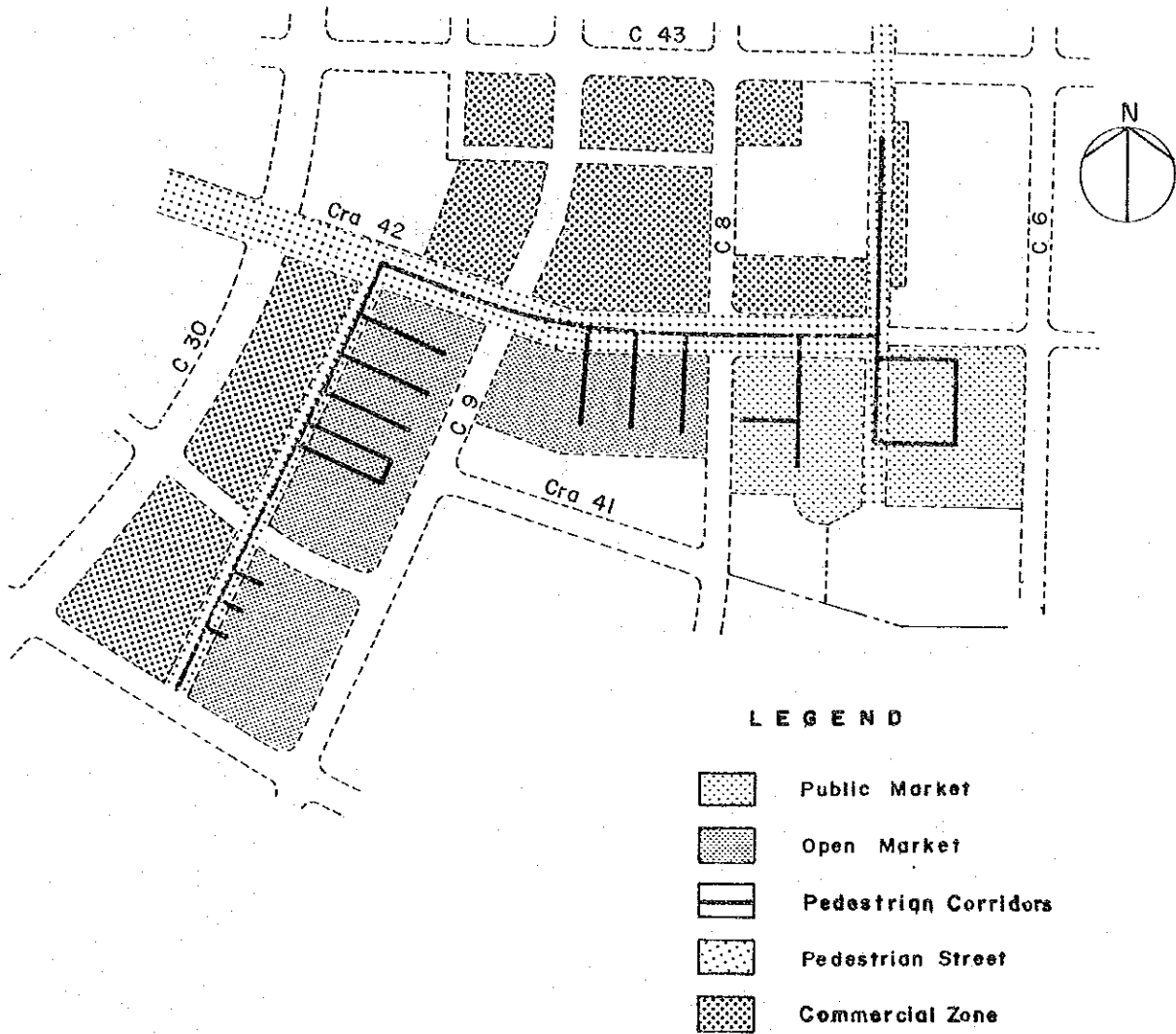


FIG. 9-1 PUBLIC MARKET AND OPEN MARKET LOCATIONS SHOWING RELATIONSHIP TO PROPOSED COMMERCIAL ZONE

9-1-5. General Organization Design Criteria

In addition to location considerations, the following are considered as a general organization design criteria:

- a. To provide the two organized markets with an administration facility
- b. To provide space for vendor stalls
- c. To provide shipment transport operation space, unloading platform, and warehouses where the commodities may be labeled and stored.
- d. To provide machinery rooms, storage rooms and any other related spaces to provide complete maintenance for the total organization.
- e. To provide an garbage collection facility for trash disposal
- f. To provide a facility for health care services
- g. To provide public bathrooms

FIG. 9-2 indicated the locations of the Public Market buildings and the Open Market areas and structures. Each structure will be described in detail in Sections 9-2 and 9-3.

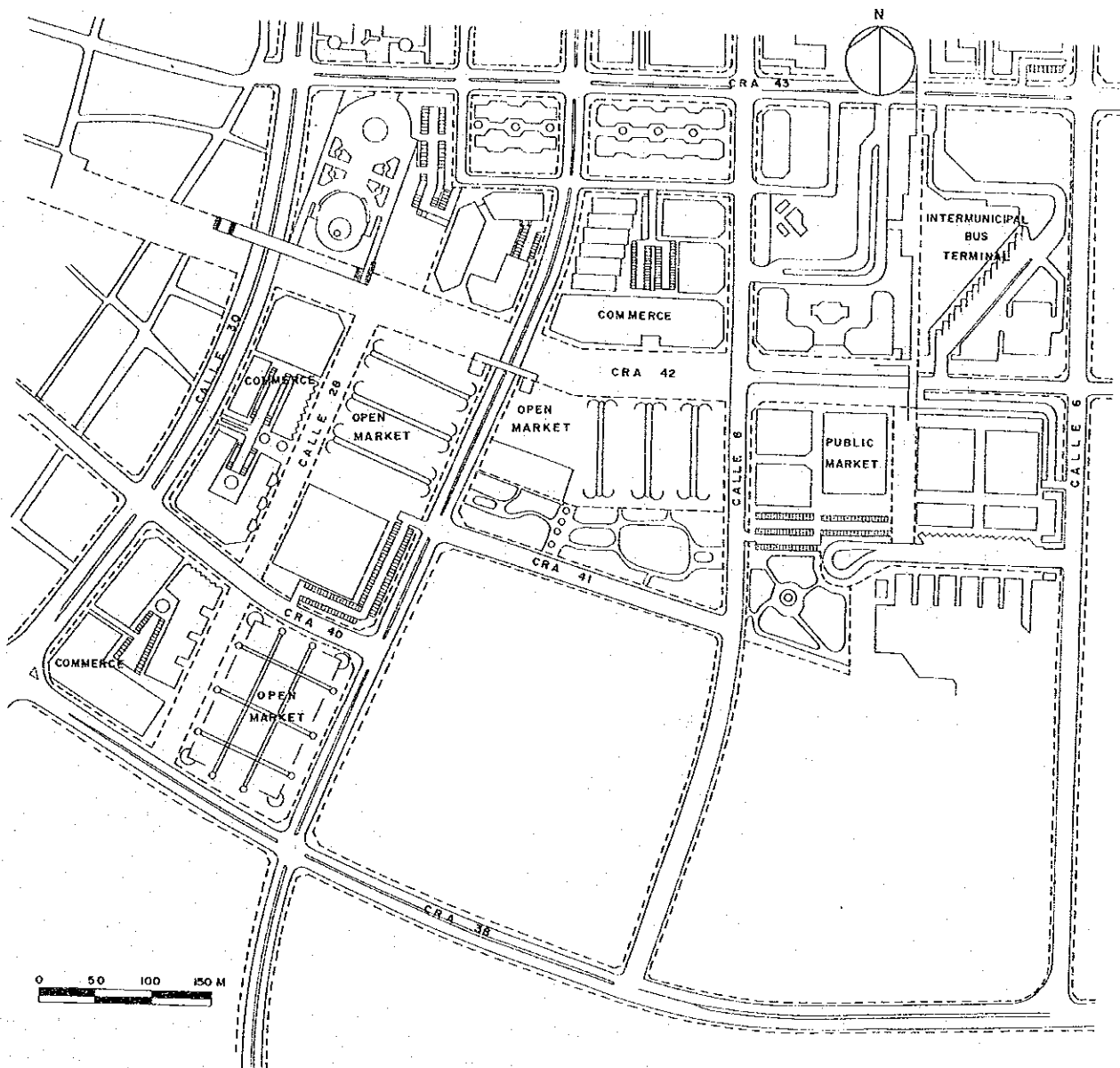


FIG. 9-2 LOCATIONS OF PUBLIC MARKET AND OPEN MARKET STRUCTURES

9-2. Public Market

The reorganization of the Public Market is intended to increase accessibility and sales, and to improve the welfare of vendors. Its location increases its accessibility and its structure and organization is intended to provide the additional benefits.

9-2-1. Structures in the Public Market

All design criteria and planning factors were considered in the layout and design of the Public Market. FIG. 9-3 and FIG. 9-4 indicate how this area not only provides the vendors with adequate space, but provides organizational facility space. The Public Market area is comprised of eight buildings shown here corresponding to FIG. 9-3 and FIG. 9-4:

- A. An administration building (building # 1)
- B. Five vendor market buildings (buildings # 2, 3, 4, 5, and 6)
- C. Two warehouse/distribution center buildings (buildings # 8)

9-2-2. Administration Building

This is a two storey building. The first floor houses the maintenance storage rooms, repair shops, and garbage collection depot necessary for maintaining the marketplace environment. In addition, marketplace maintenance employees may use the provided facilities for changing, showering and relaxing.

The second floor of the building is where the market administration offices are located. Included are the offices for the Market Manager, the Accounting Department, Accounts Payable office workers, and other support personnel. A meeting room, kitchenette, and bathroom facilities are also provided in the office area of the Administration building.

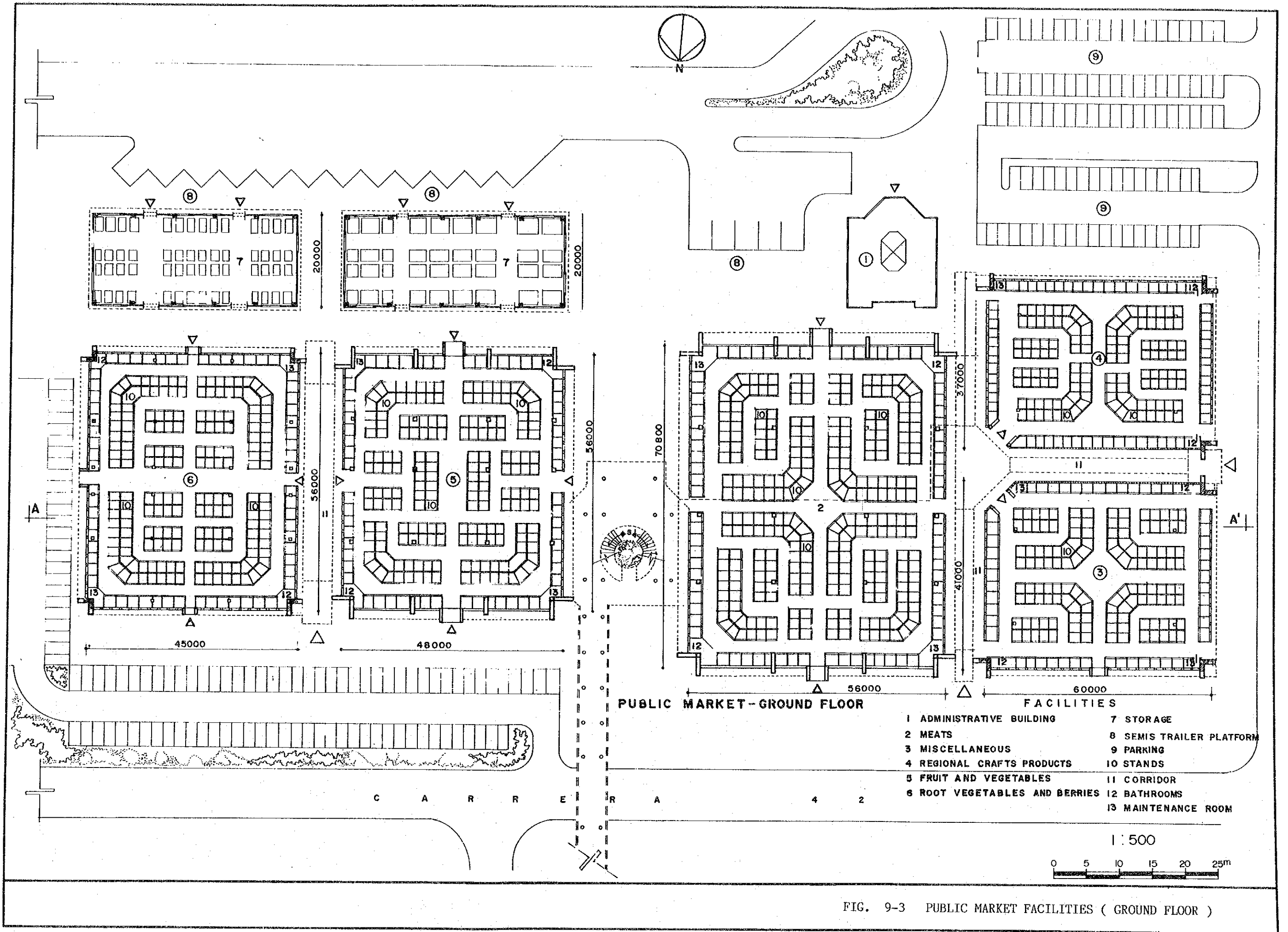


FIG. 9-3 PUBLIC MARKET FACILITIES (GROUND FLOOR)

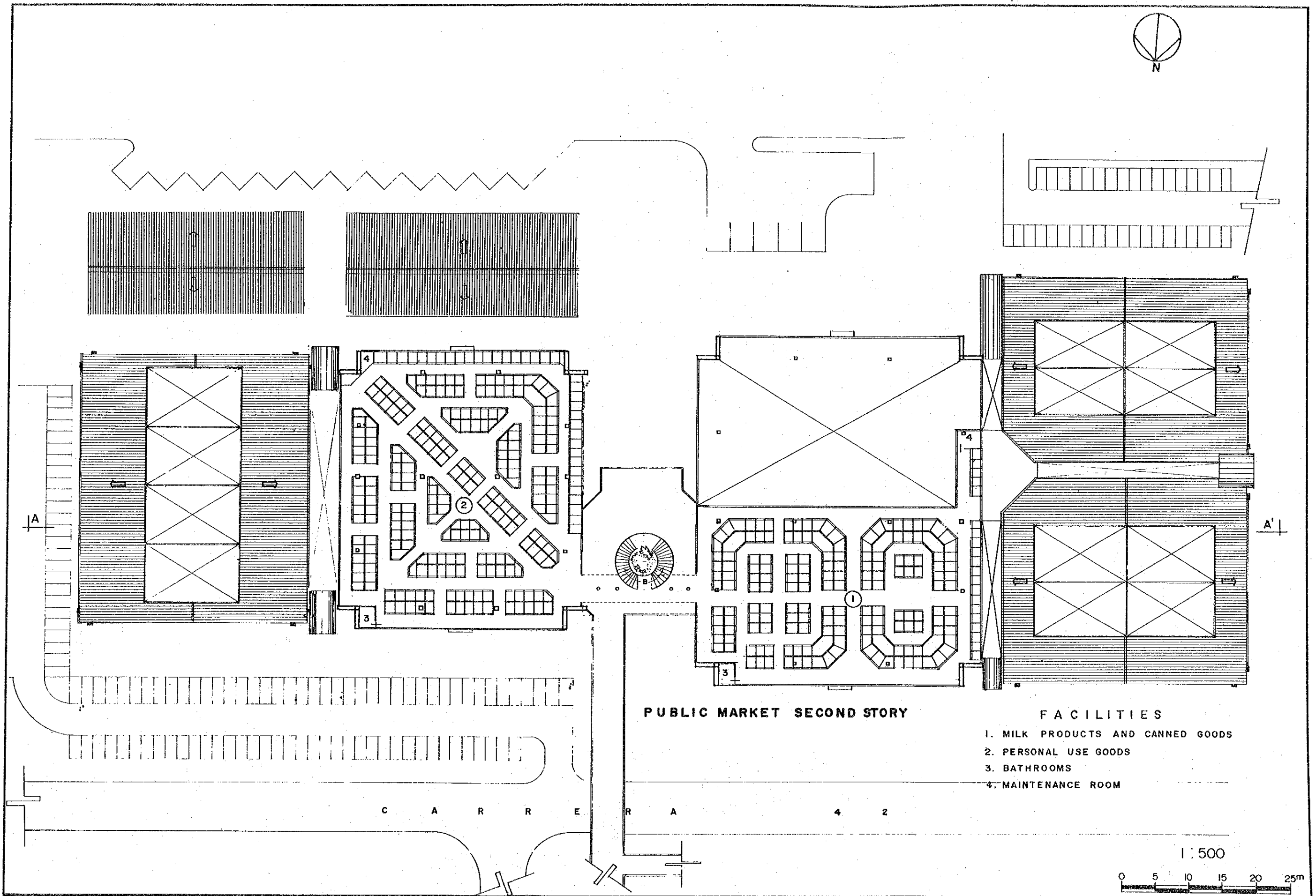


FIG. 9-4 PUBLIC MARKET FACILITIES (SECOND STORY)

9-2-3. Market Buildings

The five buildings in which the vendors will be located will be supplied with stalls built to accommodate the types of commodities being sold. The kinds of commodities considered in planning the size requirements of the stalls is shown in FIG. 9-5.

The organization of stalls inside each market building is approximately the same with some modifications based on the commodities being sold. Vendors will be selling perishable and non-perishable commodities. Selling perishables will require water and electricity for refrigeration. Meat, fish, fruit and vegetable stands fall into this category. Whereas vendors selling clothing, cosmetics and personal hygiene products, boxed and canned foods, crafts, and other non-perishable commodities, will not require connection to utilities. Various types of stands are shown in FIG. 9-6.

Each of the five market buildings will be provided with maintenance rooms and bathrooms.

9-2-4. Warehouse/Distribution Center Buildings

These buildings will provide cold storage of commodities received for distribution to individual vendors in the Public Market.

The following pages contain drawings of the Public Market facilities including an elevation perspective with construction specifications indicated. (FIG. 9-7)








PRODUCT	PACKING	MEASURES	AREA	VOLUME	SELLING STAND
Orange	 BULK	.30X.60X.70ML	.18M ²	.126M ³	Potatoes, Yuca, Platano
Potatoes		.30X.60X.80ML	.18M ²	.144M ³	Fruit and greens
Plantain		.30X.40X.45	.12M ²	.054M ³	Panela
Greens beans		.30X.60X.35	.18M ²	.63 M ²	Potatoes, greens
Berries	 HALF BULK	.30X.60X.40	.18M ²	.72M ³	Granary
Tomatoes	 CRATE	.25X.60X.50	.15M ²	.75M ³	Fruit
Mango					
Fruit					
Tangerines					
Flowl	 BASKET	.80X.800	.50M ²	.40M ³	Fowls
		11.20X.800	.50M ²	.40M ³	Fowls
Papaya	 WOOD BOX	.25X.60X.50	.15M ²	.75M ³	Fruit
Watermelon		.60X.80X.50	.48M ²	.24M ³	Fruit
Melon					
Eggs	 CARBOARD BOX	.30X.50X.40	.15M ²	.060M ²	Eggs
Berries- General		.30X.60X.80	.18M ²	.44M ³	Granaries

FIG. 9-5 PACKING TYPES IN THE PUBLIC MARKET

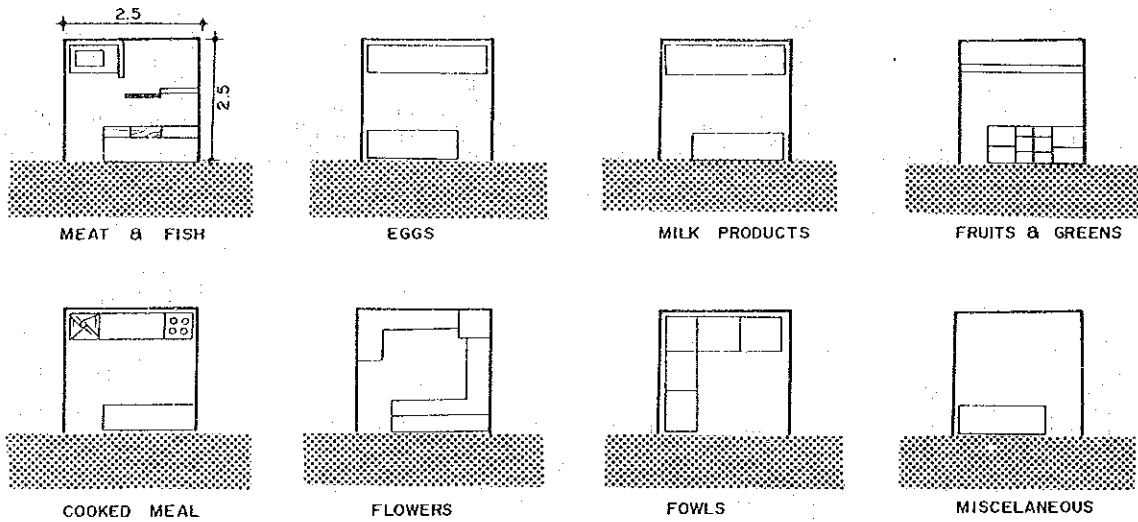


FIG. 9-6 SPACE REQUIREMENTS FOR PUBLIC MARKET

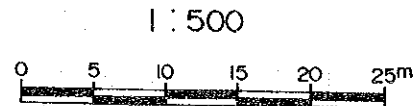
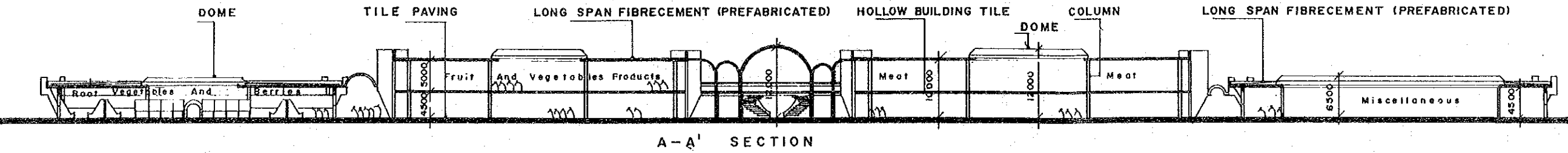
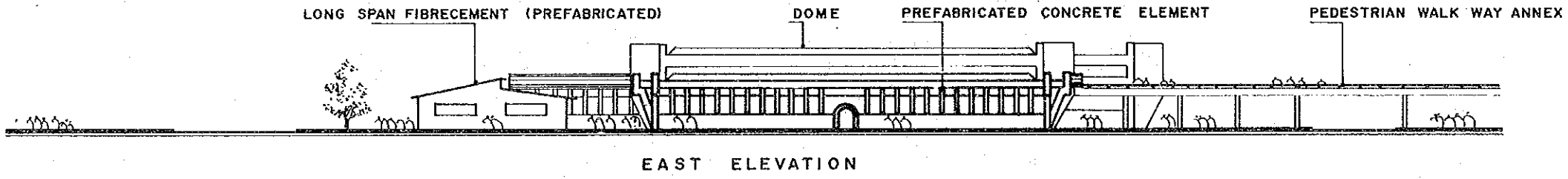
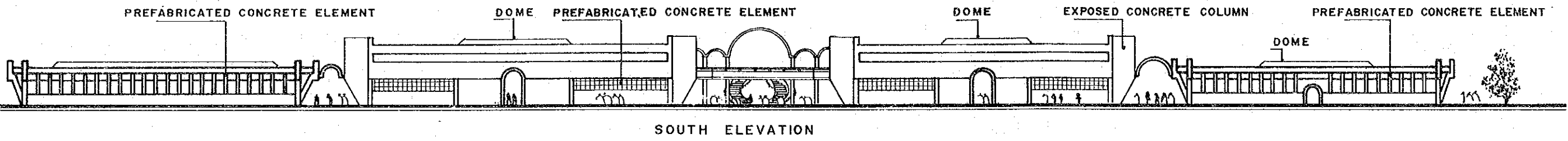
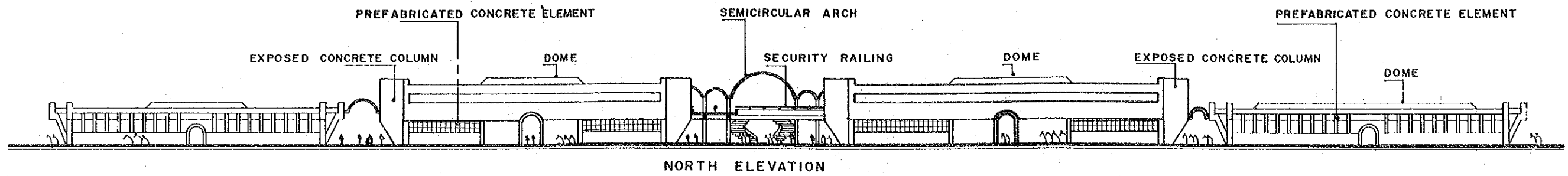


FIG. 9-7 PUBLIC MARKET CONSTRUCTION SPECIFICATIONS

9-3. Open Market

The Open Market is intended to organize the currently independent vendors and provide them with services not currently available because of their lack of organization. Their relocation will help to alleviate sidewalk congestion in the central district. However, it is projected that their relocation as the center of the existing and proposed commercial areas will further help to bridge the gap that exists between Barranquillita and the central district.

9-3-1. Structures in the Open Market

The Open Market will function in three blocks. There will be five selling areas with three characteristic types:

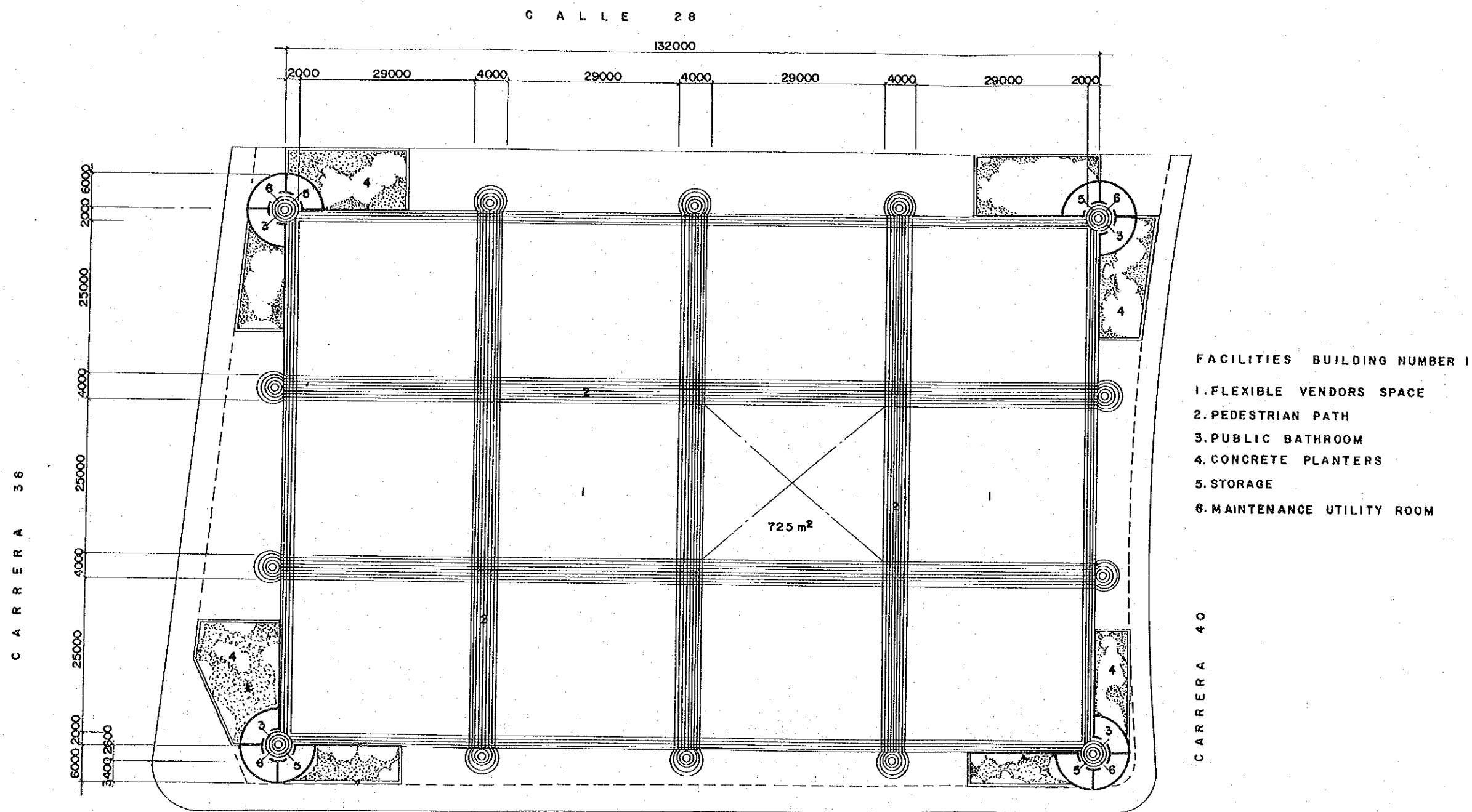
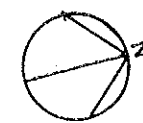
1) Type A

One area of the Open Market is characterized as Type A. It is located on the block northwest of the intersection formed by Cra 28 and Calle 17. This area has been designed to accommodate vendors with carts or mobile stands as well as stationary vendors. It provides the most flexible arrangement for vendors in the Open Market. The area is essentially a square or plaza with pedestrian pathways forming a cross hatch pattern. This affords vendors stand arrangement flexibility.

The only structural elements in Type A are located on the corners of the square where storage and bathroom facilities are located.

The square will accommodate approximately 2,300 vendor stands.

See FIG. 9-8 for a representation of the Open Market Type A design.



- FACILITIES BUILDING NUMBER 1
- 1. FLEXIBLE VENDORS SPACE
 - 2. PEDESTRIAN PATH
 - 3. PUBLIC BATHROOM
 - 4. CONCRETE PLANTERS
 - 5. STORAGE
 - 6. MAINTENANCE UTILITY ROOM

OPEN MARKET A TYPE

CALLE 9

EXTERNAL BRICK SKIM

1 : 500



FIG. 9-8 OPEN MARKET (TYPE A)

2) Type B

Two of the five areas comprising the Open Market are characterized as Type B. One is located in the block to the south-west of the corner formed by the intersection of Cra 42 and Calle 9 and the other is located on the block to the south-west of the intersection formed by Cra 42 and Calle 8. Pedestrians are guided through these market areas by three extensions of the pedestrian network which are roofed in the market area to indicate a mall arrangement.

Vendors will be located in tented structures on either side of each of the roofed pedestrian passageways. Their stands will be organized according to commodity and stand size to conform with these structures. At the ends of each roofed pedestrian passageway are structures housing bathrooms, kiosks, and storage space for the vendors.

Between 1,200 and 1,600 vendors will be housed in each of the two areas.

See FIG. 9-9 for a representation of the Open Market Type B design. An elevation perspective follows in FIG. 9-10.

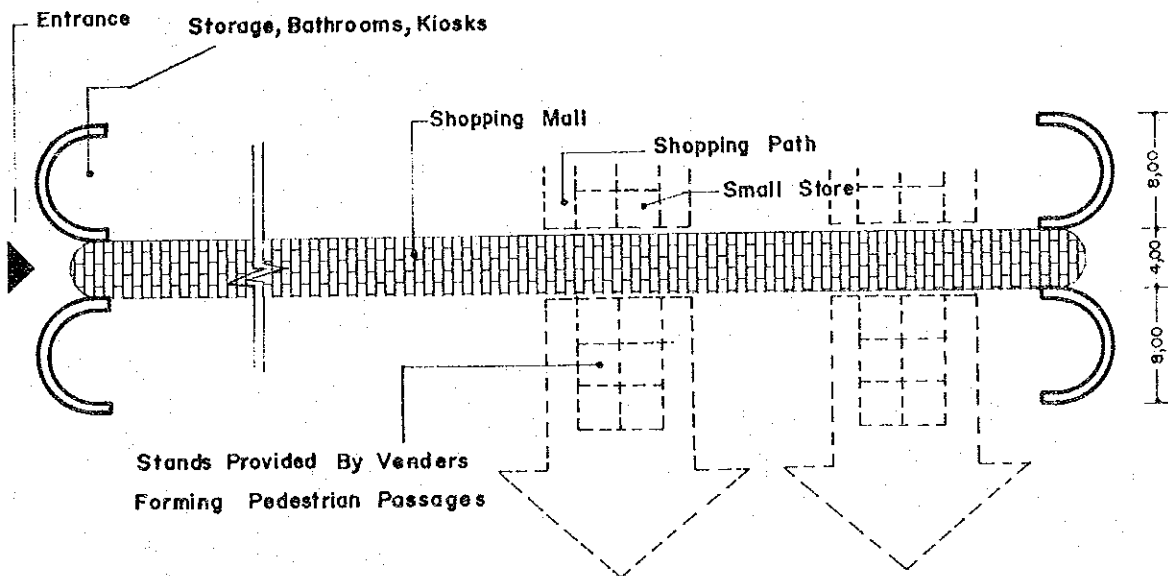


FIG. 9-9 OPEN MARKET (TYPE B)

3) Type C

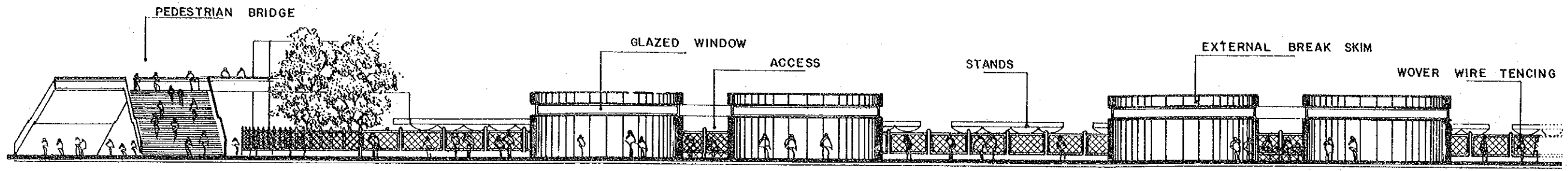
Two of the five areas comprising the Open Market are characterized as Type C. One is located in the block to the north-west of the corner formed by the intersection of Cra 40 and Calle 9 and the other is located on the block to the south-east of the intersection formed by Cra 42 and Calle 9.

These are roofed buildings with stalls, maintenance rooms and bathroom facilities similar to those found in the Public Market. Stands will be arranged within the structures organized by size and type of commodity.

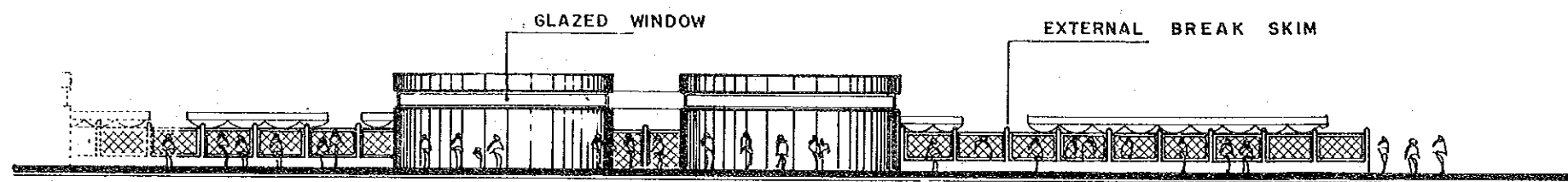
These buildings are expected to house between 400 and 800 vendors each.

See FIG. 9-11 and FIG. 9-12 for a representations of the two Open Market (TypeC) buildings including construction specifications.

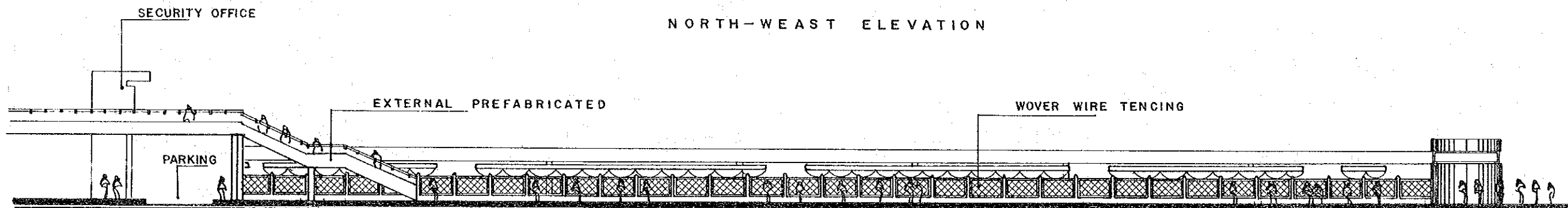
See FIG. 9-13 and FIG. 9-14 which indicate stall distribution in the Open Market Type B and C facilities.



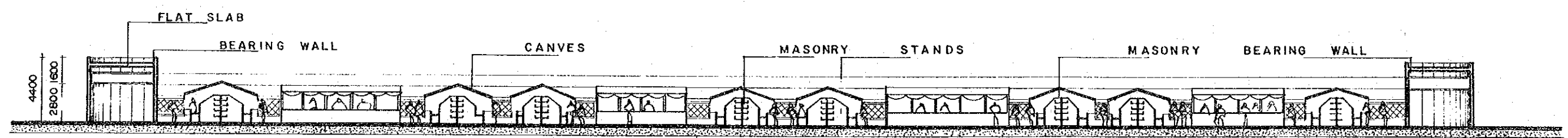
OPEN MARKET BUILDING N° 3
NORTH-WEAST ELEVATION



NORTH-WEAST ELEVATION



NORTH ELEVATION



OPEN MARKET BUILDING N° 3
SECCION A-A'

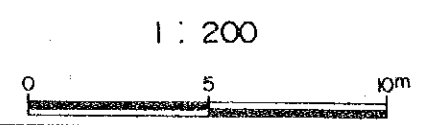
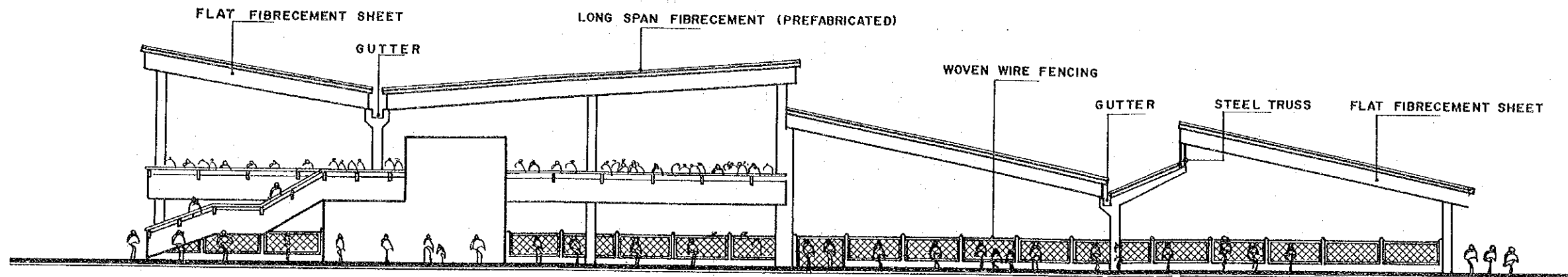
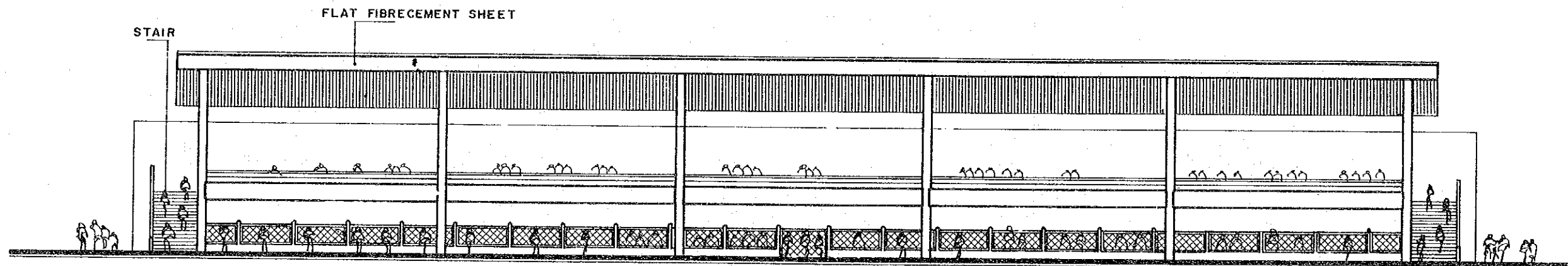


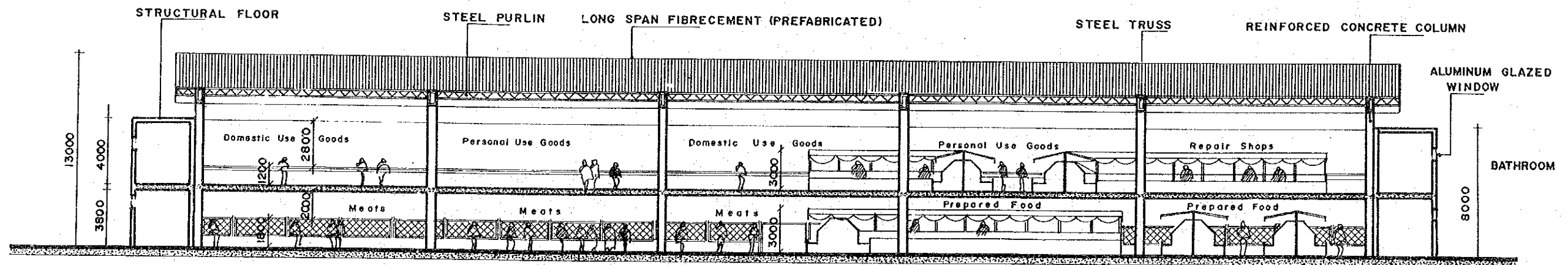
FIG. 9-10 ELEVATION PERSPECTIVE OF OPEN MARKET (TYPE B)



OPEN MARKET BUILDING No 2
SOUTH WEST ELEVATION



OPEN MARKET BUILDING No 2
NORTH WEST ELEVATION

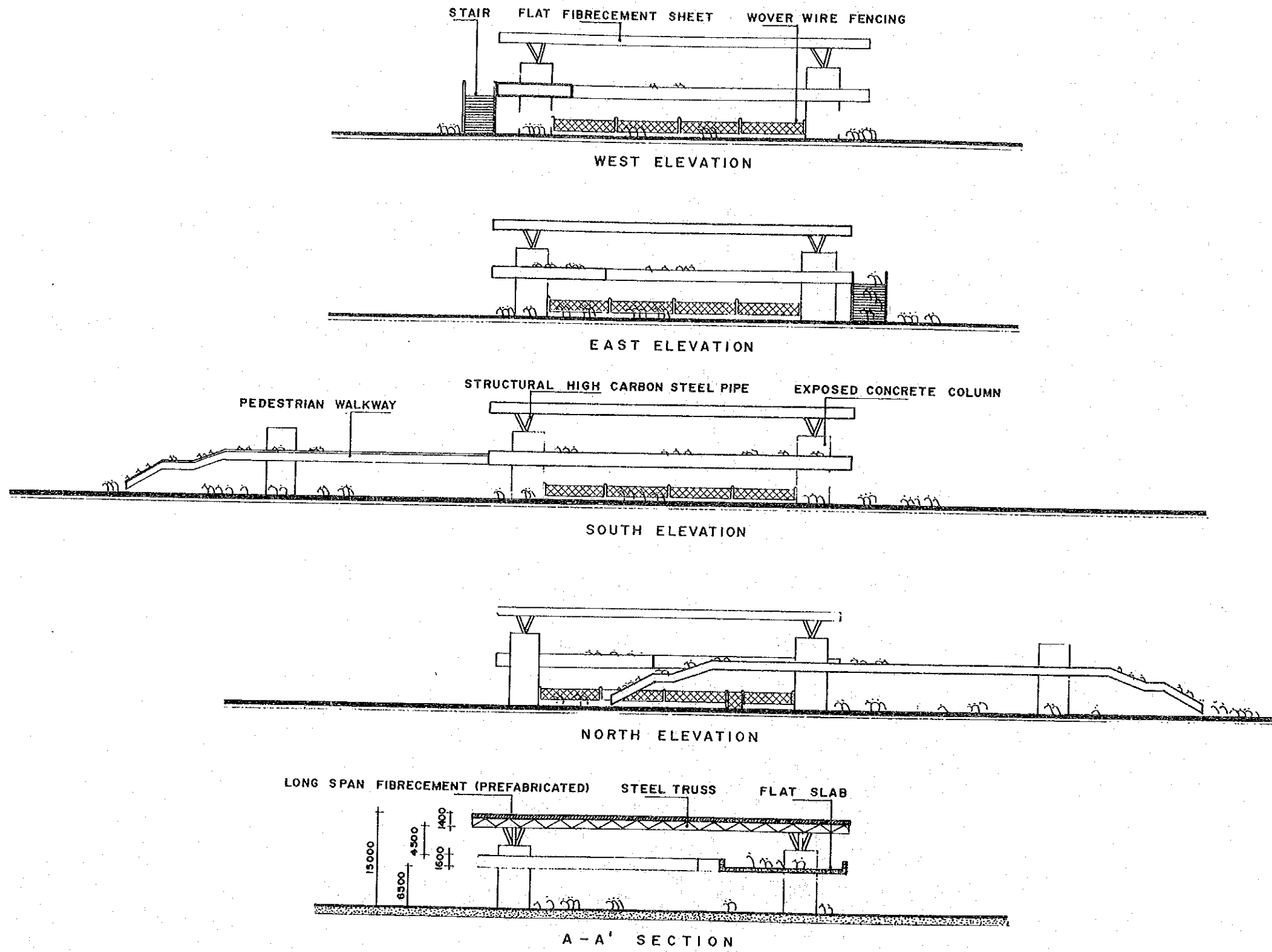


OPEN MARKET BUILDING No 2
SECTION B-B'

1 : 200



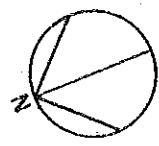
FIG. 9-11 OPEN MARKET (TYPE C)



1:500

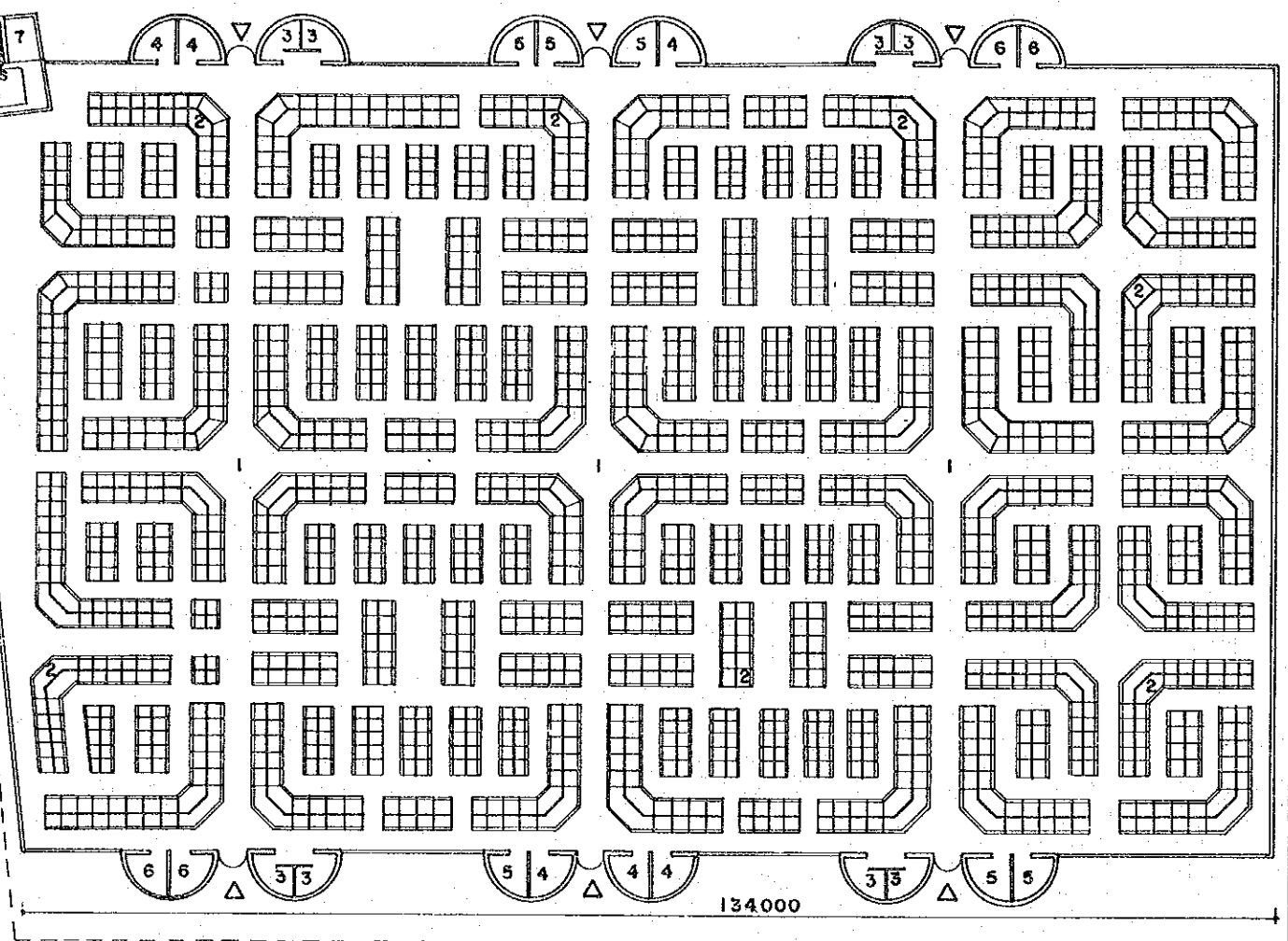


FIG. 9-12 OPEN MARKET (TYPE D)



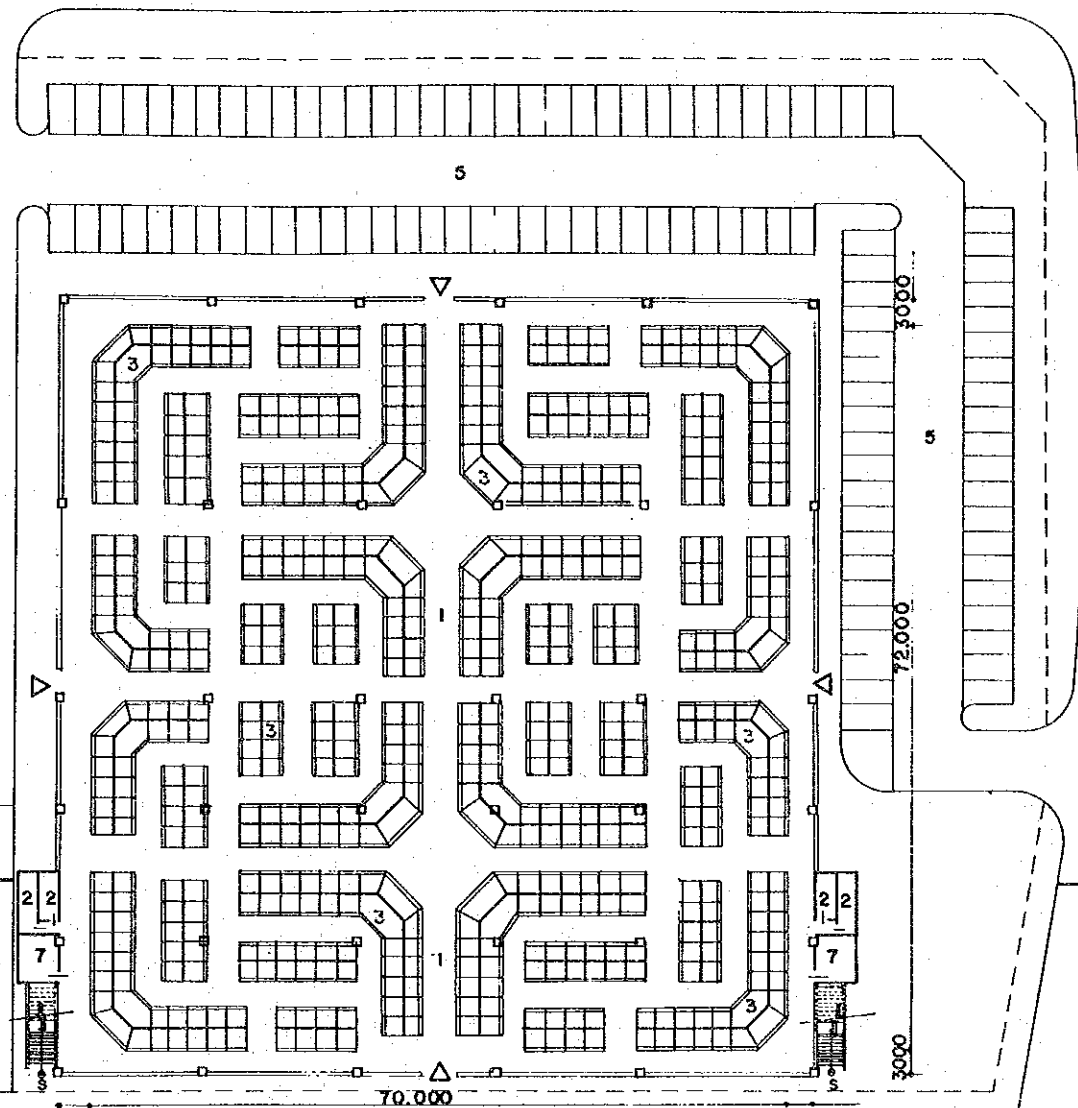
A

CALLE 17



OPEN MARKET B TYPE

- FACILITIES - BUILDING NUMBER 3 CALLE 28
- 1. PEDESTRIAN CORRIDOR
 - 2. STALLS
 - 3. PUBLIC BATHROOM
 - 4. KIOSCO
 - 5. STORAGE
 - 6. MAINTENANCE UTILITY ROOM
 - 7. SECURITY OFFICE



OPEN MARKET C TYPE

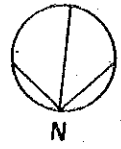
- FACILITIES - BUILDING NUMBER 2
- 1. PEDESTRIAN CORRIDOR
 - 2. PUBLIC BATHROOM
 - 3. STALLS
 - 5. CUSTOMER PARKING LOT
 - 6. DELIVERY AREA
 - 7. STORAGE

1 : 500

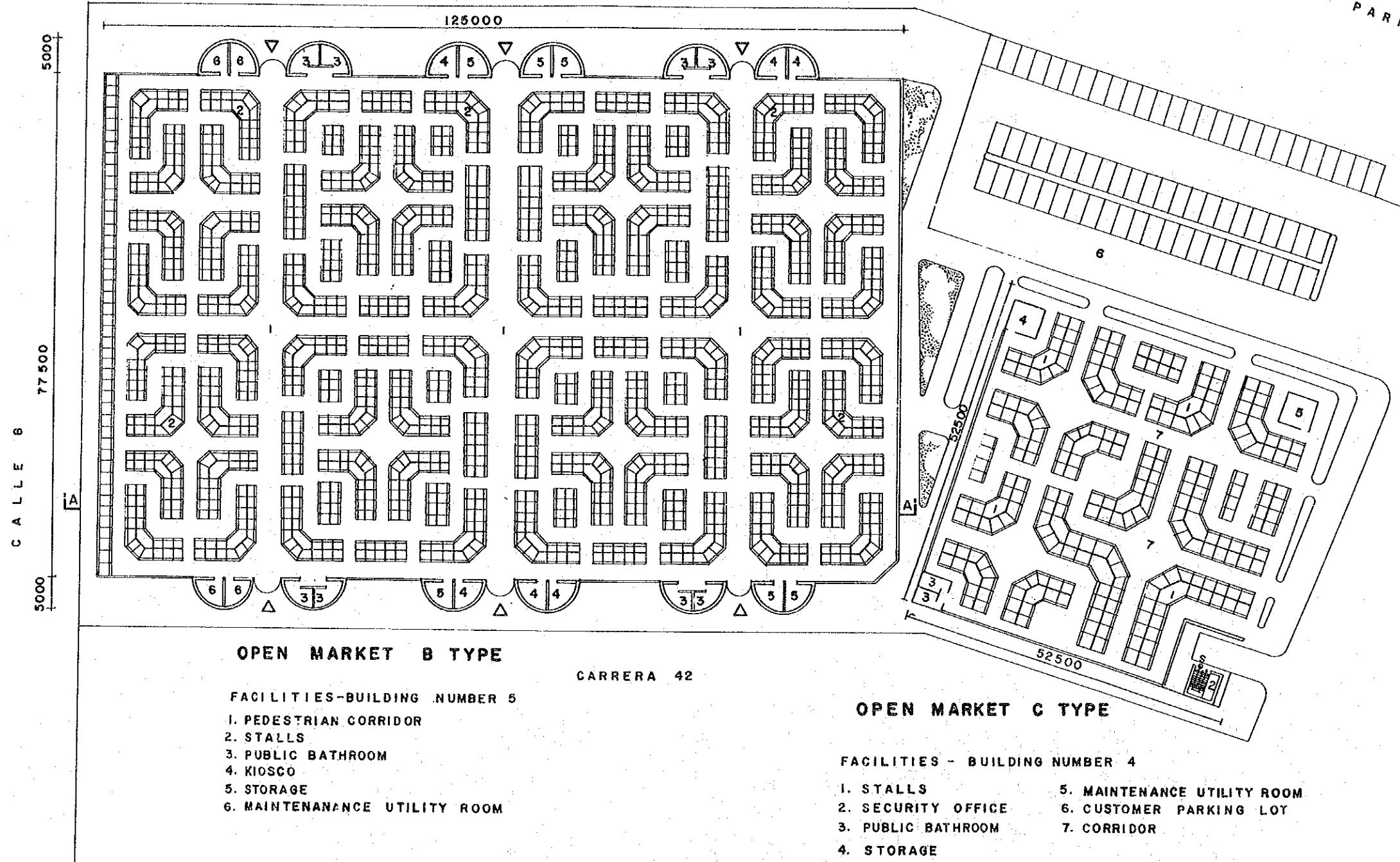


FIG. 9-13 OPEN MARKET (TYPES B AND C) STALL DISTRIBUTION

C A Ñ O A R R I B A P A R K



C A Ñ O A R R I B A P A R K



OPEN MARKET B TYPE

CARRERA 42

FACILITIES-BUILDING NUMBER 5

- 1. PEDESTRIAN CORRIDOR
- 2. STALLS
- 3. PUBLIC BATHROOM
- 4. KIOSCO
- 5. STORAGE
- 6. MAINTENANANCE UTILITY ROOM

OPEN MARKET C TYPE

FACILITIES - BUILDING NUMBER 4

- 1. STALLS
- 2. SECURITY OFFICE
- 3. PUBLIC BATHROOM
- 4. STORAGE
- 5. MAINTENANCE UTILITY ROOM
- 6. CUSTOMER PARKING LOT
- 7. CORRIDOR

1 : 500



FIG. 9-14 OPEN MARKET (TYPES B AND C) STALL DISTRIBUTION

9-4. Importance of Public and Open Market to Overall Redevelopment of the Project Area

The proposed market area is a means by which the physical and psychological barrier now separating the existing central district from the project area may be removed. Aspects involved in this improvement are the formation of one or two administrative bodies to manage the Public and Open markets, the relocation of the existing market areas, the filling of the Mercado Canal and Calle 30 improvement, the creation of the pedestrian street and bridge network, and the introduction of a new commercial zone in the study area. All of these aspects of improvement are dependent on the formation of the market organization and the relocation of the existing public market.

9-4-1. Calle 30 and Mercado Canal Projects

Calle 30 and the Mercado Canal now separate the central district of Barranquilla from the Study Area. Calle 30, when improved will become a major access route to both the market areas and the central district. However, Calle 30 improvements and the market developments are interdependent and require a coordinated implementation effort. Vendors currently located on the canal side of Calle 30 must be relocated before road improvement can commence.

The Mercado Canal will be filled and the area will become part of the park, pedestrian street and bridge network and provide room for Calle 30 improvement. This project is also dependent on vendors being relocated from the existing public market area.

Calle 30 improvements and the creation of the Mercado Canal Park will benefit the proposed market area in several ways. Calle 30 will provide a direct route to the new market area instead of separating the two existing vendor groups. The park will help to eliminate the poor public opinion of Barranquillita and will attract more people to the area.

9-4-2. Creation of the Pedestrian Street and Bridge Network

In addition to the improvements to Calle 30 and the creation of the Mercado Canal Park, the associated pedestrian street and bridge network will bridge the study area to the central district both figuratively and literally. A pedestrian crossing bridge at the intersection of Cra 42 and Calle 30 for crossing the improved Calle 30 will join the market and the Mercado Canal Park to the existing central district.

The pedestrian plaza (Cra 42) will provide an activity center for performances, fairs and other activities which will draw people to the market areas.

Cra 42 is also the central location of the proposed commercial zone in the project area and its location will border the market areas. The two areas will complement each other.

9-4-3. Introduction of Commercial Zone in the Project Area

FIG. 9-15 illustrates the intersection of Cra 42 and Calle 9 shows how the proposed general commercial area will complement the activities of the Public and Open markets and help to establish the pedestrian road as the center of the commercial area extending from the current central district commercial areas.

In the figure, the pedestrian bridge and the roof of Type C of the Open Market are seen in the foreground on the left. Behind them, Open Market Type B, with its tented structures and covered extensions of the pedestrian network may be seen. The proposed commercial zone is seen behind the Open Market and in these blocks located between the pedestrian Calle 28 and Calle 30 general shops will be located which will extend the existing commercial area from the central district to the project area. These shops will complement the activity generated in the Open Market.

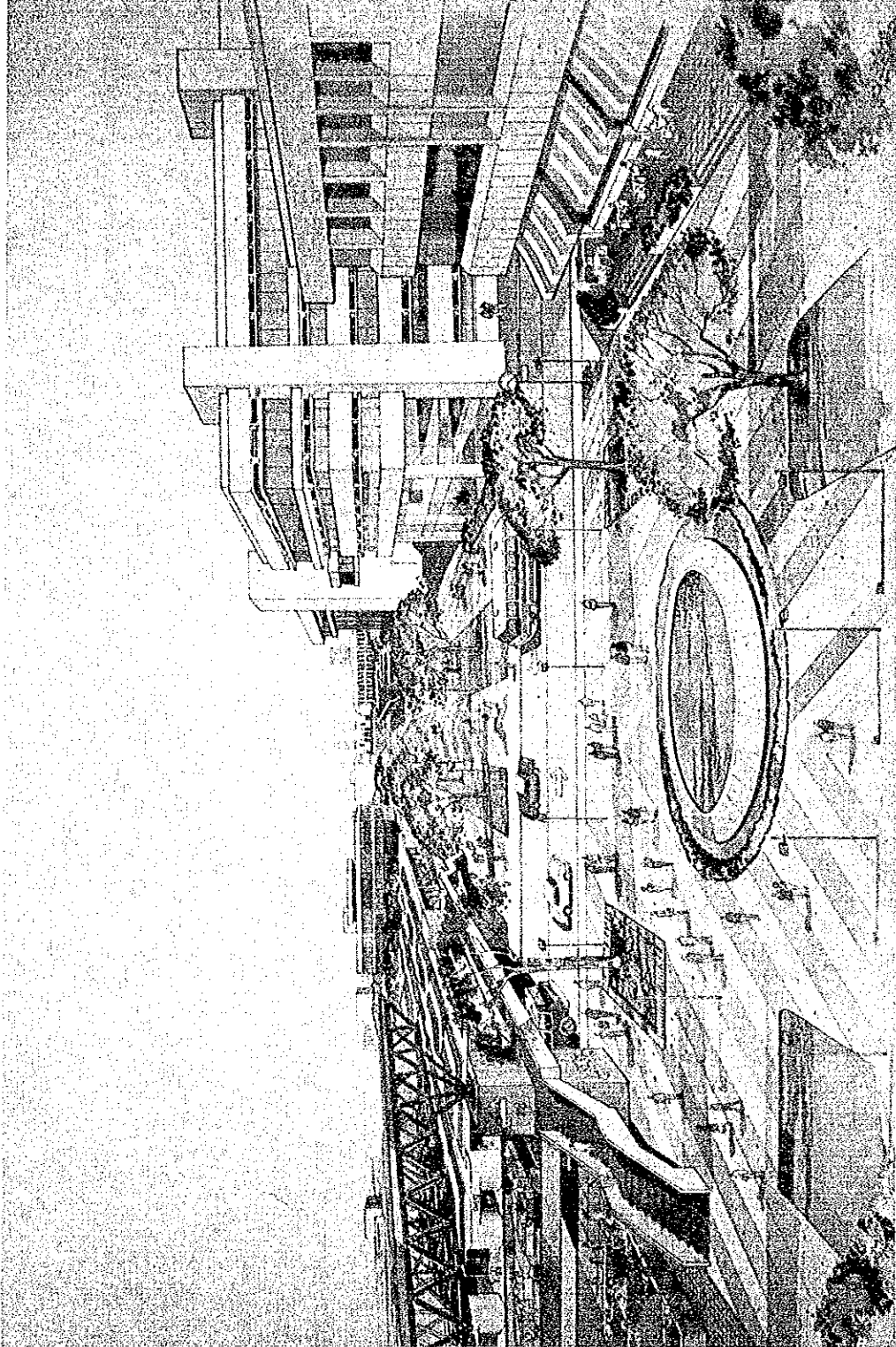


FIG. 9-15 IMAGE OF PEDESTRIAN CRA 42 LOOKING TOWARD THE CENTRAL DISTRICT

Buildings located along Cra 42 will extend the commercial area across the street from the Open and Public markets to the bus terminal.

The intermunicipal and urban bus terminal complex is located at the north east corner of the commercial district at the intersection of the pedestrian plaza (Cra 42) and Calle 8. Additional commercial activities used to supplement terminal facilities are proposed for buildings on Calle 8.

9-4-4. Conclusion

The success of the proposed projects for the overall redevelopment of Barranquillita are dependent upon the success of the market facilities. The markets will promote the success of the proposed commercial area which will provide the impetus for redevelopment to extend westward into the existing central district.

Chapter 10

PARKS AND RECREATIONAL FACILITIES

10-1. General

The studies carried out in the central district showed a scarcity of green zones and a deficiency in recreational facilities. In the proposed development for Barranquillita those points have been considered and a promotion of recreational facilities and an increase of green areas is planned.

These planned areas will complement the new land use distribution in the study area. The basic policy is to provide recreational and sport facilities, plazas and parks for the people who will be living in Barranquillita and for the daily population in the central district.

10-2. Planning Criteria

10-2-1. Existing Parks

An analysis of the present conditions of recreational and leisure areas showed that only 0.9% of the urban area is used for park land. The scarcity necessitates the introduction of more park areas, increasing to approximately 10 to 12% of the total urbanized area.

10-2-2. Climate

Barranquilla is a wet tropical city with an annual temperature of 30 degrees Centigrade and a relative humidity of 95%. This climate makes the locale one of the most suffocating cities in the tropical region. As the city was being urbanized, concrete roads and closed buildings were

introduced bringing, as a consequence, a relative increase of the humidity and temperature. These factors drive design criteria for solving the tropical climate problems.

Large trees, included for shadow and color, must be planted to decrease temperature. To decrease humidity, zones with solar radiation absorbing floors and bodies of water are to be included. It is hoped that the population will see these methods of climate control as vital elements and their usage will be adopted in other areas of the city.

Parks may include intensively tropical flora, as many trees as year round plants. Roof gardens and other elements producing shadow in key locations of activity or corridors are also very important.

10-2-3. Profitability

At present, an approximate estimation shows 1,200 hectares are necessary for parks and open spaces in Barranquilla. The central district would need 60 Ha. If this space is transformed in maintenance cost, the Metropolitan Area of Barranquilla should have a budget of \$ 6000 million pesos and the central district \$300 million. For the municipality and the Metropolitan Area these figures are out of question, so it is necessary to think of other mechanisms.

Therefore, it is proposed that methods for generating profits in the parks themselves be established. A successful program is functioning in the Colombian city of Cali which may be used as a model.

The following four aspects of the Cali parks system should be taken into consideration for Barranquilla as well:

- a. An entity is in charge of the administration and the functions of park implementation.

- b. The lands where the parks are located are legalized and assigned to the Administrative entity.
- c. The community contributes to the investment and maintenance expenditures.
- d. Income is produced through use of the parks.

10-2-4. Park Usage

The existing parks have a limited daily life. On average, they are in use 10 hours per day. However, it is necessary to introduce attractions and mechanisms for extending daily use in future, for example opportunities for people to work and study in the area. An example of park functioning in the evening and night time is La Electrificadora Park on Calle 85 intersecting with Cra 64. The ideal functioning period is between 18 and 20 hours per day.

It is important to establish a series of facilities for creating an attractive environment for the persons who remain in the central district.

People working in the central district do not have any place to go for relaxation or for lunch time. Planned places must be oriented to fill eating, passive and active recreational needs. Additionally the parks must provide meeting places, such as libraries, exhibition halls, cultural zones and gymnastic facilities.

10-3. Design Criteria

The design of parks and recreational zones in Barranquilla were based upon the following planning criteria:

- a. To provide amusement and relaxation areas in the central district, including passive and active recreations and social meeting and inter-

change places.

- b. To provide facilities to the persons working and living in the central district, such as cultural, recreational and social spaces.
- c. To provide an open park system where the users can go at any time of the day.
- d. To reduce the affect of climate, green zones and tree-planted areas combined with water bodies will be included to provide a better environment.
- e. To create a newadministrationsystem responsible formakingtheparks operative and profitable.
- f. To increase and promote economic benefits obtained through community usage of the parks.

The planned park system is an open space integration system: Urban and sport parks connected to and combined with corridors and pedestrian areas will provide needed improvement in the urban landscape.

10-4. Urban Parks

10-4-1. General Site Determinations

At present, the canals act as a barrier between the existing central district and the project area. Additionally, the areas surrounding the canals are in an advanced stage of environmental deterioration and degradation.

Therefore, the land areas proposed for redevelopment as parkland are primarily existing as contaminated canals which will be filled completely or partially to provide the space and improve the environment.

Three urban parks are planned:

- 1) Tramosos Canal Park
- 2) Mercado Canal Park
- 3) Arriba Canal Park

10-4-2. Tramosos Canal Park (See FIG. 10-1A and FIG. 10-1B)

Located along Cra 46 and the Tramosos Canal, it is an open space defined by Calle 7 (pedestrian way), Calles 8, 9, and 10 (vehicular streets). It is a link between the north-east area (housing area) and the multipurpose parks on the Mercado Canal.

The length of this park and its location along the canal have determined a promenade type park design which provides for passive activities. The circulation in the park is via an esplanade, where people may walk by the canal, continue by a shady tree planted area, circle around the church and end up on the pier of the future fishing club.

A small square at a different level from the rest of the park (1.6m higher) will be located in the center of the walkway. It will allow park visitors to rest and watch boats passing in the canal. The raised area will be provided with benches, lighting, water, public telephones, garbage cans and other amenities for a pleasant stay in the park.

10-4-3. Mercado Canal Parks (See FIG. 10-2A, FIG. 10-2B and FIG. 10-2C)

The Mercado Canal Parks will be a park system running from Cra 42 to Cra 46 bordered by Calle 30 and Calle 10. It is made up of four distinct parks which are separated by Cras 43, 44 and 45.

The park system is located on landfill where the Mercado Canal currently runs. The system is planned to combine recreational, artistic, cultural, and social activities for the population.

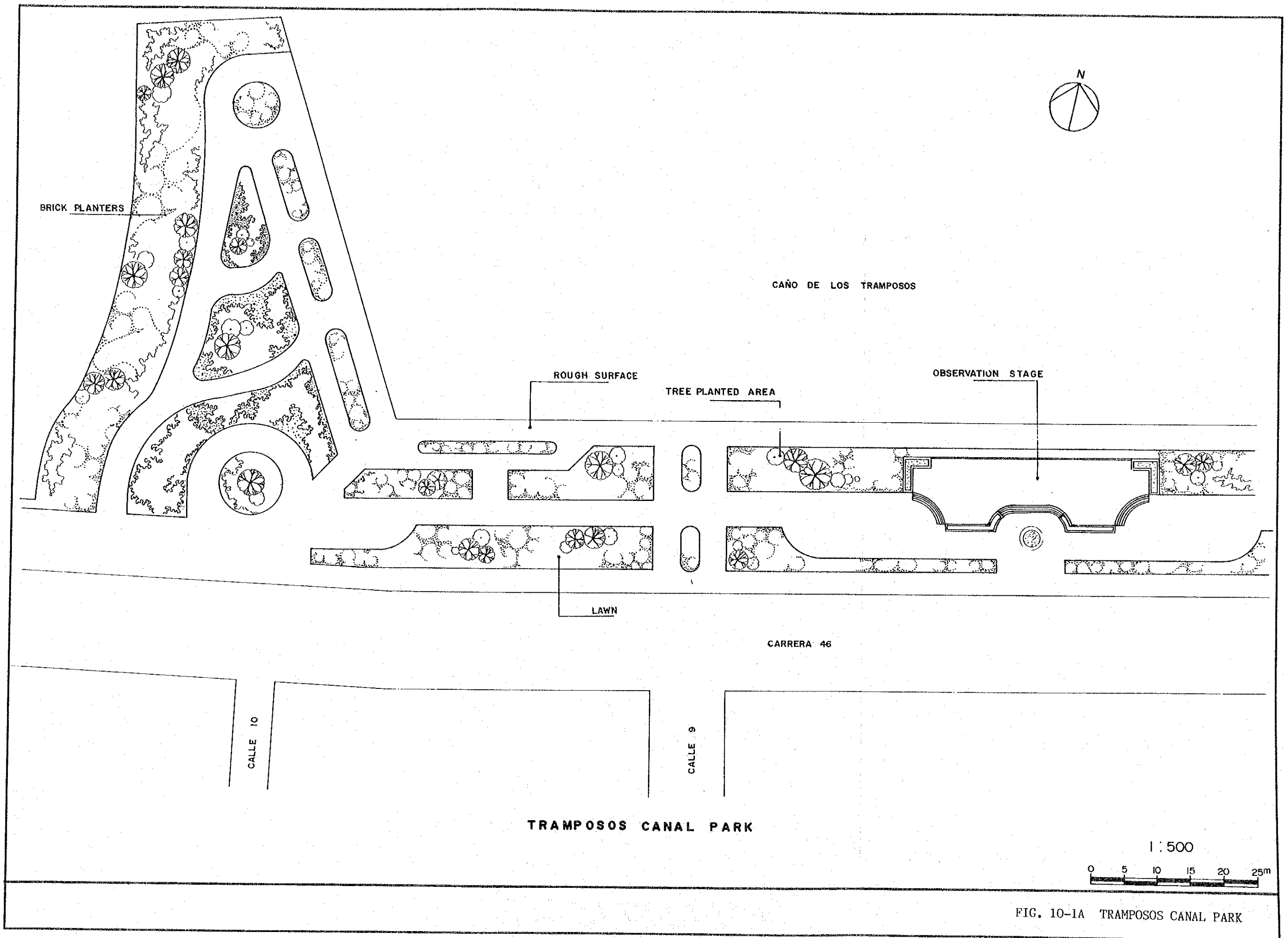
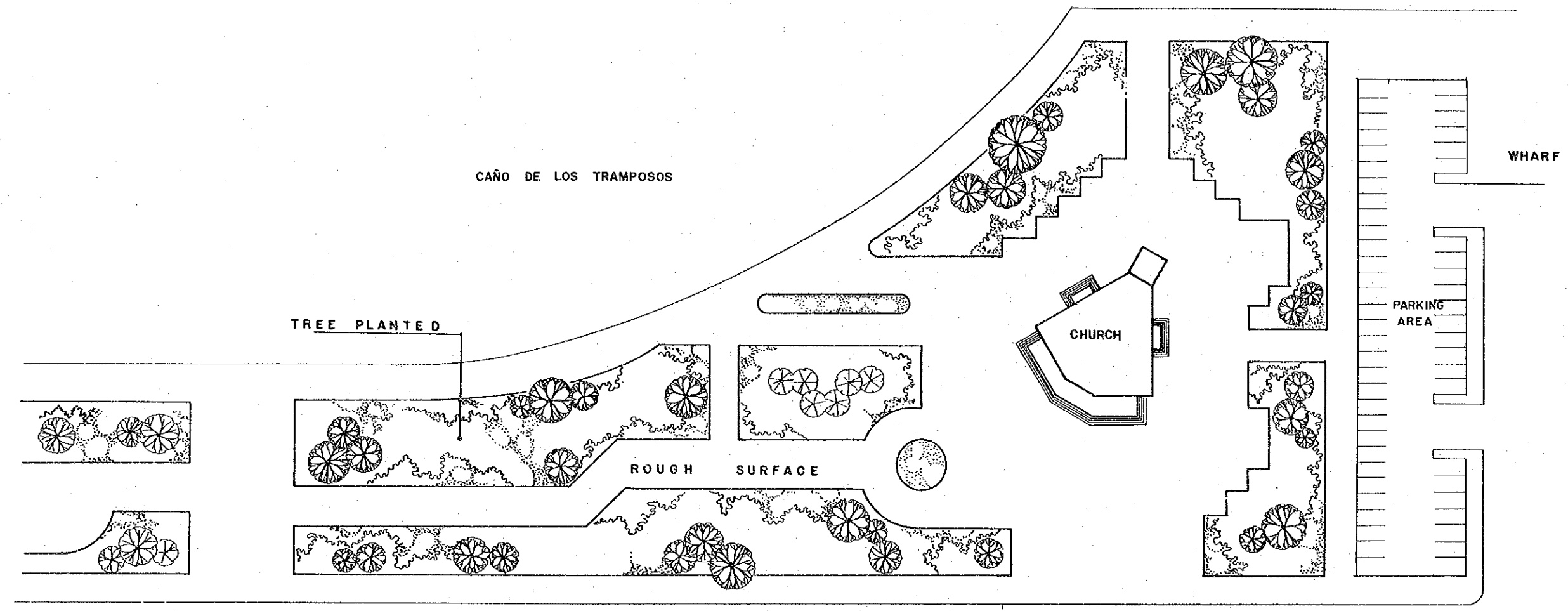
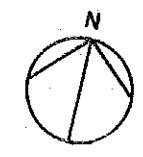


FIG. 10-1A TRAMOSOS CANAL PARK



CARRERA 46

CALLE 8

TRAMPOSOS CANAL PARK

1 : 500

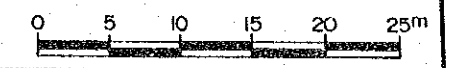


FIG. 10-1B TRAMPOSOS CANAL PARK

A description of each park follows:

Park I: From Cra 42 to Cra 43.

This area will be a passive park the main aspect of which is a big square that provides a social gathering point for persons coming from Cra 42 (pedestrian street) and the pedestrian bridge over Calle 30. There are green zones distributed around a central foundation that is a higher level than the rest. An interesting environment is created with benches located under large, colorful, shady trees.

Park II : From Cra 43 to Cra 44.

This area will function as an activity park, primarily for children. This is the center of the multipurpose park system and offers some security for the child population, because of the natural protective barrier formed by a grove of trees along Cra 43 and its close proximity to the pedestrian Cra 44. The amusement area will include baby sitting services, childcare, guided play, a children's library and other services aimed primarily for the security, amusement, and education of children.

A general administration building will be located in this section of the park system to house park management personnel and maintenance equipment.

Park III: From Cra 44 to Cra 45.

This area is the activity center of the park system, with a place to have open area performances such as theatre, informational gatherings, typical shows, cultural and social meetings, etc.

The central square has been designed with special color, effects, nice shapes on the floor textures, crowned with a stage elevated 1.5m from the surroundings. The stage is semi-circular with a semi-circular fountain behind it which will provide an interesting background for the performances.

Toward Cra 45 is proposed a green zone corner with high, leafy trees and resting benches.

Park IV: From Cra 45 to Cra 46.

This area is an active-passive place designated for cultural activities. Space is planned for popular cultural events, art exhibitions and craft fairs. A school of Fine Arts for theatre, dance, painting and music education is also planned. The area will also include a library and supplementary services such as restaurants, cafeterias. All buildings are surrounded by green zones, small squares, pedestrian paths, and water.

Also found in this park section are small shops for crafts people.

The recreational blocks of the Mercado Canal Park System will be supplemented by the public services of lighting, water supply, garbage collection, telephone, bathrooms, etc. The area will be furnished with benches and kiosks.

10-4-4. Arriba Canal Park. (See FIG. 10-3A and FIG. 10-3B)

The Arriba Canal Park will be located on landfill where the Arriba Canal currently runs. Located in the south-east corner of the Study area, its boundaries are Calle 9, Cra 41, the pedestrian Calle 7 and the Market area. Calle 8 divides the park into two parts.

The park will function as an area for passive entertainment with walkways among shady groves of trees and foliage. It borders the marketplace and will provide shoppers and tradespeople with a relaxing environment.

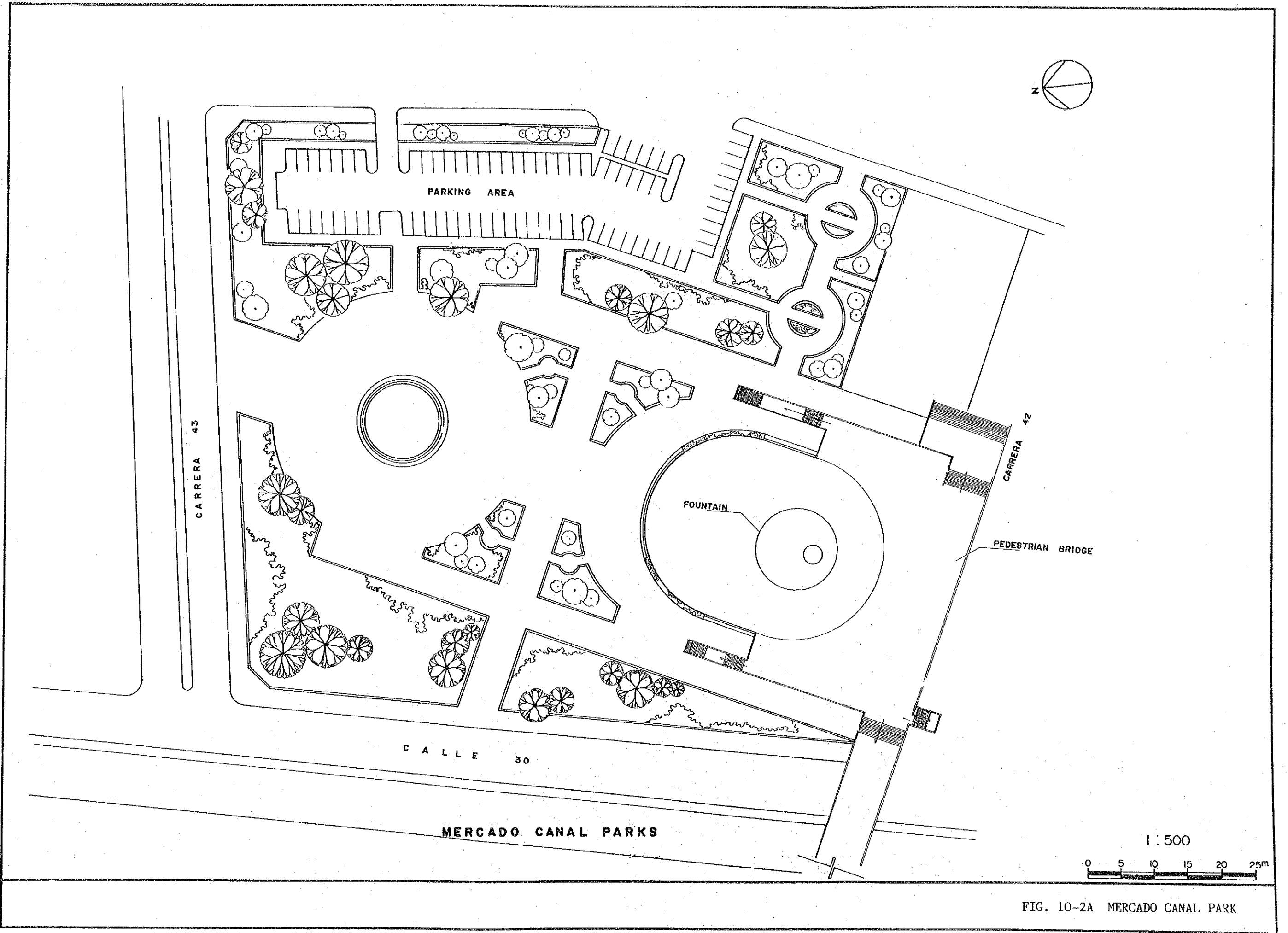


FIG. 10-2A MERCADO CANAL PARK

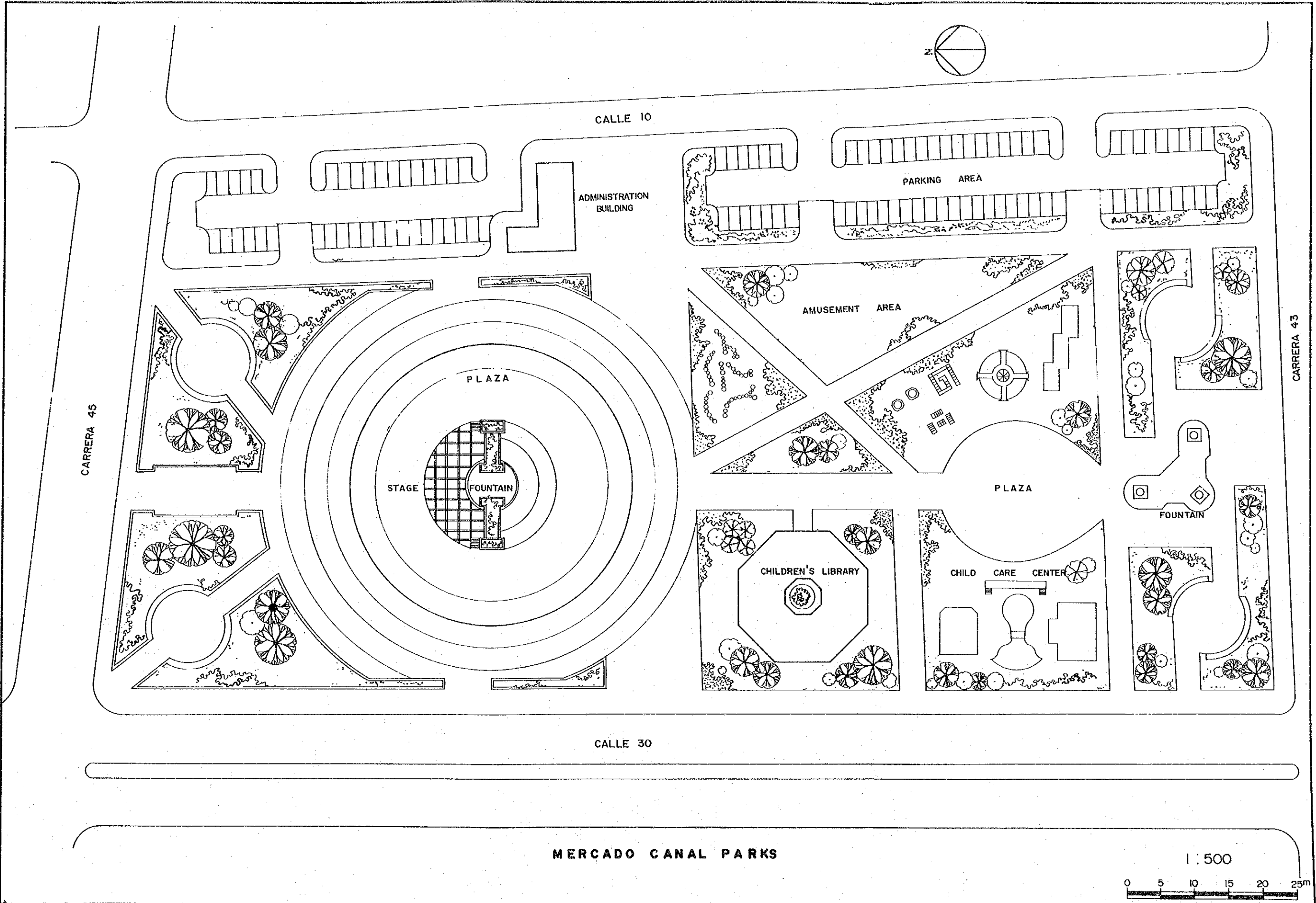
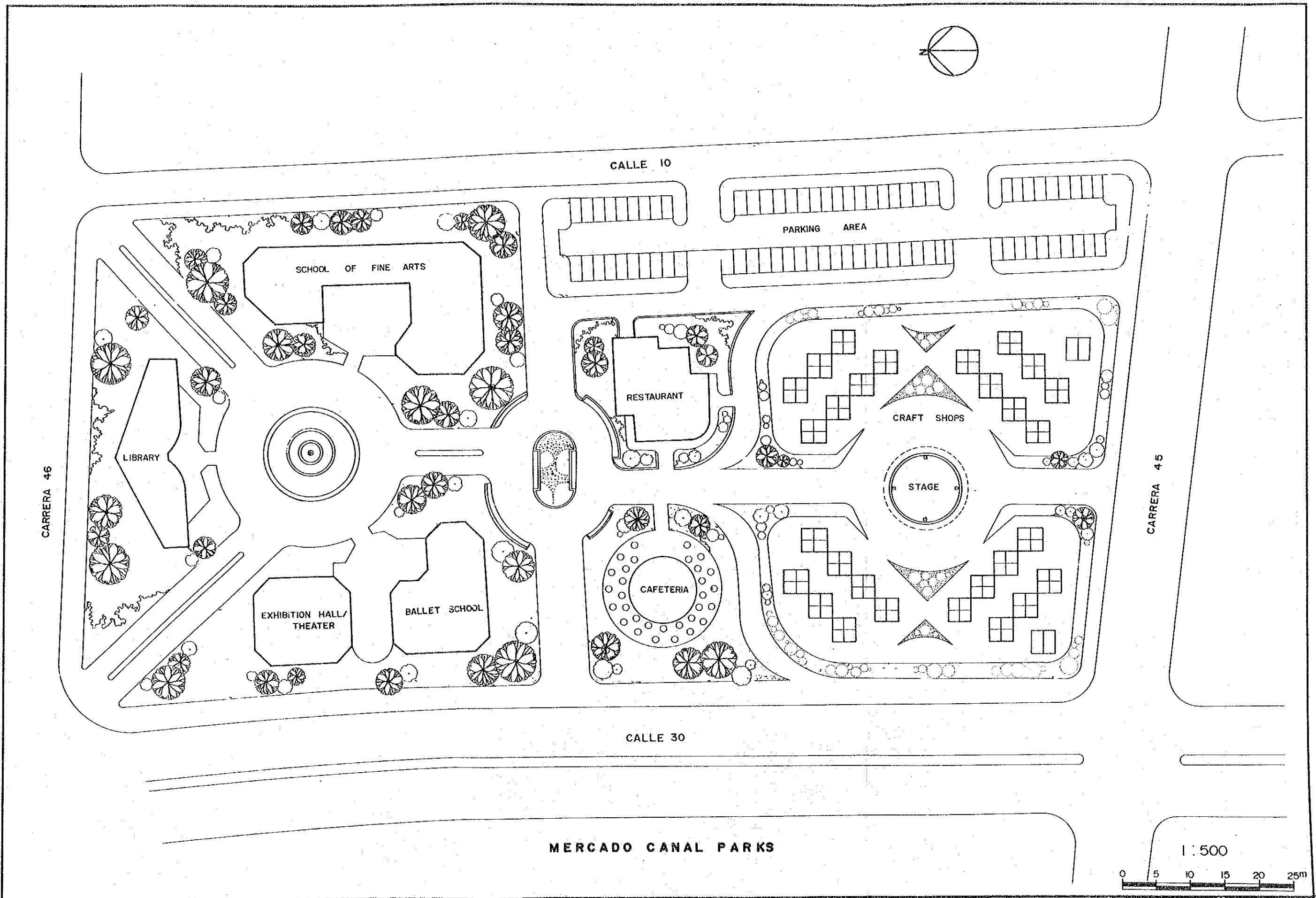


FIG. 10-2B MERCADO CANAL PARK



MERCADO CANAL PARKS

1:500

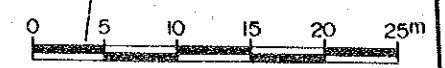
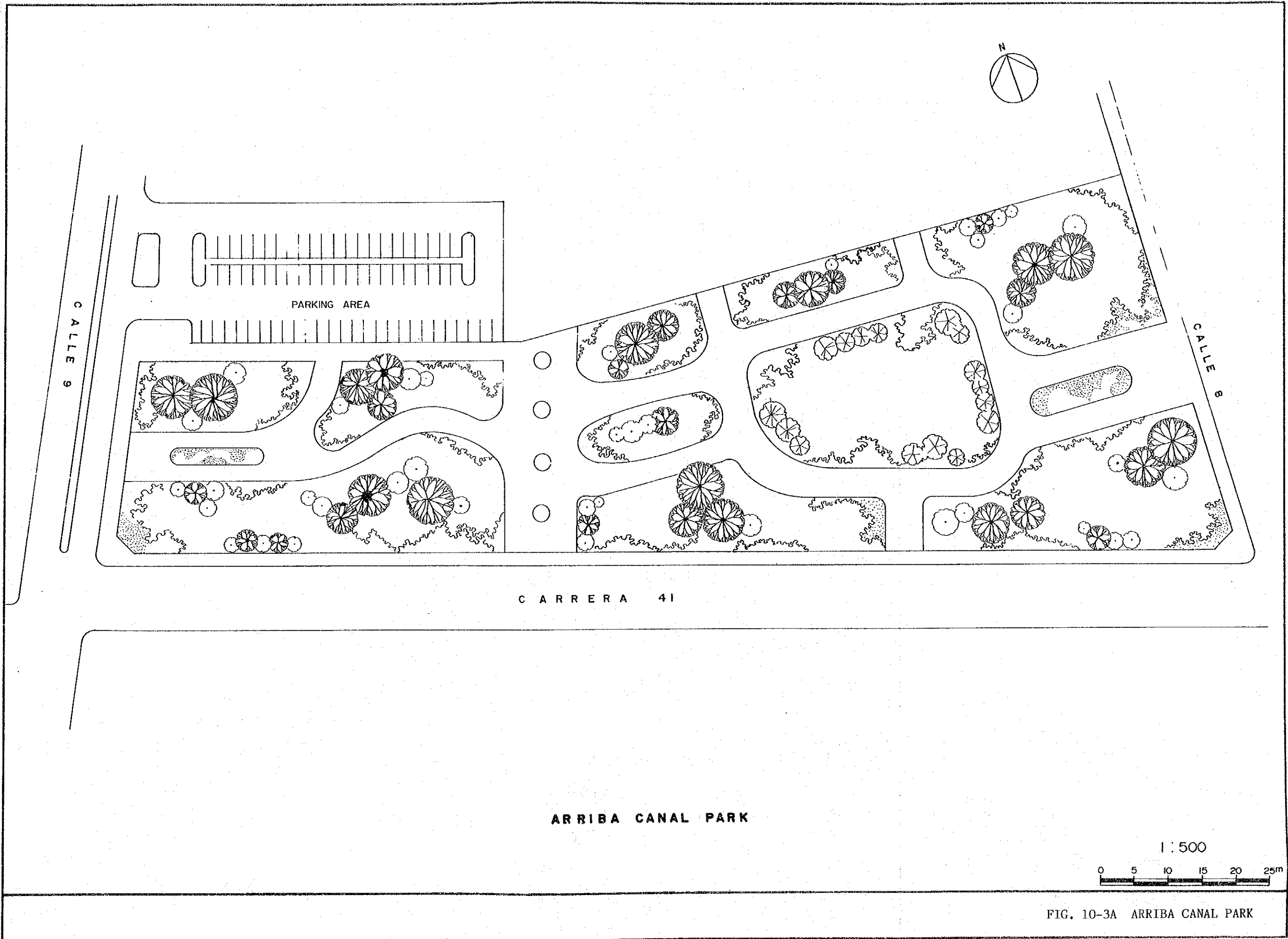


FIG. 10-2C MERCADO CANAL PARK



ARRIBA CANAL PARK

FIG. 10-3A ARRIBA CANAL PARK

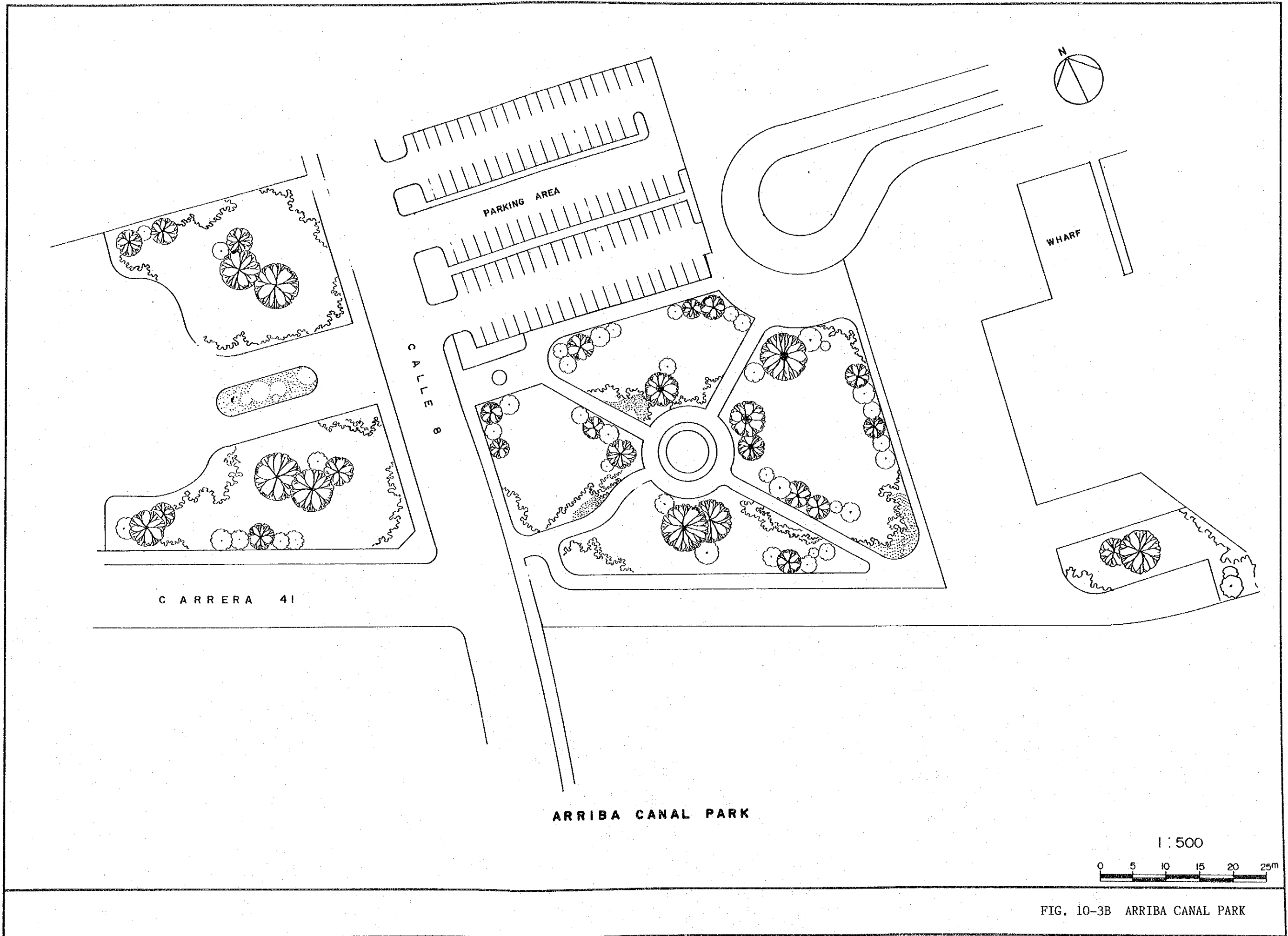


FIG. 10-3B ARRIBA CANAL PARK

10-5. Recreational Park

10-5-1. Location and Access

The sports park is located in the east part of Barranquillita, between the Riverside Bypass and Calle 4, and Cra 43 and 46, surrounded by the housing and light industry zones. The main approach will be via Calle 4, providing easy access to the rest of the central district.

The sports installation will be available primarily to the central district inhabitants, but the Riverside Bypass will allow efficient access from other parts of the city.

At present, recreational and sport facilities are scarce in the central district, and people living and working in this area frequent taverns to compensate for the lack of any better leisure time outlet. The concentration of people, especially working population, is expected to increase in the near future in the central district. It is necessary to introduce a new environment and provide healthy activities to achieve a better quality of life in this part of the city.

10-5-2. Planning Recommendations

The preferences of the Colombian people determine the order in which the facilities should be made available. The most popular sports are soccer, micro-soccer and softball so fields for these sports are of primary concern and should be implemented first. Of the remaining outdoors sports, facilities should also be made available for basketball, volleyball, tennis, roller skating, and swimming.

A building should be included to house both administrative offices and facilities for indoors sports. Recommended are facilities for racketball, bowling, billiards, pool, ping pong and tables for cards and chess.

EPM is currently in charge of park management in Barranquilla. This entity is not well organized and, at present, parks are in bad condition due to lack of maintenance. A new entity, whose purpose is to manage the recreational facilities, should be formed. Where such entities exist in other cities in the country, facilities are run efficiently. The entity in charge of recreational management charges users of the facility a price for participation and these funds are used to recoup construction investment, provide effective facility maintenance, and fund future expansion or promote similar facilities in other areas in the city.

The purpose of the park is to promote sports activities, especially in the central district. The sports complex will generate its own revenue once it is opened to the public. However, initially a financial loan is needed to fund the implementation process. It is feasible that the loan may be made in good faith because of the potential popularity of the park for paying users not only in the central district but also city wide.

10-5-3. General Characteristics and Description

In summary, the project calls for a multisport park (sports complex) with fields for the most popular sports in Barranquilla, an administration building and indoor sports. Also there will be some service units to supplement the activities in the park.

A description of the project and suggestions for organization follows:

1) Accessibility

The sports complex will face the beginning of Cra 45, between Cra 43 and 46. This location permits central access to the parking lot from Calle 4. In this way, there will be one entrance for the vehicles and persons accessing the park.

2) Zoning

The park can be divided into 4 zones:

- (1) Central distribution zone, where the general buildings, housing the administration office, indoors games, and general services, will be located.
- (2) Parking spaces on either side of the entrance.
- (3) Major sports fields (soccer, baseball, basketball) and associated services.
- (4) Minor sports areas (tennis courts, volleyball courts, tracks and pool) and associated services.

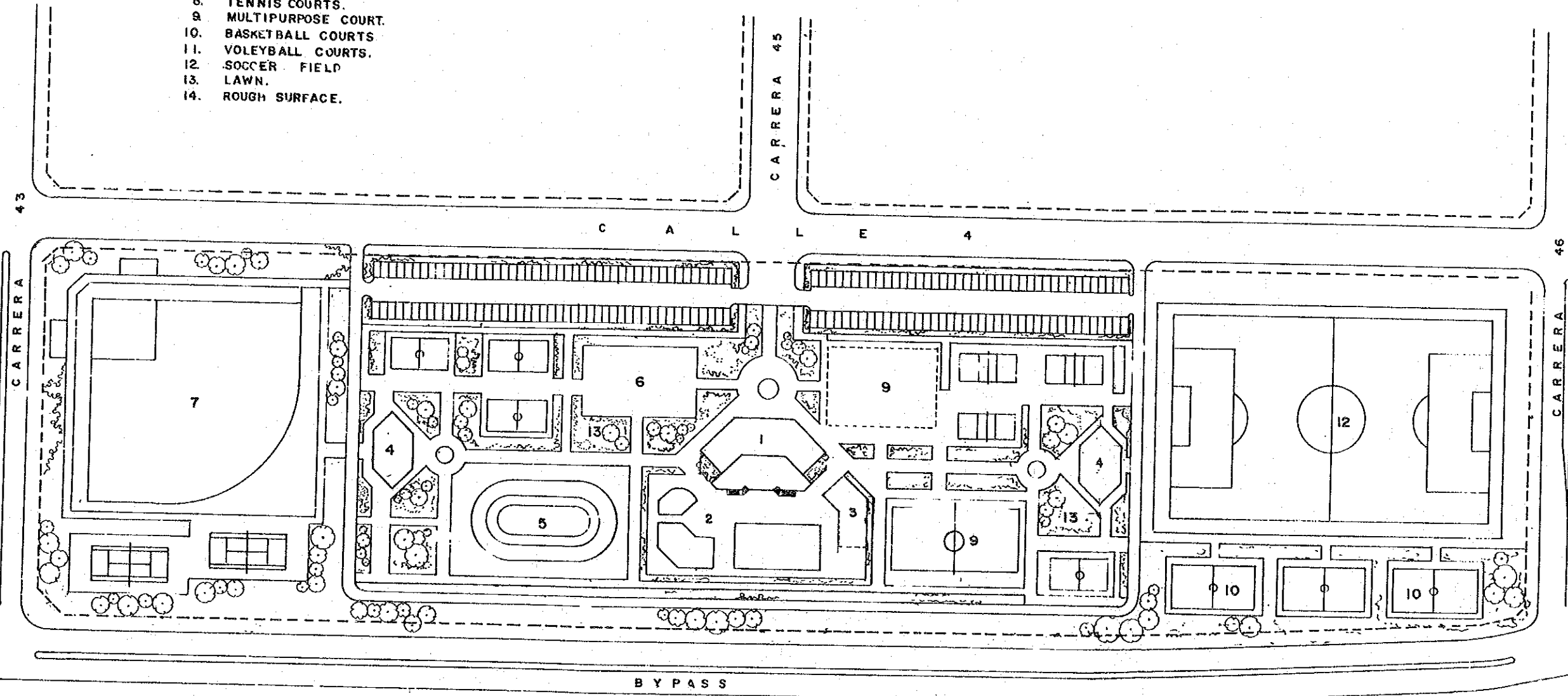
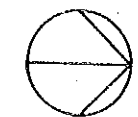
2) Circulation and General Operation (See FIG. 10-4)

After entering the park, people will be conducted to a central plaza. From there, they could go to any of the facilities. If it is their first visit to the park they could go to the administration office, and use the general services of the building and perhaps go to the indoors games area. Also, from the plaza people could use any of the supplementary service areas of each playing field that encloses locker rooms, showers, bathrooms, cafeteria, and other necessary services. From the service areas, the persons may go to the respective playing fields and courts.

The most popular sports such as soccer, micro-soccer, basketball, etc., will be located in the north side of the lot, where physical determinants (sun and wind) will provide more benefits. The other activity areas will be in the south area.

FACILITIES

1. ADMINISTRATION BUILDING
2. POOLS.
3. FUTURE EXPANSION AREA.
4. LOCKER AND CHANGING ROOM WITH SHOWER AND TOILET - FAST FOOD EAT.
5. ROLLER SKATING RINK.
6. GYMNASTICS AREA
7. SOFTBALL COURT
8. TENNIS COURTS.
9. MULTIPURPOSE COURT.
10. BASKETBALL COURTS
11. VOLLEYBALL COURTS.
12. SOCCER FIELD
13. LAWN.
14. ROUGH SURFACE.



RECREATIONAL PARK

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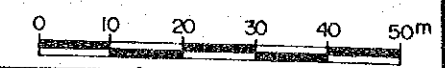


FIG. 10-4 RECREATIONAL PARK

Chapter 11

PLANS FOR OTHER ZONES

11-1. General Introduction

The Study is concerned mainly with the major project proposals. Road system improvement, marketplace creation, bus terminal construction, and the introduction of a parks and recreation system will bring new growth opportunities to the project area. However, for the project area to be fully realized as a thriving economic center, additional areas must be included. These areas are the residential, business, and industrial zones. Although these zones have not been planned in great detail for this Study, general descriptions of existing conditions, recommendations, and developmental suggestions are outlined in this chapter.

11-2. Residential Zone

11-2-1. Existing Residential Area

Housing conditions are extremely poor and very few residences exist in the Barranquillita area. The few residential buildings are found among an area in which there is a great proliferation of bars and transient motels. Most residents have vacated the area, and the majority of inhabitants remaining are transients or squatters, resulting in a socio-economic environment in rapid deterioration. The existing buildings have not been efficiently maintained, resulting in their rapid degeneration. This contributes to the tendency of dwellers to vacate the area and search for better living conditions elsewhere.

During the daylight hours the project area is in use and the major activity is related to the bus system. The area is used as a terminal space for buses serving the Municipality and the immediate region, and traffic congestion has become a major source of the pollution and stench

that permeates the area.

The area is considered to be extremely dangerous for its inhabitants and prohibitively perilous for non-residents. When merchants close their shops at 6:00 p.m. and the street vendors leave the area surrounding the Mercado Canal, there is virtually no activity in Barranquillita. Security and night time vigilance is negligible, and the streets remain dark and unpatrolled.

All the characteristics of the area are reflected in a negative public reaction to the deteriorating environment. The area as it exists provides nothing to recommend it as a residential area.

11-2-2. Residential Zone Proposal

The Master Plan proposed a housing development. The Study included an investigation of typical housing developments in Barranquilla and considered Municipal Planning Office regulations. A general plan for a residential zone has been developed.

The intention of the residential area is not to replace the existing housing, but to introduce a higher level of housing in order to attract new residents to the area. Another intention of the housing plans, land usage, and layout design is to promote a strong sense of community among the inhabitants. The housing is proposed for residents interested in relocating to be closer to the newly created cultural and business center; housing in the area will attract middle to upper middle class tenants and owners whose main housing requirements are for environmental amenities and convenient access to activity centers.

11-1-3. Residential Zone Development Method

Allocation of housing blocks are illustrated in FIG. 11-1. Blocks A, B, and C will be developed as residential housing blocks and blocks D and E will be developed as mixed usage (residential and commercial) blocks.

The lot area of block A is 18 HA, B is 6, C is 5.7, D is 2.7, and E is 2.5.

TABLE 11-1 illustrates the various criteria by which tentative plans for each site area block were developed. The suggested layout of the residential zone is illustrated in FIG. 11-2.

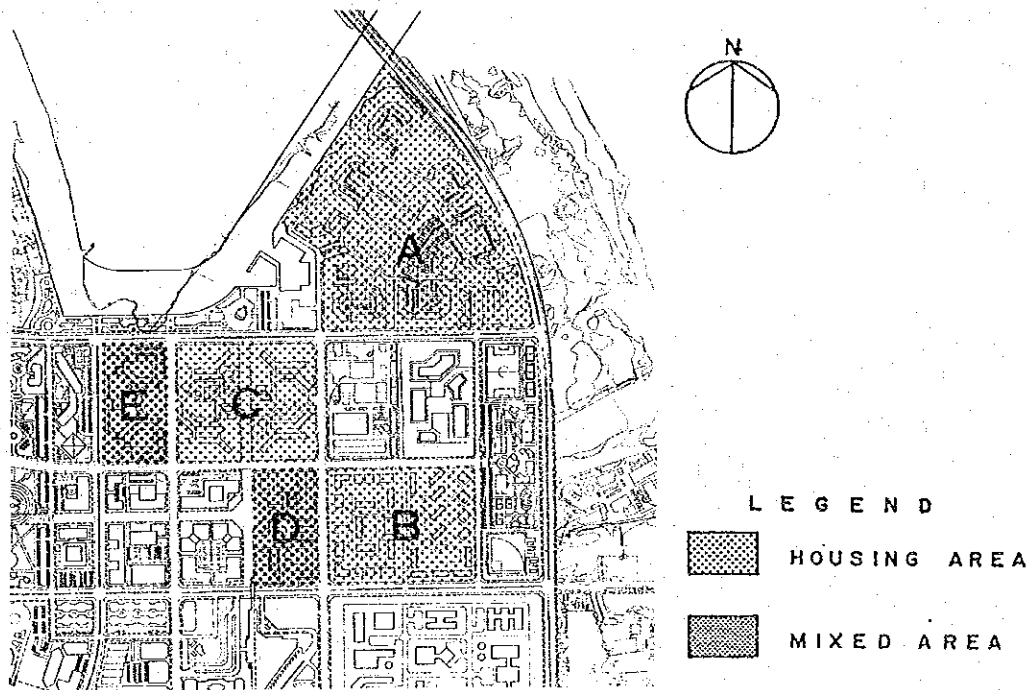


FIG. 11-1 SITE AREA OF RESIDENTIAL ZONE

TABLE 11-1 TENTATIVE CRITERIA FOR RESIDENTIAL AREA DEVELOPMENT

Criteria Description	Block A	Block B	Block C	Block D	Block E
1. Land Use	Residential	Residential	Residential	Mixed Usage	Mixed Usage
2. Land Area	18.0 Ha	6.0 Ha	5.7 Ha	2.7 Ha	2.5 Ha
3. Class or Tenant	Middle to High	Middle to High	High	Middle	Middle
4. Housing Preferences					
Environmental Amenities	Yes	Yes	Yes	-	-
Convenient Location	-	-	Yes	Yes	Yes
Height of Building	Low to High	Medium	High	High or Medium	High
5. Construction Cost	Medium to High Cost	Medium Cost	High Cost	Medium Cost	Medium Cost
6. Housing Style					
Traditional Barranquilla Style	Yes	Yes	-	Yes	Yes
Modern	-	(Yes)	Yes	Yes	Yes
Neoclassical	Yes	-	(Yes)	-	-
7. Exclusive Additional Facilities	-	-	Swimming Pools and Tennis Courts	-	Swimming Pools
8. Housing Block Access (exclusive or non-exclusive) (open or closed)	Open and closed	Closed	Open	Closed	Closed
9. Residential Population Projection	6,800	5,000	6,300	1,600	1,200

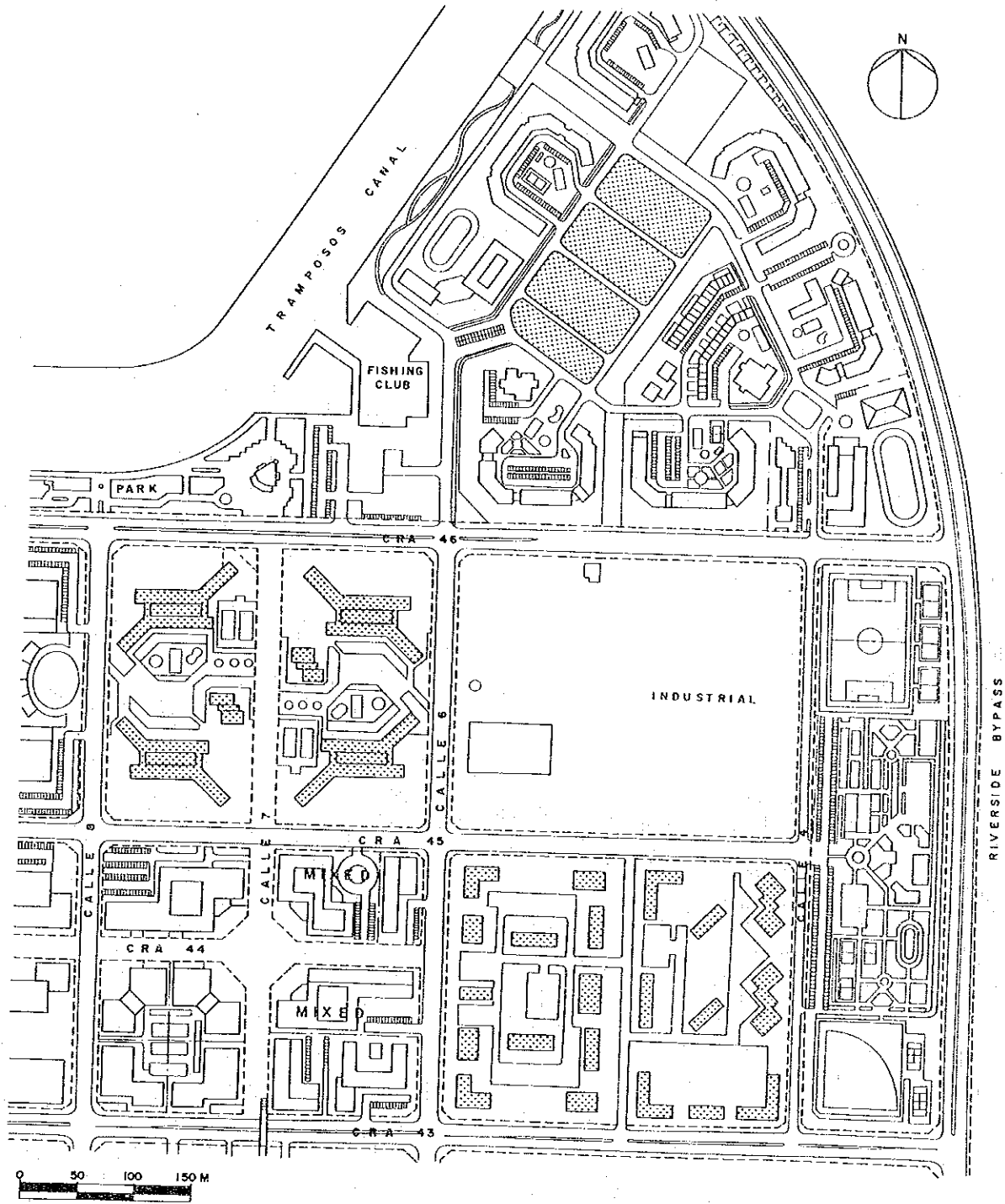


FIG. 11-2 IMAGE PLAN OF RESIDENTIAL ZONE

11-3. Business Zone

11-3-1. Existing Business Zone

The current trend for business in Barranquilla is to expand west and northwest of the current center. Eastward expansion is halted by the canal. However, with improvements to Calle 30 and the conversion of the canal to parkland, it is projected that the barrier now separating the two areas will no longer exist and business will move eastward into the project area.

The existing central district has two major centers: the Civic Center, housing municipal organizations and workers, and Paseo Bolivar, a plaza which divides Calle 34.

11-3-2. Business Zone Proposal

The two business areas (the existing central district and the proposed area), less than one kilometer from each other, will be joined to form one central business district.

The pedestrian walkway from the bus terminal will provide efficient commuter access to the business zone; the housing area, also, is within a one to three block walking distance via Cra 44 or Calle 7.

11-3-3. Business Zone Development Suggestions

The central area of the business zone proposed by the Study will be the intersection formed by the two pedestrian streets (Cra 44 and Calle 7). See FIG. 11-3 for the proposed business zone's logistical relationship to the existing business zone. FIG. 11-4 illustrates a proposed arrangement of structures in the zone. FIG. 11-5 is a projected view of how the business zone would appear viewed looking east on Cra 44.

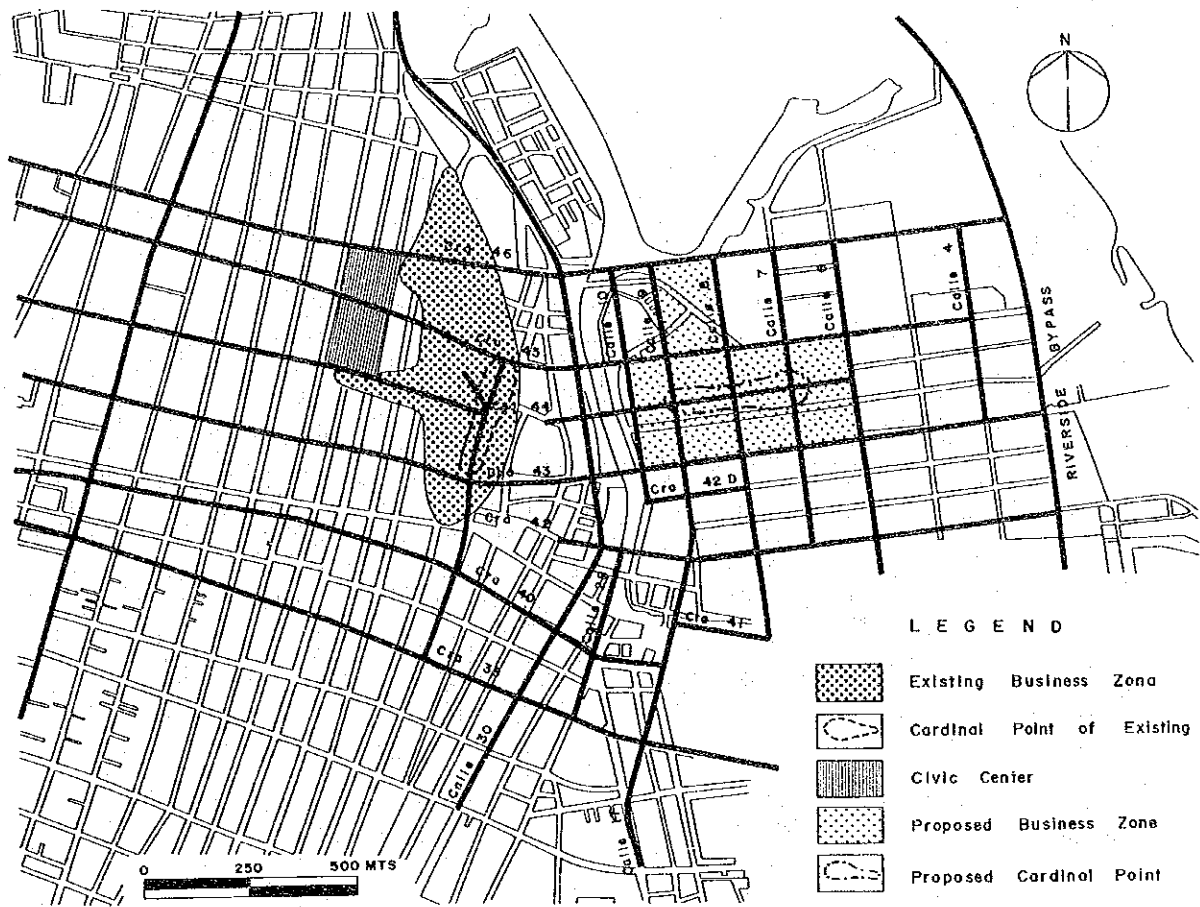


FIG 11-3 LOGISTICAL RELATIONSHIP BETWEEN EXISTING AND PROPOSED BUSINESS ZONES

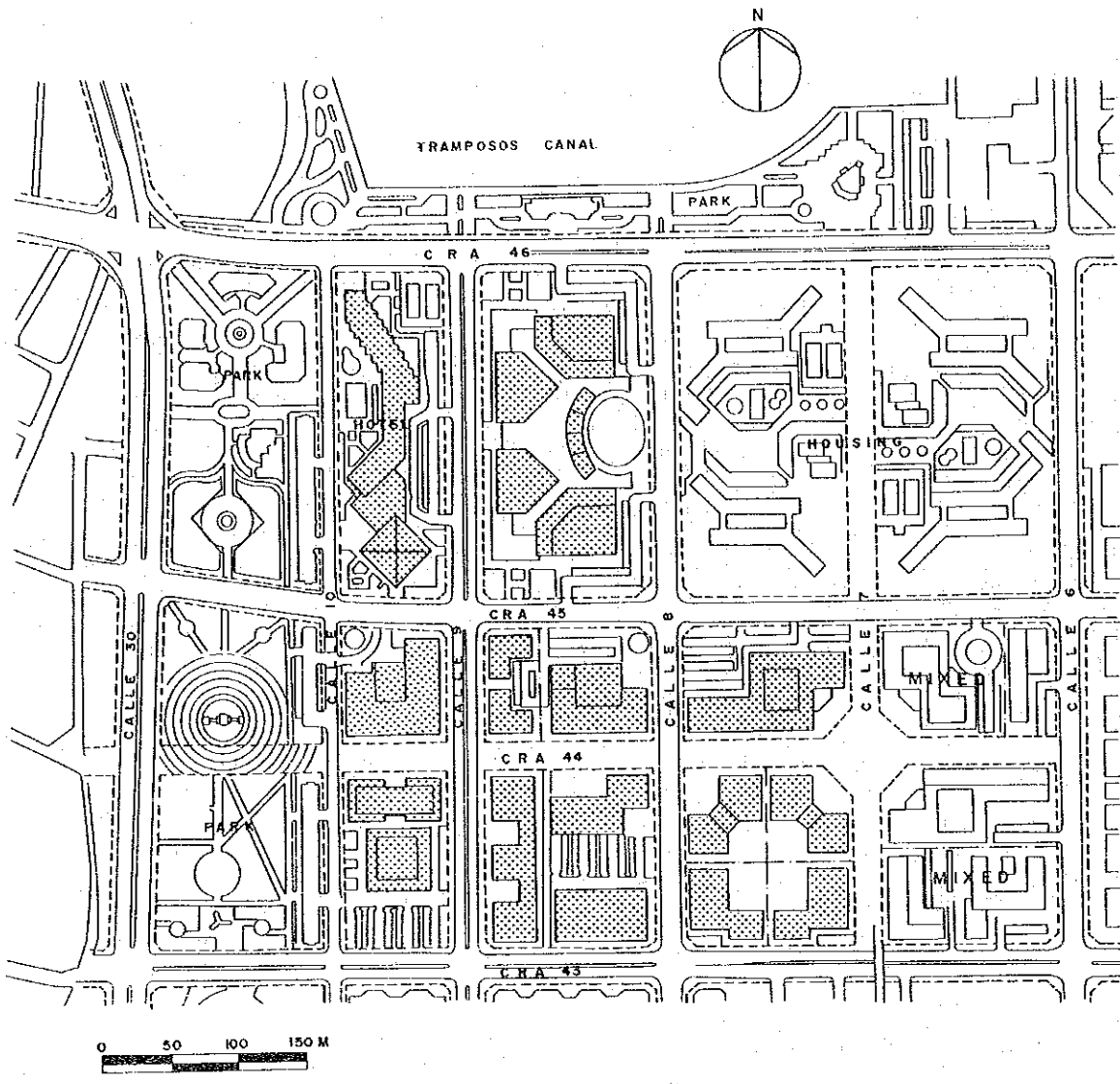


FIG. 11-4 SUGGESTED STRUCTURAL LAYOUT OF BUSINESS ZONE

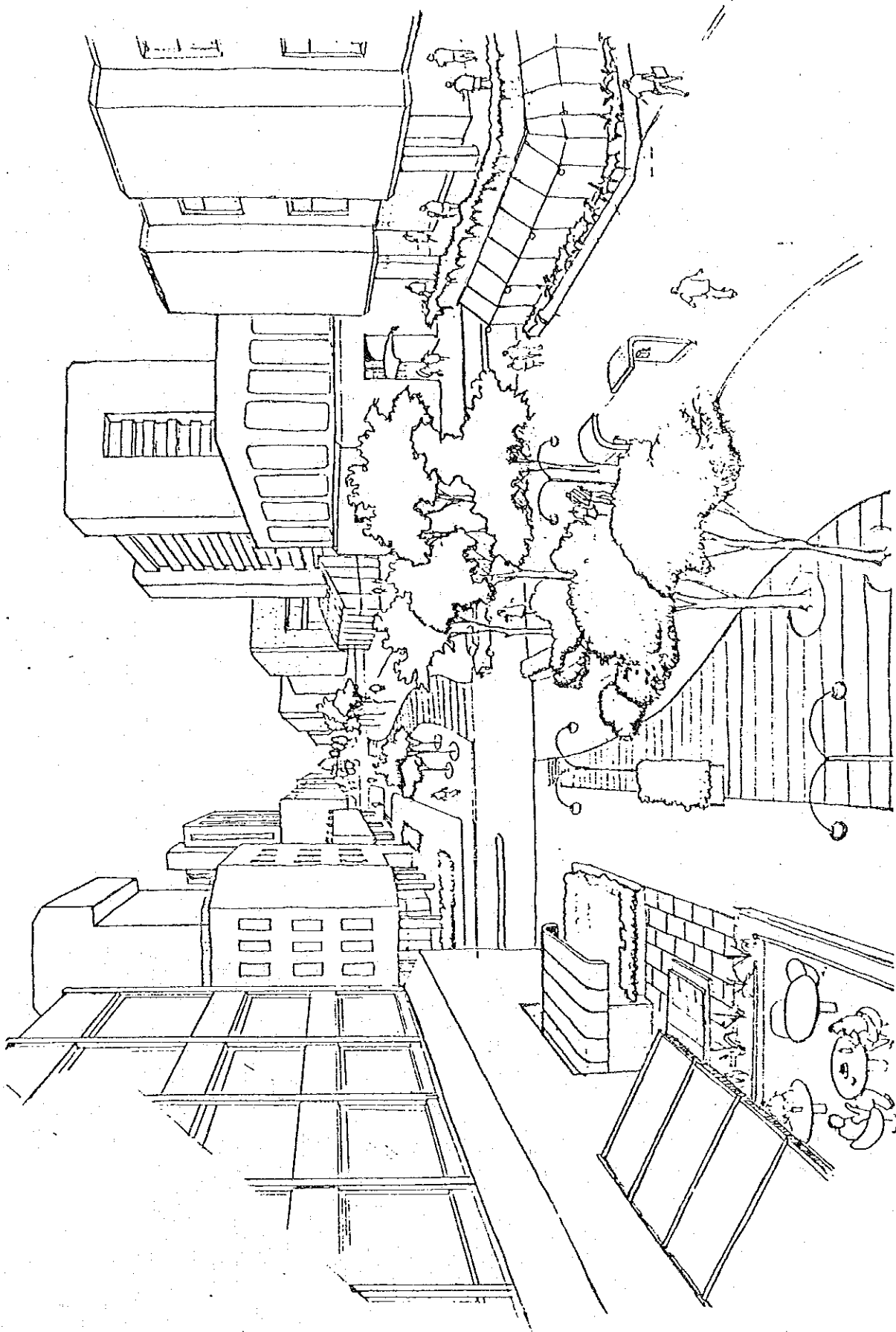


FIG. 11-5 BUSINESS ZONE AS VIEWED LOOKING EAST ON CRA 44

11-4. Industrial Zone

11-4-1. Existing Industrial Zone

The existing Phillips factory grounds are located in the east north-east area of the project area. This factory is the only major industry in the project area.

11-4-2. Industrial Zone Proposal

The proposed industrial zone is comprised of three sectors:

- a. An existing industrial park
- b. An industrial park for the relocation of existing industries in the Barranquillita area.
- c. An industrial park for the introduction of environmentally non-disruptive industries.

All sectors are located for easy access to and from the: Residential Areas, Riverside Bypass, Calle 7 (pedestrian walkways), Public Market, Intermunicipal Bus Terminal and Port Facilities.

11-4-3. Industrial Zone Development Method

- 1) The existing industrial park

The current grounds of the Phillips factory and the block directly east of it are to be converted into an industrial park. The expanded Phillips facilities are necessary for the planned inclusion of a research institute and increasing plant activities. The expanded park may be accessed easily via pedestrian Calle 7 (for residents of the neighboring housing developments or commuters using the bus terminal) from the Riverside Bypass or Cra 46.

- 2) An industrial park for the relocation of existing industries in the Barranquillita area.

The sector along the Arriba Canal, bordered also by the Public Market and one block southeast of the Intermunicipal Bus Terminal has been designated for the relocation of existing industries. Calle 7 and the Riverside Bypass provide additional access to this sector.

- 3) An industrial park for the introduction of environmentally non-disruptive industries.

This sector is designated for new industrial activities related to port functions and for additional non-polluting industries. It is located in the east next to the bus terminal (directly across Calle 7 to the west) and across Cra 42 from the relocated industry sector.

FIG. 11-6 illustrates the proposed locations of the three industrial zones in the project area to show their logistical relationship to other sectors.



FIG. 11-6 LAYOUT OF FACILITIES

Chapter 12

INFRASTRUCTURE

12-1. Planning Principles

The development of an infrastructure is an indispensable factor for urban development. The following infrastructure development is required for the Study Area:

a) Land preparation and drainage system

- The preparation of the land, the filling of canals, and the creation of a drainage system within the Study Area for Arroyo flood control and an improved environment.

b) Urban utilities

- The urban utilities such as water supply, sanitary sewers, electricity, telephone, and gas supply to provide energy and services to the consumers who will reside in the Study Area.
- A sewage treatment plant to preserve the natural environment and to protect human health.

The urban utilities have different planning considerations from land preparation and the drainage system. The city of Barranquilla is provided with water, electricity, telephone, and gas systems by the authorized entities; the responsible agencies have their own development plans, included in which are the urban utilities of the Study Area. Therefore, utility services, except for a sewage treatment system, are supplied to the Study Area through existing authorities.

However, land preparation and the drainage system are planned and developed independently by an individual development body in Barranquilla.