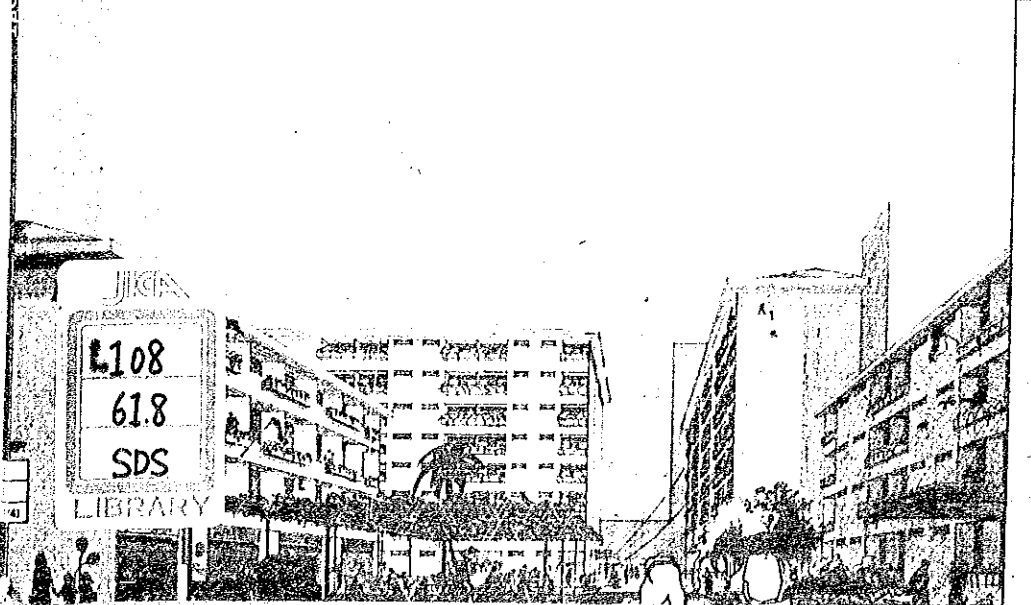
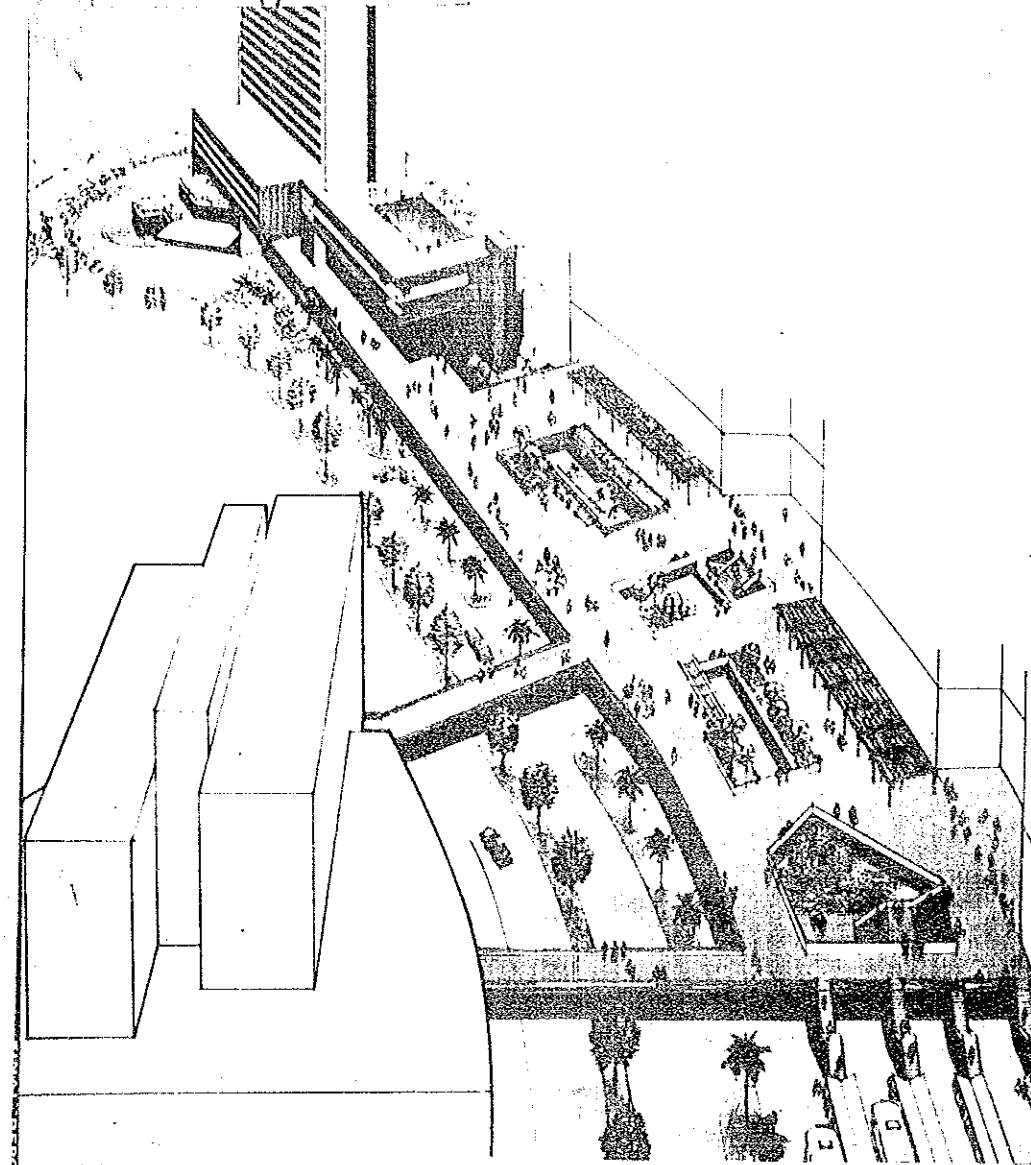


社会開発協力部報告書



No. 7

THE REPUBLIC OF INDONESIA

Study on Urban Renewal Housing Project in Jakarta

FINAL REPORT
EXECUTIVE SUMMARY

DECEMBER, 1983

JAPAN INTERNATIONAL COOPERATION AGENCY

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THE REPUBLIC OF INDONESIA

**Study on
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in Jakarta**

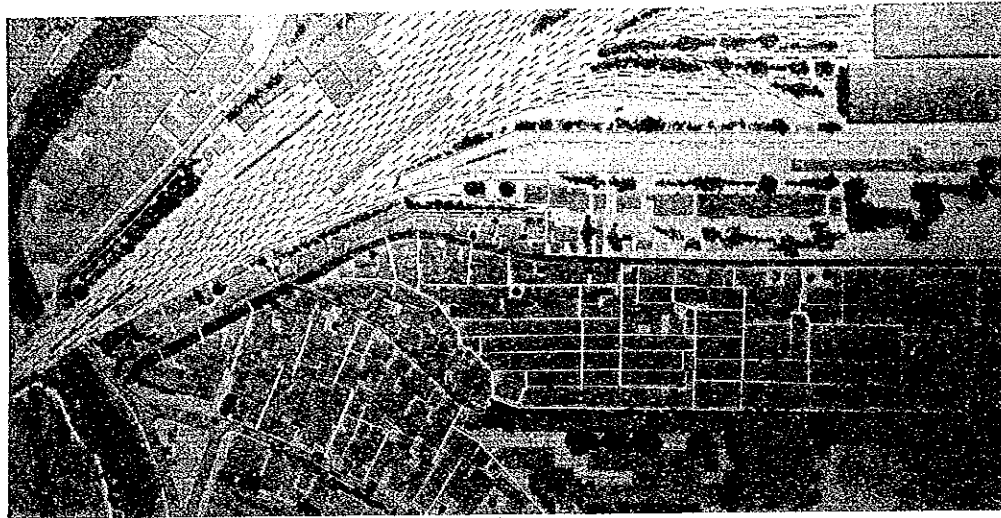
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BEFORE RENEWAL

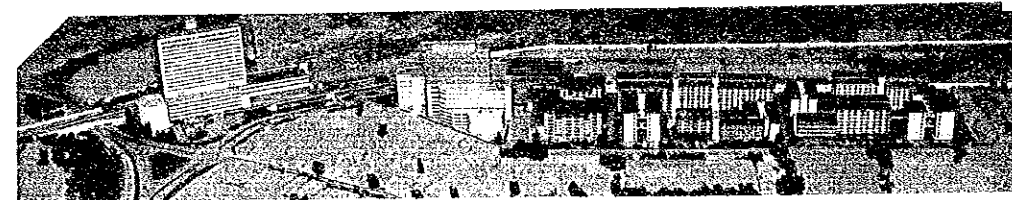


▲ EXISTING MODEL OF SITE AREA

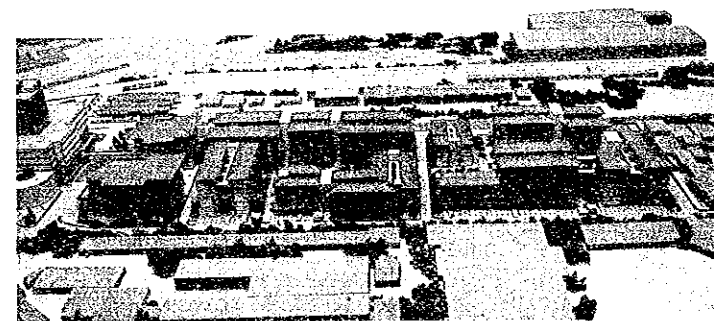


▲ PHOTO OF EXISTING CONDITION

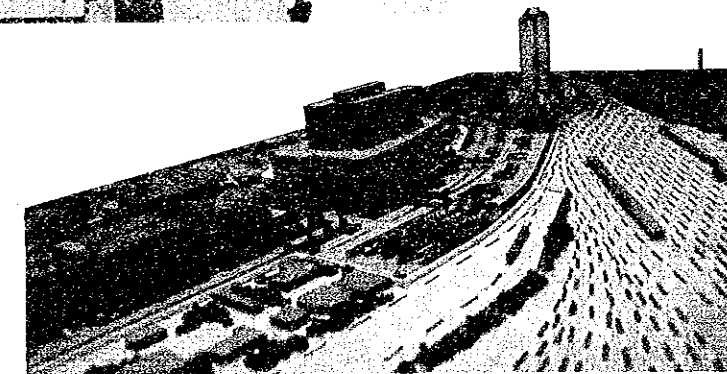
AFTER RENEWAL



▲ PLANNING MODEL OF TOTAL SITE AREA



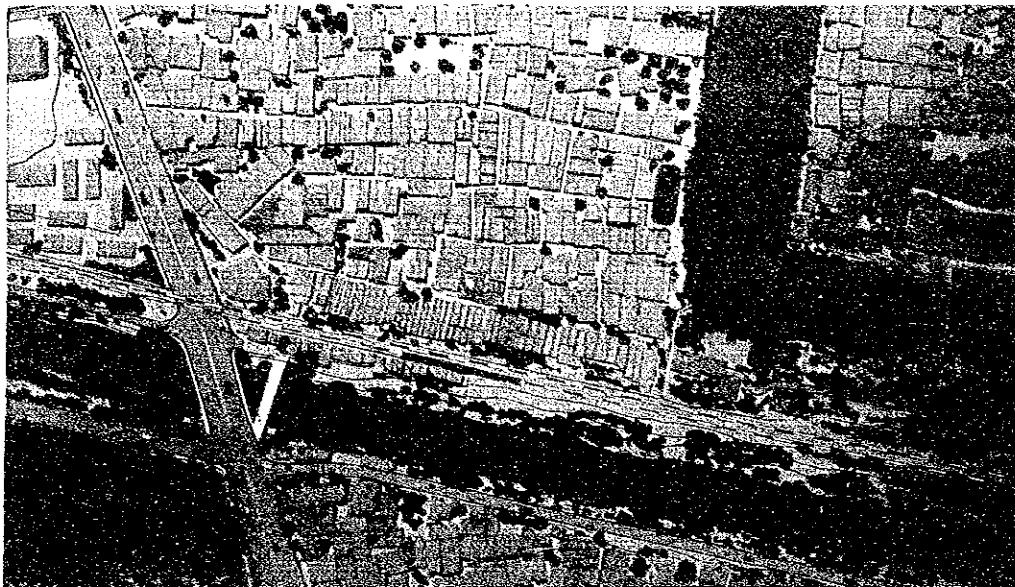
◀ MODEL OF HOUSING BLOCK



▲ MODEL OF COMMERCIAL/BUSINESS BLOCK

MODEL OF BEFORE & AFTER RENEWAL – MANGGARAI

BEFORE RENEWAL

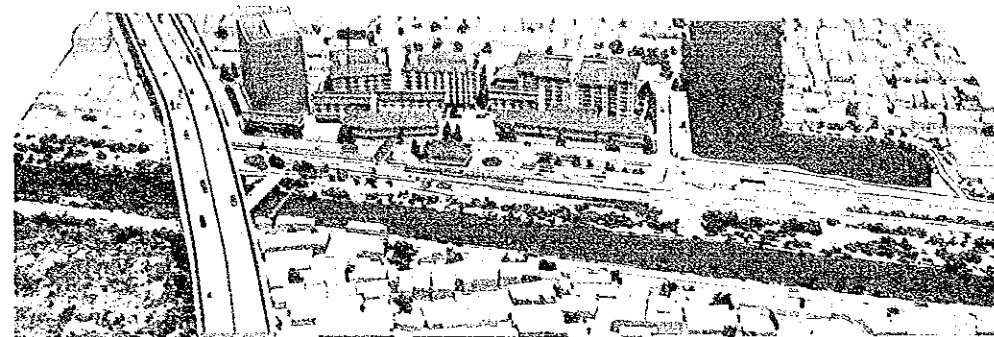


▲ EXISTING MODEL OF SITE AREA

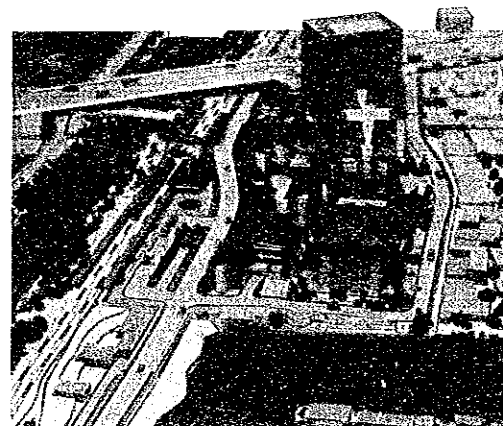


▲ PHOTO OF EXISTING CONDITION

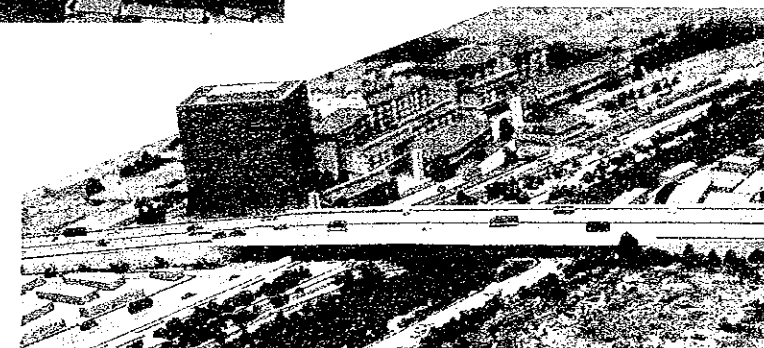
AFTER RENEWAL



▲ PLANNING MODEL OF TOTAL SITE AREA



◀ VIEW FROM EAST



▲ VIEW FROM WEST

MODEL OF BEFORE & AFTER RENEWAL – KEBON MELATI

STUDY ON URBAN RENEWAL HOUSING PROJECT IN JAKARTA

FINAL REPORT

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AIMS AND EFFECTS OF THE URBAN RENEWAL 1

PREFACE

It is with great pleasure that I present to the Government of the Republic of Indonesia this report entitled "STUDY ON URBAN RENEWAL HOUSING PROJECT IN JAKARTA".

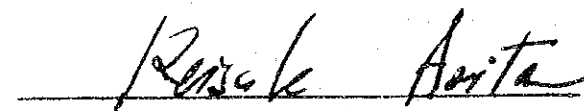
This report embodies the result of the study which was carried out in the Kebon Melati and Manggarai areas of JAKARTA from July 1982 to February 1983 (Stage I) and from June to September 1983 (Stage II) by the Japanese study team commissioned by the Japan International Cooperation Agency following the request of the Government of the Republic of Indonesia to the Government of Japan.

The study team, headed by Mr. Itaru MAE, Pacific Consultants International, had a series of discussions on the Project with the officials concerned of the Government of Indonesia and conducted a wide scope of field survey and data analyses.

I hope that this report will be useful as a basic reference for development of the Project and contribute to the promotion of friendly relations between our two countries.

I wish to express my deep appreciation to the officials concerned of the Government of the Republic of Indonesia for their close cooperation extended to the Japanese team.

December, 1983

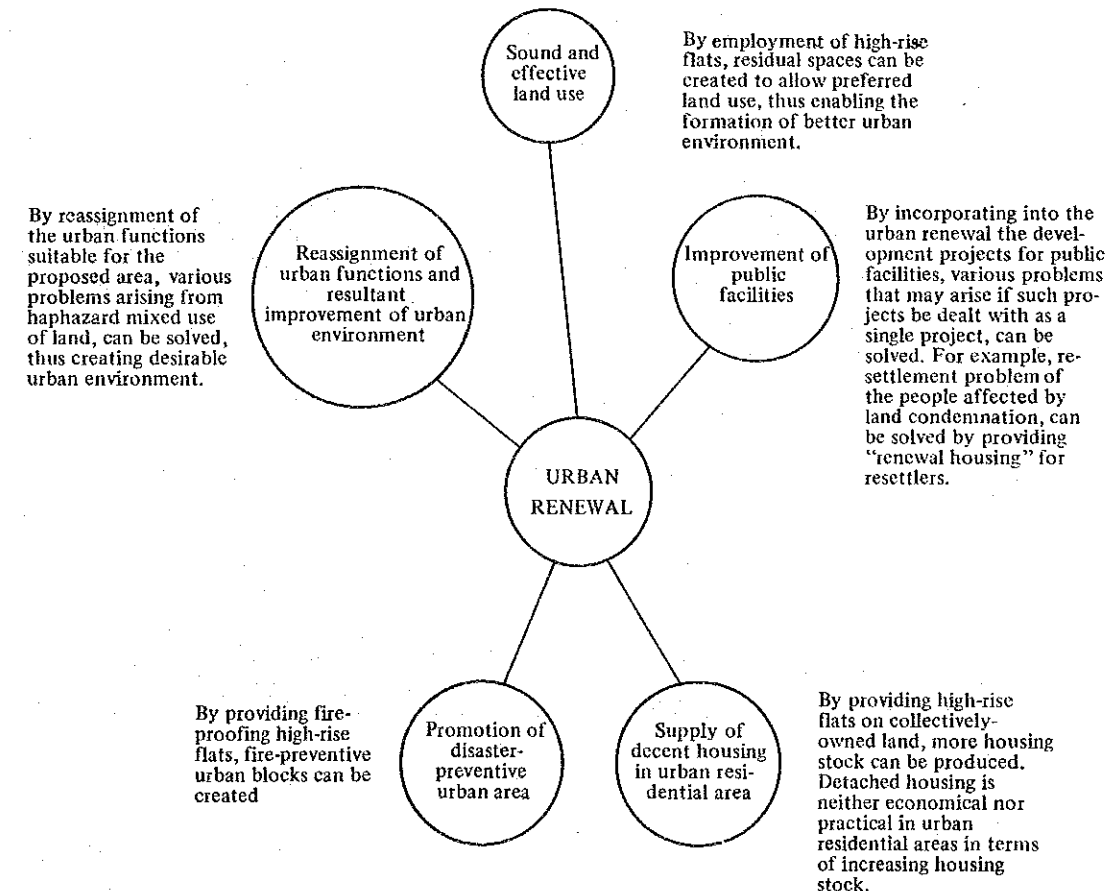


Keisuke Arita
President

Japan International Cooperation Agency

AIMS AND EFFECTS OF URBAN RENEWAL

- Urban renewal must be comprehensively planned and intensively implemented with inclusion of the following projects, to achieve maximum "multiple effects" of the project.
 - (a) Improvement of poor standard housing and living environment chiefly from the standpoint of social welfare;
 - (b) Development or improvement of urban infrastructures; and
 - (c) Improvement and reassignment of urban functions to reflect the city planning in terms of preferred land use.
- Following the government's guidelines, urban renewal must be oriented to cater for the low-income group constituting the majority of urban population, and at the same time be in principle self-financing or financially independent from the government development funding.
- The sites that necessitate urban renewal in Jakarta, may have different "faces", but in general, the aims and effects of the urban renewal in Jakarta can be summarised as shown below.



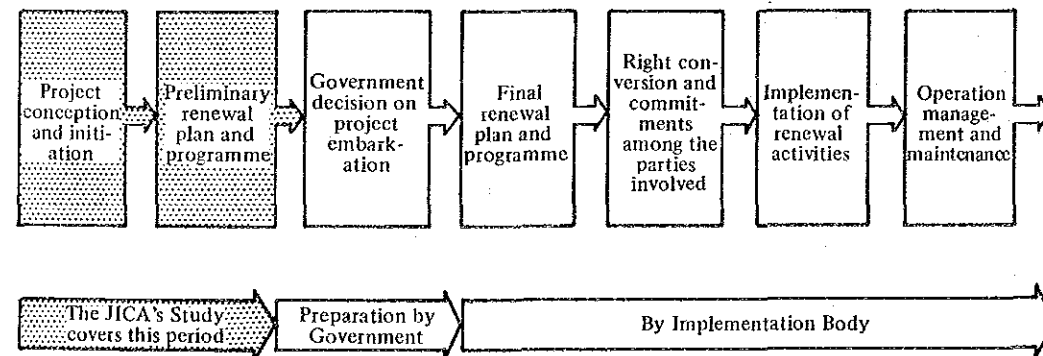
OBJECTIVES OF THE STUDY

- The scope of work agreed upon on February 27, 1982 between the Directorate General Cipta Karya, Ministry of Public Works, Indonesia and JICA, stipulates the objectives of the Study as follows:
 - (a) To propose basic concepts for implementing urban renewal projects in Jakarta, in general, and in particular, selected study areas in Jakarta (Kebon Melati and Manggarai) in Stage I;
 - (b) To perform feasibility studies for the urban renewal projects to be initiated at the project sites selected in the study areas in Stage II; and
 - (c) To perform technology transfer to Indonesian counterpart personnel in the course of the Study.

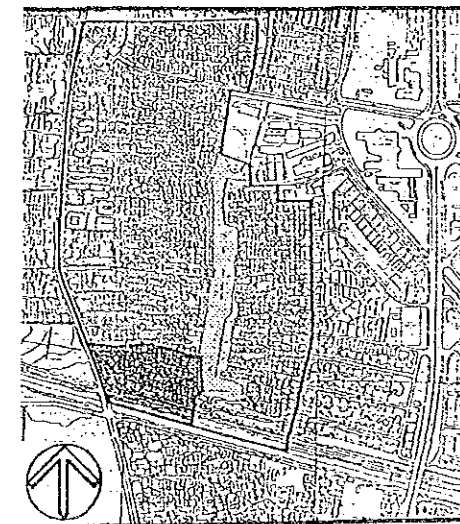
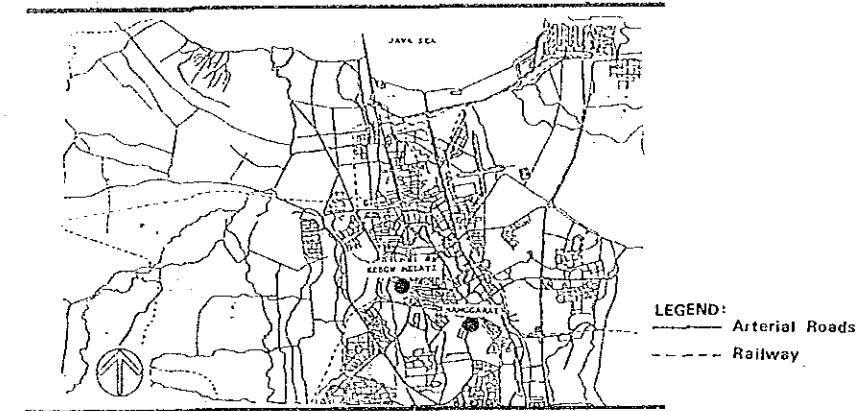
More specifically, the ultimate objective of the Study is to provide a "Preliminary Urban Renewal Plan" to the selected project sites which may serve as the sound basis for the Governmental decision making process prior to embarking the urban renewal projects.

The Preliminary Urban Renewal Plan shall include fairly accurate plans and programmes on land acquisition system, right conversion system, cash-flow analysis, physical planning, project scheduling, project organization, etc., yet it still needs to be elaborated through more accurate physical inventory survey (e.g. real estate measurements) and marketing research (e.g. feasibility of commercial developments). This is also true when considering the circumstantial changes of the sites which may occur by the time of actualization of the project.

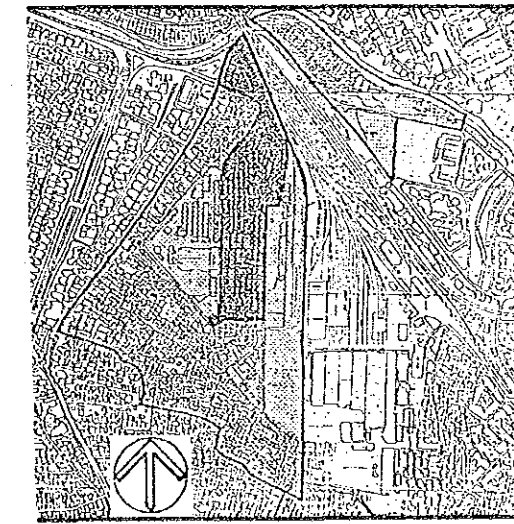
- The following is a work flow which may be followed by the project and the position of the Study relative to the series of works.



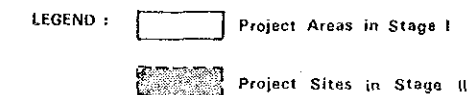
LOCATION MAP OF THE PROJECT SITES



PROJECT SITE IN KEBON MELATI (3.6 ha.)



PROJECT SITE IN MANGGARAI (7.6 ha.)

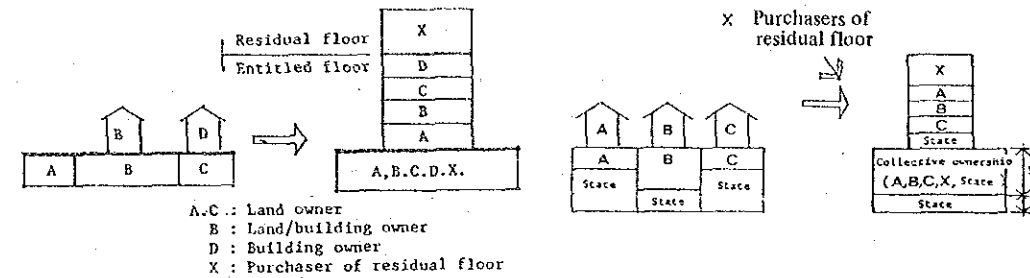


- The urban renewal is a project that belongs to the city planning pursuing civil benefits, and in this context the government's non-involvement in financial terms appears to be neither realistic nor reasonable. The point is how the government can effectively and efficiently support the projects at the least possible cost, and the subsidy and financial defrayment should be considered along this line.
- Legal, institutional and organizational adjustments are needed. However, the commencement of the proposed project could not wait until everything becomes ready. Nor could it be wise in that such adjustments would become more realistic and substantial through experiencing real problems in implementing the project which may be regarded as a "pilot" project.
- Organizations for urban renewal can be structured in various ways, e.g. local or central government, or public corporations or civil associations. However, urban renewal projects in Jakarta need to include intensive development of infrastructures, and most of these developments are financially and technically controlled by the central government agencies. Under the circumstances, particularly in consideration of the character of the project as the pilot one with fairly large scale, it is recommended that Cipta Karya will be best suited as the implementation agency and the actual execution assumed by PERUM PERUMNAS.
- A concept of "cross-subsidization" is essential to comply with the government's guidelines on project financing. The cross-subsidization appears to be synonymous with the "redistribution of income" between the socio-economical "dual structure" which predominantly exists in Indonesia. More specifically, the cross-subsidization becomes more substantial if urbane, modern (westernized) and wealthy structure be incorporated in the urban renewal in the form of "revenue-producing projects". Furthermore, to allow this, sites need to be advantageously located to assure the marketabilities of such revenue-producing projects.
- Because of the existence of Kampung that characterise the city of Jakarta in both qualitative and quantitative terms, the urban renewal should be primarily focussed on the improvement of Kampung to attain sound and effective land use in a way consistent with the city planning. The improvement, however, always creates a serious problem as to how the socially weak and economically poor people can be safeguarded without being exploited by the project. Planning policy should be directed to rehouse as many inhabitants as possible, providing with decent houses in their original place of living. To allow this, considerable help of the Government may be inevitable in light of their low economical capabilities.
- The urban renewal should be oriented to induce the people's efforts to acquire better life with reasonable financial obligations for purchasing new houses or maintaining their own community facilities. The citizen have to learn that the city life costs them not only moral but also economical accountability.
- An urban renewal project should be comprehensively planned and intensively implemented to achieve maximum multiple effects and equitable distribution of development benefits accrued by the project.
- The urban renewal can be implemented by civic associations (housing cooperative) in the future when the urban renewal has become more familiar to the citizen and convincing of its merits. The government's support and guide are essential to foster the urban renewal projects by civic associations.
- Unlike infrastructure developments, economical appraisal of urban renewal projects may face the difficulty that effects and benefits are by and large of the nature not quantifiable in money terms and have "intangible" merits which will defy quantification. However, it should be borne in mind that this would never lessen the feasibility of the projects.
- The urban renewal per se will never present a definite panacea against the city problems which are largely attributable to many other "fundamentals", but will be an effective and versatile tool to improve existing urban structures which are outmoded to cope with current problems and needs.
- In place of the conventional purchase-of-land method, the right conversion method should be encouraged to minimise initial investment and to maximise resettlement rate, thus mitigating project cash flow and achieving the objective to improve the living environments of the people.
- In financial terms, the financial burden to be borne by the Government is for the subsidy applicable to the selected cost items and the defrayed costs for improvements to the public facilities involved, which accounts for about 30 percent of the total implementation cost. This is a very important character inherent to urban renewal projects, distinct from ordinary infrastructure development projects. In other words, the Government or the implementation body can initiate an urban renewal project with arrangement of the budget of about 30 percent of the total cost plus operational funds which will be normally recoverable from revenue-producing projects.

● Three Alternative Methods of Urban Renewal Project

(a) Purchase-of-land method

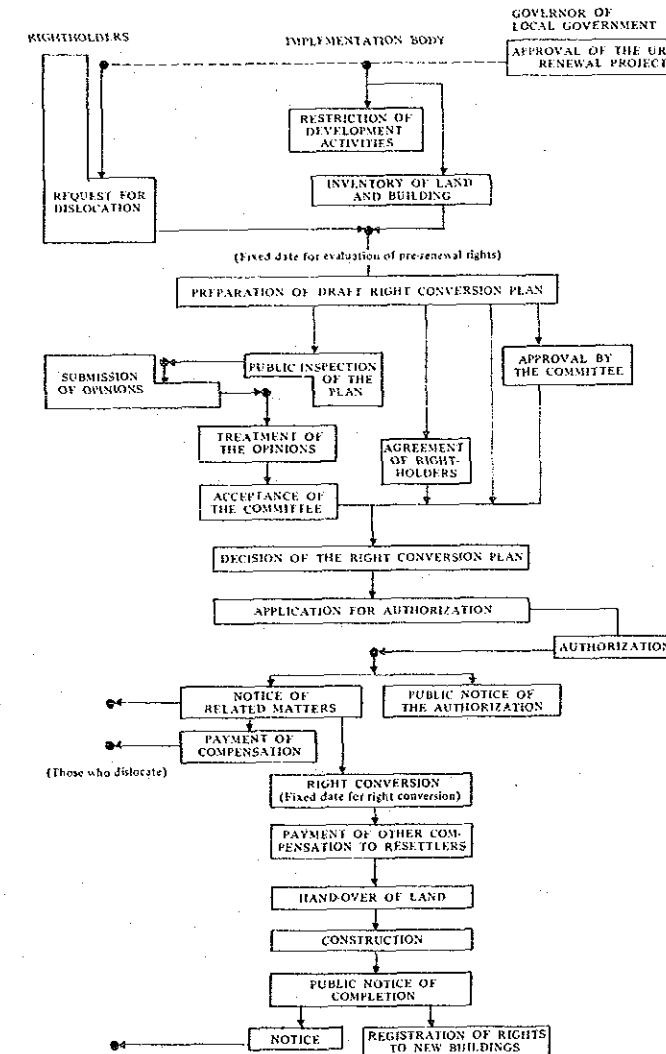
This is the conventional method to acquire the necessary land for public projects. In a built-up urban area, particularly where densely populated, over-crowded urban residential areas like Kampung, this method appears to be less workable due to difficulties in evaluating the piecemeal rights of the people on the fragmentary land ownership before renewal.



(b) Right conversion method

To avoid the disadvantages of the purchase-of-land method as above mentioned, this method was developed originally from the method of "land readjustment" (KUKAKU-SEIRI). In this method, the rights to the land and buildings before renewal are converted to the new rights after renewal. The supreme objective of this method is to make the best possible effort to form an agreement on the urban renewal project amongst the inhabitants involved, thus aiming at maximising the resettlement rate.

(b) Right conversion process



(c) Reserved right-conversion method

This is a variation of the right conversion method by introducing the merits of the purchase-of-land method. In this method, the rights before renewal are once purchased and the payments are deposited until requested by the rightholders to withdraw the amount for dislocation. For those who request to be resettled in new houses, the rights after renewal will be provided in the same manner as the ordinary right conversion method.

In this report, the right conversion method (b) is recommended as best suited for the proposed projects in that the method would maximise the resettlement rate and thus minimise the financial burden of the implementation body.

● Right Conversion Method

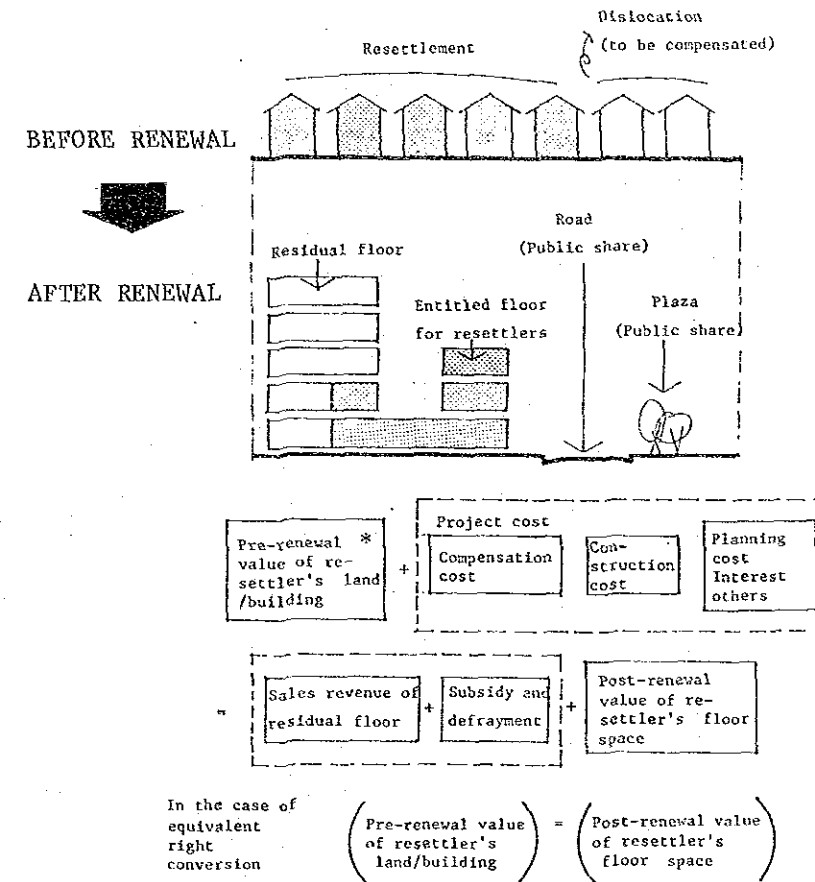
(a) Principle of the method

In accordance with the right conversion system, the rights before renewal will be converted to the rights after renewal as shown below. According to this method, the land ownership of the State can also be converted to the part of the entitled floor in proportion to its rights before renewal. This Government's entitled floor can be allocated for use of public facilities or for supply of housing to the low-income people to serve as social welfare.

- The expenses to be incurred by the implementation body are as follows:
 - (a) Compensation for the land and buildings, to be paid to the rightholders who will dislocate to other places without being resettled.
 - (b) Compensation for any loss or damage incurred by the rightholders during the course of construction, such as compensation for suspension of trading, temporary housing, etc.
 - (c) Implementation expenses for planning and design, construction of public facilities and housing/buildings, interests against loan, etc.
- The revenues that shall be recovered by the implementation body, are as follows:
 - (a) Revenue from lease or sales of the residual floor or land which are normally developed for commercial or business use in expectation of higher productivity.
 - (b) Subsidy* from the government which covers part of the compensations of the first two above, and part of the implementation expenses of the above.
 - (c) Defrayments from the management agencies responsible for public facilities, the maximum amount of which is estimated on the assumption that the improvement would be done as an independent project by the "purchase-of-land" method.

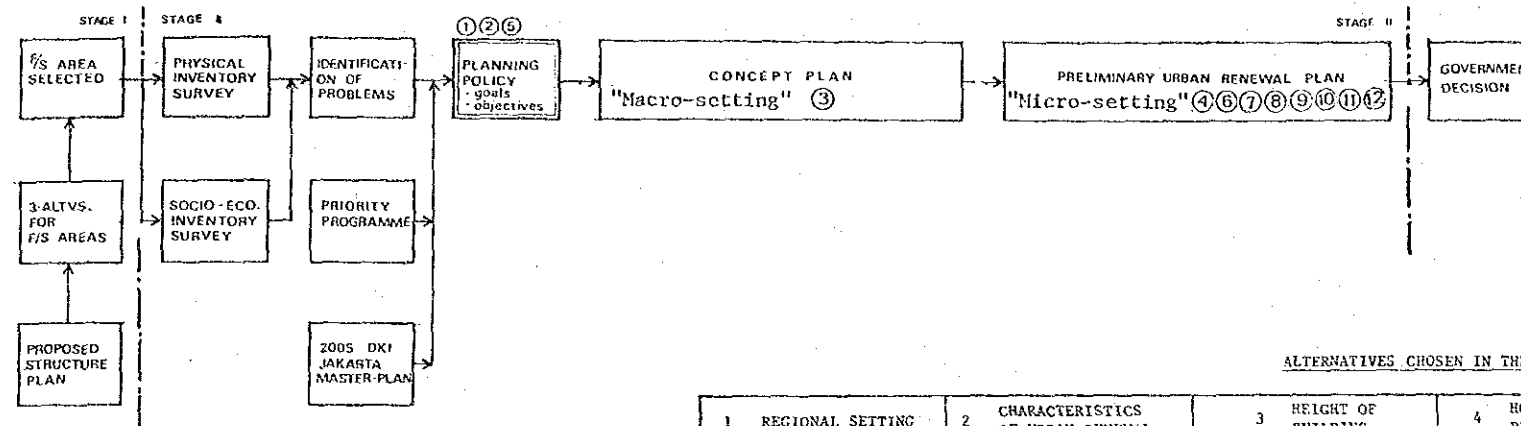
- * The Government's subsidy may be granted for the following reasons.
- Encouragement of urban renewal projects.
 - Compensation for the loss or damage suffered by the people due to the projects (suspension of trading, temporary housing, etc.).
 - Compensation for extra costs needed to develop built-up area (planning and design of the right conversion, land preparation, etc.)
 - Financial share for the costs paid for the construction of the facilities for public use (open space, corridor, elevator, staircase, utilities, public hall, etc.).

● Relation between "project" and "finance"



- * Relief to poor rightholders
- In planning the right conversion, the following countermeasures should be considered to the persons who cannot obtain reasonably adequate floor area.
- Sell or rent the necessary additional floor to such inhabitants by reallocating the state's entitled floor at a subsidized price or rent according to the Government policy. In the Study, financial analysis does not include the possible repayment for the added floor as the revenue of the implementation body.
 - To those who wish to dislocate, the implementation body should help them to find their new home such as other low-income housing.

FLOW CHART OF THE CHOICE OF ALTERNATIVES : PRELIMINARY URBAN RENEWAL PLAN (P.U.R.P)



As urban renewal has the nature of improving existing urban structures in a selected limited area in pursuance of the local redevelopment plan (structure plan), choice of alternative planning concepts is normally narrowed because of the limitations of existing demographic, geographic, socio-economic, planologic, methodologic features and constraints attached to the site.

The above flow chart shows the choice of alternatives, linked to the flow of the Stage-II Study starting from inventory surveys through to the establishment of a preliminary urban renewal plan. Before arriving at the ultimate plan, plans are examined for desirability through the two processes as shown in the figure, one is "macro-setting" for the concept plan and the other is "micro-setting" for the preliminary urban renewal plan.

The table shows the alternatives on the major items chosen in the study process.

ALTERNATIVES CHOSEN IN THE STUDY PROCESS

Legend: : Chosen alternatives

1 REGIONAL SETTING	2 CHARACTERISTICS OF URBAN RENEWAL	3 HEIGHT OF BUILDING	4 HOUSING LOT PLANNING	5 IMPLEMENTATION METHOD	6 RESETTLEMENT RATE
a. City centre or sub-centre type b. District centre type c. Other functional assignments	a. Predominantly linked with infrastructure improvements b. Aimed at improving housing and building	a. High-rise bldg. b. Mid-rise bldg. c. Low-rise bldg.	a. Open-gallery type b. Single-corridor type c. Staircase type d. Twin-corridor type e. Inner corridor type f. Court type	a. Purchase-of-land b. Right conversion c. Reserved right conversion	a. 100% b. 75% c. 50%
Manggarai is characterized as a city sub-centre, whilst Kebon Melati as an urban residential area	Both project sites need incorporation of infrastructure improvements into the proposed urban renewal projects	To realise sound and effective land use, it is essential to employ high-rise buildings from economic and physical aspects	Open-gallery type is chosen in that it enables dense layout of buildings, preserving existing neighbourhood atmosphere	Right conversion method is chosen in that it lessens initial investment, raises resettlement rate and enables equitable distribution of development benefits	Referring to the socio-economic survey data, 75% is employed as a reasonable maximum rate that may likely happen
7 REVENUE-PRODUCING BUILDINGS	8 ECONOMIC FEASIBILITY	9 SUBSIDY SYSTEM	10 DEFRAYMENT	11 RIGHT CONVERSION	12 IMPLEMENTATION ORGANIZATION
a. No b. Yes Commercial Office Hotel Housing Others	Regarding tangible benefit a. Development benefits by effective land use b. Benefits from infra improvement c. Other benefits	a. Selective subsidy b. Lump sum c. Deficit-pay	a. Yes b. No	Regarding public land a. Converted as a right before renewal b. Not converted	a. PERUMNAS b. DKI Jakarta c. Quasi-public corporation d. Civil association
Project in Manggarai includes commercial, office and hotel facilities to satisfy sub-centre functions. Whilst, project in Kebon Melati includes neighbourhood shops and office buildings	The above two benefits are quantified in monetary terms and other benefits are dealt with as intangible benefits that defy quantification	Subsidy must be selectively applied to the items which are particularly required for urban renewal projects, taking into consideration the public benefits that may be accrued by the projects	One of the important aims of the urban renewal is to improve related infrastructure simultaneously. This may justify the financial defrayed costs of the respective agencies responsible for the public facility	The value on land before renewal are converted to the right on floor after renewal. The value on land is to be shared by the state against its right, thus the entitled floor after renewal is proportionally shared by the state	a. or b. is preferred in consideration of public purpose. Of a. and b., a. is recommended because of its experiences in housing development and accountability for urban development

● **Environments of the Area**

- (a) 2005 Master Plan of DKI Jakarta designates the area as a city subcentre.
- (b) JABOTABEK railway improvement programmes indicate betterment of the Manggarai station.
- (c) The area presents poor living environment with extremely high population density and lacks public facilities.
- (d) About 140 home industries manufacturing "kompor" located in the area are scheduled to move out to the new small industrial complex in Pulo Gadung.

● **Renewal Plan**

The project includes:

- (a) Improvement of public facilities such as station-front plaza, major roads, bus terminals, public utilities, community facilities.
- (b) Realization of effective land use around the station to assign a subcentre function.
- (c) Improvement of living environment such as decent flats, parts, etc.

The implementation is divided into two sections in consideration of the execution scale and priority, and each section can be financially independent.

● **Implementation Cost and Schedule**

- (a) The implementation cost

	Unit: Million Rp.		
	Section-I (Rp.)	Section-II (Rp.)	Total (Rp.)
Implementa- tion cost	32,500 (100%)	34,300	66,800 (100%)
Subsidy	3,600 (11%)	3,100	6,700 (10%)
Defrayment	5,000 (15%)	2,700	7,700 (12%)
Sales revenue of residual floor	23,900 (74%)	28,500	52,400 (78%)

- (b) Floor unit cost

F21	93,300 Rp./m ²
F26, F36, F54	115,000 Rp./m ²

- (c) Right-conversion rate on land and floor area : approximately 1.0

- (d) Added floor against the extremely poor rightholders should be reallocated from the state's entitled floor obtained by the right conversion method.

- (e) Implementation schedule is planned to be,

Section-I	: 5 years including urban renewal planning
Section I+II	: 8 years including urban renewal planning

● **Financial Analysis**

FIRR (Financial Internal Rate of Return):	Section I : 7.9%
	Section II : 9.4%

Financial analysis shows that should the loan with the following conditions be available, the project could produce surplus (profit) at the end of the amortization period and the surplus could offset the financial burden of the Government.

- Foreign soft loan for the portion of : 20-year amortization including 5-year grace at 5-percent interest
- Local loan for the portion of local : 20-year amortization including 5-year grace at 12-percent interest.

● **Economic Analysis**

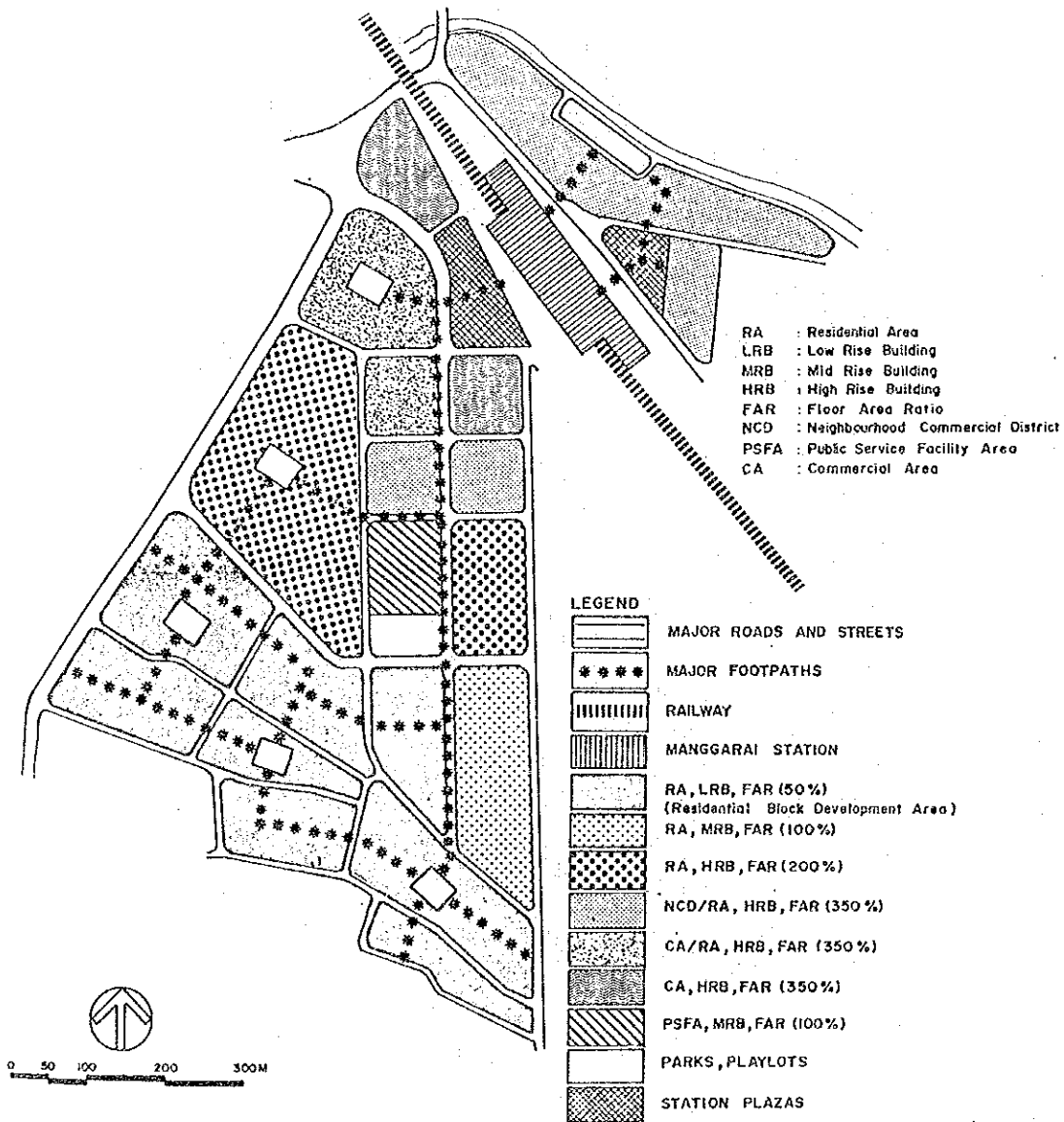
As a result of economic analysis, the project is feasible and greatly contributes to the national economy.

IRR (Internal Rate of Return)	: 18%
NPV (Net Present Value)	: Rp. 7,366 million

STRUCTURE PLAN & SELECTED PROJECT SITE -MANGGARAI 8

STRUCTURE PLAN

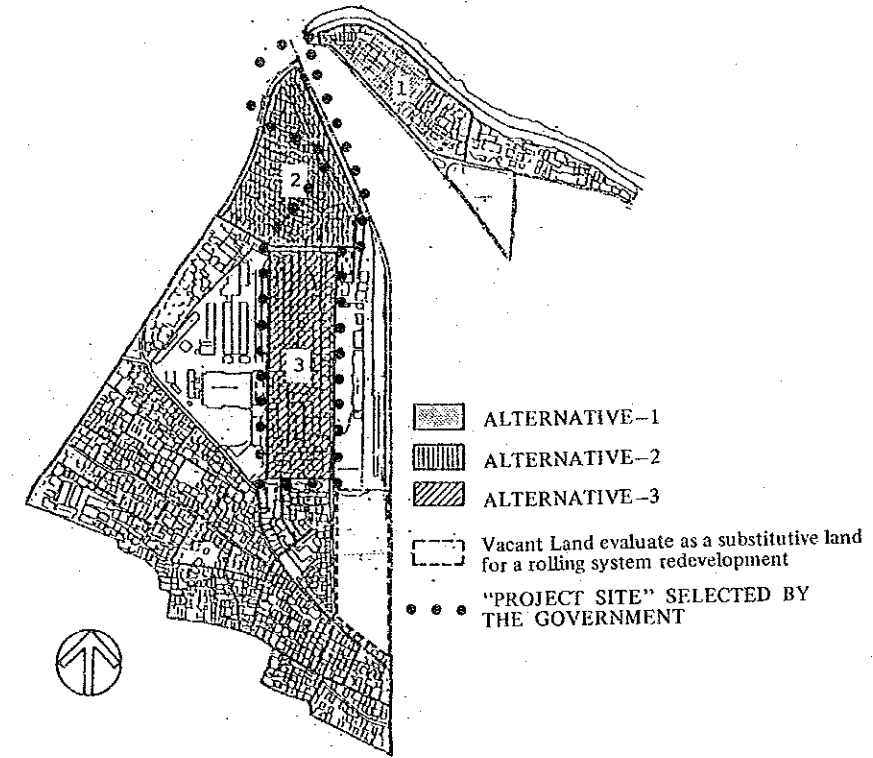
According to the Preliminary DKI Master Plan for the year 2005, Manggarai will be redeveloped in the future as mixed commercial, business and residential areas with sub-centre functions, linked with railway improvement programmes involving a station-front plaza. The proposed structure plan is shown below.



PROPOSED STRUCTURE PLAN IN MANGGARAI

PROJECT SITE SELECTED

Three alternative sites for feasibility studies were recommended, of which the site marked as "Project Site" was ultimately selected by the Government.



CONDITIONS OF ALTERNATIVES

ALTERNATIVES	ALT. - 1	ALT. - 2	ALT. - 3
SITE AREA (Ha)	2.9	4.7	5.9
EXPECTED POPULATION	6,500	5,800	5,000
PROPOSED HOUSING FLOOR (M ²)	45,300	48,600	29,000
MAJOR IMPLEMENTATION ITEMS	Urban Renewal Housing (URH), Roads, Drainage & Sewerage (D&S), Water Front of Kali Ciliwung	Station-Front Plaza Roads, Commercial BLDGS, URH, D&S	URH, D&S, Community Facilities

DESIGN CONCEPT & LAYOUT PLAN - MANGGARAI 9

● Supply of low-cost housing and adequate community facilities

- In general, 8-storey flats are designated.
- In every flat, open galleries are designed to provide community spaces.
- Public open areas are provided for playground, garden and sports field, etc.
- Manggarai mall (a pedestrian road connecting residential area to the Manggarai station) is designated to provide a multi-functional open space.

● Development of station-front plaza

- Relocation of existing bus terminals to the station-front plaza
- Elevated pedestrian deck which separates the pedestrians from the road services.

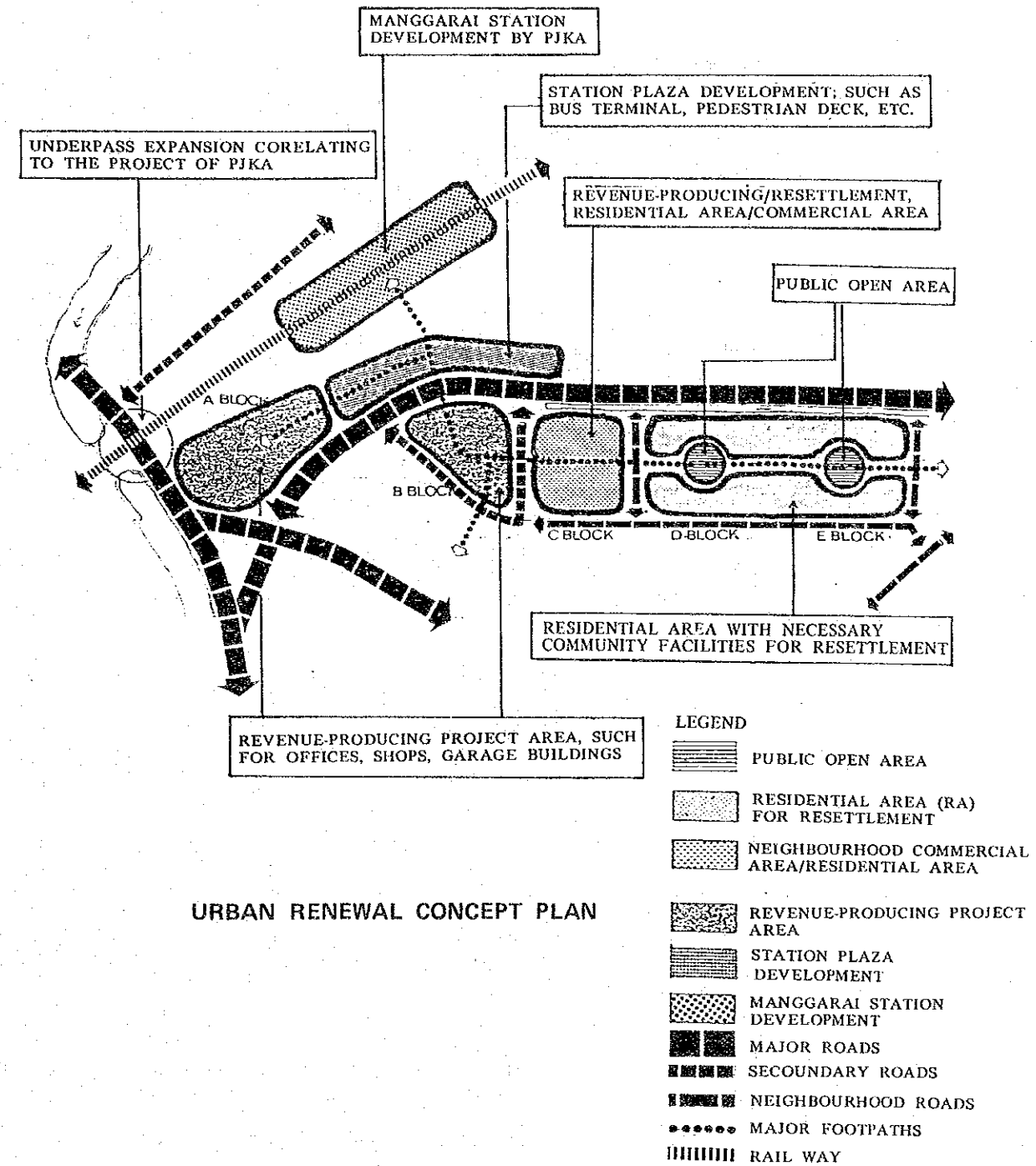
● Development of commercial and business facilities in front of the station-front plaza

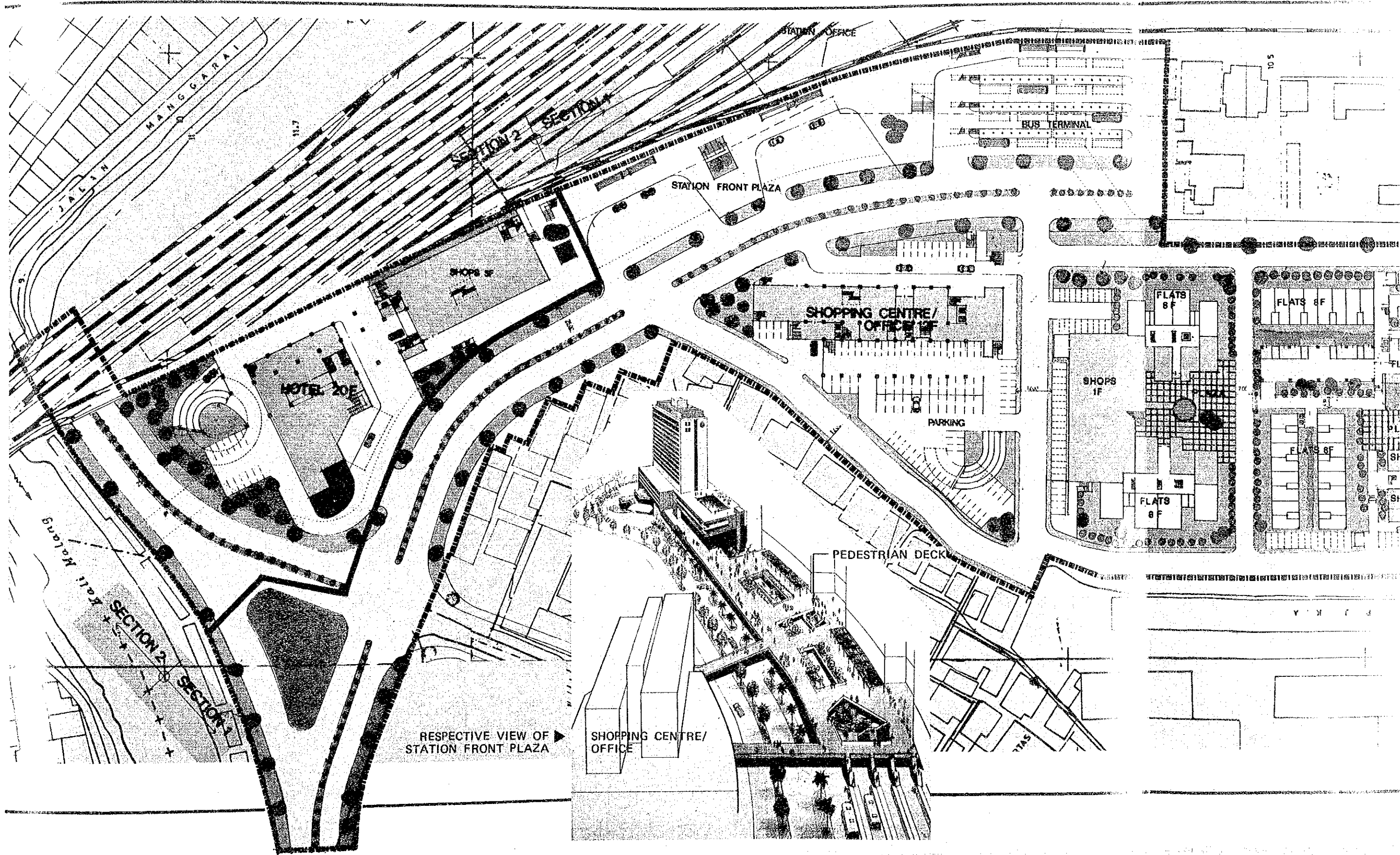
- A block
 - A middle-class hotel of 20 storeys with 300 rooms. The hotel will become a land-mark of the Manggarai area.
- B block
 - A shopping centre (from 1st floor to 6th floor) and a office (from 7th floor to 12th floor)
- A and B blocks are connected to the station-front plaza with the elevated pedestrian deck.

● 25 m wide road

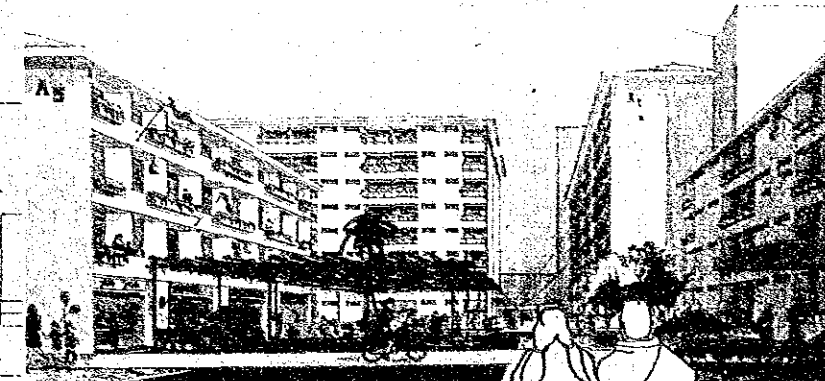
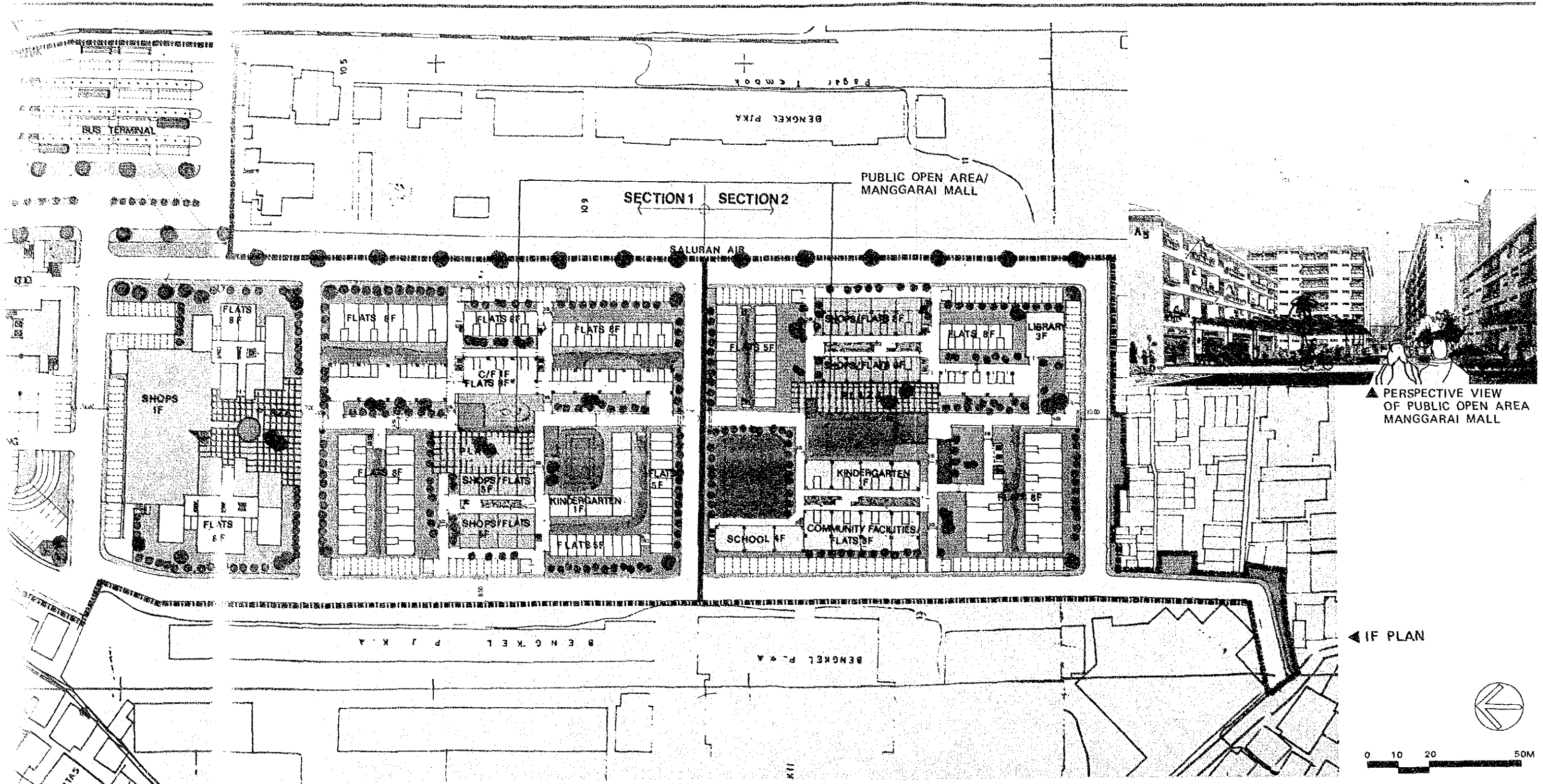
25 m wide road (R.O.W.) is designated for access to the station-front plaza.

25 m wide road will serve as a future main road connecting the north and the south areas of the Manggarai district.





MANGGARAI



▲ PERSPECTIVE VIEW OF PUBLIC OPEN AREA MANGGARAI MALL

FIG. 5-11 LAYOUT PLANNING - MANGGARAI

PROJECT DATA - MANGGARAI 10

Section I

General Condition of plan	Land Area	Public Use	Present		Plan		Remarks
			Area	%	Area	%	
	Major road		1,800 m ²	3.6%	12,300m ²	24.6%	
	Neighbourhood Road		5,400 m ²	10.8%	7,600	15.2%	
	Station front plaza	Bus terminal	1,800	3.6%	6,900	13.0%	
	River		1,600	3.2%	0	0%	
	Others		0	0%	0	0%	
	Sub-total		10,600	21.2%	26,800	53.5%	
	Building lot area		39,450	78.8%	23,250	46.5%	
	Project area		50,050	100%	50,050	100%	
	House		31,900		40,610		Private floor 32,250
	Shop		1,000		14,740		9,370
	Office		0		13,000		8,220
	Hotel		0		0		0
	Workshop		4,100		0		0
	Car park		0		10,450		10,450
	Public buildings		400		570		570
	Total		37,400		79,370		60,940
	Floor area ration			95%		295%	
	Coverage ratio			75%		49%	
	Number of housing unit					843	
	Population			6,050		6,050	
Type of housing	Type	Private Floor area	Number of units	Type	Private Floor area	Number of units	
	F21	21.0m ²	235	F54	52.7m ²	120	
	F25	27.4	240	F70	76.5	60	
	F36	38.6	128	F100	105	60	
Community facilities (number)	Kindergarten		1	Morsque		1	
	Meeting hall		1				
Financial plan	Revenue		Expenditure		Item of Subsidy		
	Subsidy	3,589	Planning	1,741	Planning	1,161	
	Deffrayment	4,998	Land Preparation	438	Land Preparation	1,073	
	Sales Revenue of residual floor	23,939	Compensation	676	Construction	1,184	
			Construction	23,481	Over head, etc.	171	
			Maintenance	536	Item of Deffrayment		
			Overhead etc.	1,526	Land Cost	2,916	
			Contingency	2,348	Construction	1,395	
			Interest	1,830	Compensation	449	
	Total	32,526	Total	32,526	Overhead, etc.	238	
Unit floor cost	House (1) (F21)	House (2) (F25-F54)	House (3) (F70, F100)	Shop (1)	Community facility	Office	Shop (2)
Rp. 1000/m ²	93.3	115	159.2	207.3	207.3	1,161.0	1,672.2
Right-conversion	Floor area for right holder	29,237m ²	Conversion rate (land area)	1.0	Conversion rate (land area)		1.0

Section II

General Condition of plan	Land Area	Public Use	Present		Plan		Remarks
			Area	%	Area	%	
	Major road		1,300m ²	5.1%	3,400m ²	13.3%	
	Neighbourhood Road		2,900	11.3%	4,300	16.8%	
	Station front plaza		0	0%	0	0%	
	River		1,400	5.5%	0	0%	
	Others		500	1.9%	0	0%	
	Sub-total		6,100	23.8%	7,700	30.1	
	Building lot area		19,500	76.2%	17,900	69.9%	
	Project area		25,600	100%	25,600	100%	
	House		12,090		21,650		Private floor 17,930
	Shop		1,300		7,900		5,140
	Office		0		0		0
	Hotel		0		23,530		16,010
	Workshop		200		0		0
	Car park		0		11,330		11,330
	Public buildings		560		2,640		2,640
	Total		14,090		67,050		52,345
	Floor area ration			72%		311%	
	Coverage ratio			65%		49%	
	Number of housing unit					520	
	Population			2,750		2,750	
Type of housing	Type	Private Floor area	Number of units	Type	Private Floor area	Number of units	
	F21	21.0m ²	110	F54	52.7m ²	96	
	F25	27.4	202				
	F36	38.6	112				
Community facilities (number)	Elementary		1	Meeting hall		1	Library
	Kindergarten		1	Mosque		1	
Financial plan	Revenue		Expenditure		Item of Subsidy		
	Subsidy	3,118	Planning	1,887	Planning	1,258	
	Deffrayment	2,657	Land Preparation	162	Land Preparation	505	
	Sales Revenue of residual floor	28,495	Compensation	353	Construction	1,207	
			Construction	25,454	Over head, etc.	148	
			Maintenance	244	Item of Deffrayment		
			Overhead etc.	1,653	Land Cost	288	
			Contingency	2,545	Construction	2,200	
			Interest	1,970	Compensation	42	
	Total		Total	34,270	Overhead, etc.	127	
Unit floor cost	House (1) (F21)	House (2) (F25-F54)	Shop (1)	Community facility	Metal	Shop (2)	Car parking
Rp. 1000/m ²	92.7	114.0	154.6	206.1	1,187.0	1,750.3	43.3
Right-conversion	Floor area for right holder	13,358m ²	Conversion rate (land area)	0.9	Conversion rate (land area)		1.3

Section I + II

General Condition of plan	Land Area	Public Use	Present		Plan		Remarks
			Area	%	Area	%	
	Major road		3,100m ²	4.1%	15,700m ²	20.8%	
	Neighbourhood Road		8,300	11.0%	11,910	15.7%	
	Station front plaza		1,800	2.4%	6,900	9.1%	
	River		3,000	4.0%	0	0%	
	Others		500	0.7%	0	0%	
	Sub-total		16,700	22.1%	34,500	45.6%	
	Building lot area		58,950	77.9%	41,150	54.4%	
	Project area		76,600	100%	75,600	100%	
	House		43,990		62,260		Private floor
	Shop		2,300		22,640		
	Office		0		13,000		
	Hotel		0		23,530		
	Workshop		4,300		0		
	Car park		0		21,780		
	Public buildings		900		3,310		
	Total		51,490		146,420		
	Floor area ration			87%		302%	
	Coverage ratio			70%		49%	
	Number of housing unit					1,363	
	Population			8,800		8,800	
Type of housing	Type	Private Floor area	Number of units	Type	Private Floor area	Number of units	
	F21	21.0m ²	345	F54	52.7m ²	216	
	F25	27.4	442	F70	76.5	60	
	F36	38.6	240	F100	105	60	
Community facilities (number)	Elementary		1	Meeting hall		2	Library
	Kindergarten		2	Mosque		2	
Financial plan	Revenue		Expenditure		Item of Subsidy		
	Subsidy	6,707	Planning	3,678	Planning	2,419	
	Deffrayment	7,655	Land Preparation	600	Land Preparation	1,578	
	Sales Revenue of residual floor	52,343	Compensation	979	Construction	2,392	
			Construction	48,935	Over head, etc.	320	
			Maintenance	780	Item of Deffrayment		
			Overhead etc.	3,181	Land Cost	3,204	
			Contingency	4,893	Construction	3,595	
			Interest	3,800	Compensation	491	
	Total	66,796	Total	66,796	Overhead, etc.	365	
Unit floor cost							
Rp. 1000/m ²							
Right-conversion	Floor area for right holder		Conversion rate (land area)		Conversion rate (land area)		

IMPLEMENTATION SCHEDULE & FINANCIAL PLAN-MANGGARAI 11

Implementation schedule (Manggarai Section I)

Items	Year	1	2	3	4	5	6	7	8	9	10
	SECTION I(a)										
1 PLANNING											
2 TEMPORARY HOUSING		Construction & operation									
3 LAND PREPARATION		Demolition & grading									
4 CONSTRUCTION			Housing								
			Saluran Air, 25M road, station plaza, water supply, sewerage, etc.								
SECTION I(b)											
1 PLANNING											
2 TEMPORARY HOUSING			Operation & maintenance								
3 LAND PREPARATION			Demolition & grading								
4 CONSTRUCTION				Housing office/shop							
				Road, water supply, etc.							

Implementation schedule (Manggarai Section II)

Items	Year	1	2	3	4	5	6	7	8	9	10
	SECTION II										
1 PLANNING											
2 TEMPORARY HOUSING							* Operation				
3 LAND PREPARATION							Demolition & grading				
4 CONSTRUCTION											
-BUILDING(HOUSING, ELEMENTARY SCHOOL, ETC.)											
-BUILDING(HOTEL, PEDESTRIAN DECK)											
-INFRASTRUCTURE, ETC.							Saluran Air, under pass				

* Alternatively, this can immediately follow the planning for Section I.

Financial Schedule in Manggarai – Section I

Unit: Rp.1,000,000

	Year	CONSTRUCTION						Total
		1	2	3	4	5	6-24	
Equity		0	0	0	0	0	0	0
Share Defrayment		1,325	0	341	2,650	0	682	4,998
Subsidy		895	709	1,160	490	336	0	3,590
Revenue from Rental Floor		0	0	0	135	135	65,493	65,763
Foreign Loan		611	1,643	2,086	3,510	4,589	0	12,439
Domestic Loan		0	689	1,344	3,142	8,924	0	14,099
Total		2,831	3,041	4,931	9,927	13,984	66,175	100,889
Implementation Cost		1,610	4,035	4,470	8,913	11,670	0	30,698
Interest of Foreign Loan **)		31	113	217	393	622	7,291	8,647
Interest of Domestic Loan **)		0	83	244	621	1,692	22,768	25,408
Repayment of Foreign Loan		0	0	0	0	0	12,439	12,439
Repayment of Domestic Loan		0	0	0	0	0	14,099	14,099
Total		1,641	4,231	4,931	9,927	13,984	56,577	91,291

Final Cash Balance = 100,889 - 91,291 = 9,598 > 8,588 = 4,998 + 3,590 = Share Defrayment + Subsidy

**): 5%
**): 12%

Financial Schedule in Manggarai – Section II

Unit: Rp.1,000,000

	Year	CONSTRUCTION								Total	
		1	2	3	4	5	6	7	8		9-27
Equity		0	0	0	0	0	0	0	0	0	0
Share Defrayment		0	0	0	0	886	0	0	0	1,771	2,657
Subsidy		0	0	0	0	1,543	788	788	0	0	3,119
Revenue from Rental Floor		0	0	0	0	0	0	0	162	77,957	78,119
Foreign Loan		0	0	0	0	1,533	3,086	5,359	3,697	0	13,675
Domestic Loan		0	0	0	0	0	2,956	8,815	8,362	0	20,133
Total		0	0	0	0	3,962	6,830	14,962	12,221	79,728	117,703
Implementation Cost		0	0	0	0	2,575	7,554	13,050	9,121	0	32,300
Interest of Foreign Loan **)		0	0	0	0	77	231	499	684	8,020	9,511
Interest of Domestic Loan **)		0	0	0	0	0	355	1,413	2,416	32,112	36,296
Repayment of Foreign Loan		0	0	0	0	0	0	0	0	13,657	13,657
Repayment of Domestic Loan		0	0	0	0	0	0	0	0	20,133	20,133
Total		0	0	0	0	2,652	8,140	14,962	12,221	73,922	111,897

Final Cash Balance = 117,703 - 111,897 = 5,806 > 5,776 = 2,657 + 3,119 = Share Defrayment + Subsidy

**): 5%
**): 12%

A sensitivity analysis was made to the financial schedule which will be greatly affected by fluctuations of the foreign portion and interest rates of domestic loan. The analysis was made to the entire project (Section I + Section II) and the cases analysed are as shown below.

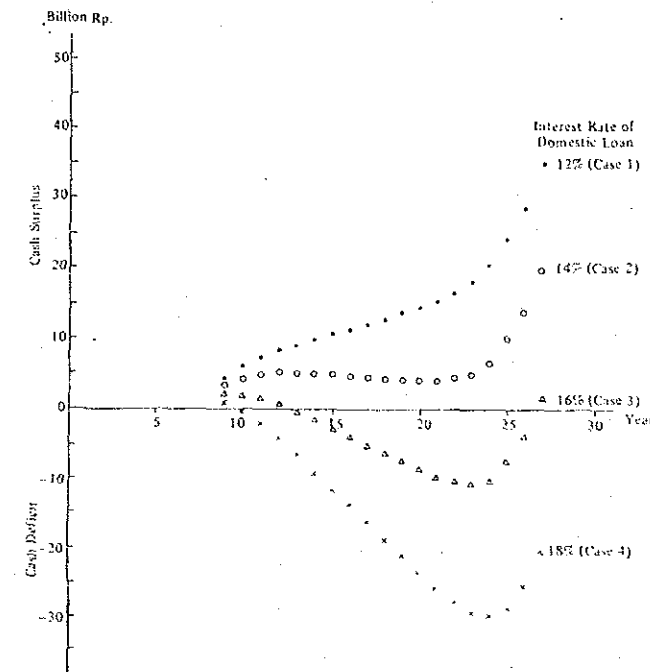
	Interest rate of domestic loan	12%	14%	16%	18%
Foreign Portion					
40%		Case 1 (Basic Case)	Case 2	Case 3	Case 4
50%		Case 5	Case 6	Case 7	Case 8

The following table shows the amount of the foreign portion respective to the foreign cost component involved in the building construction being 40% and 50%.

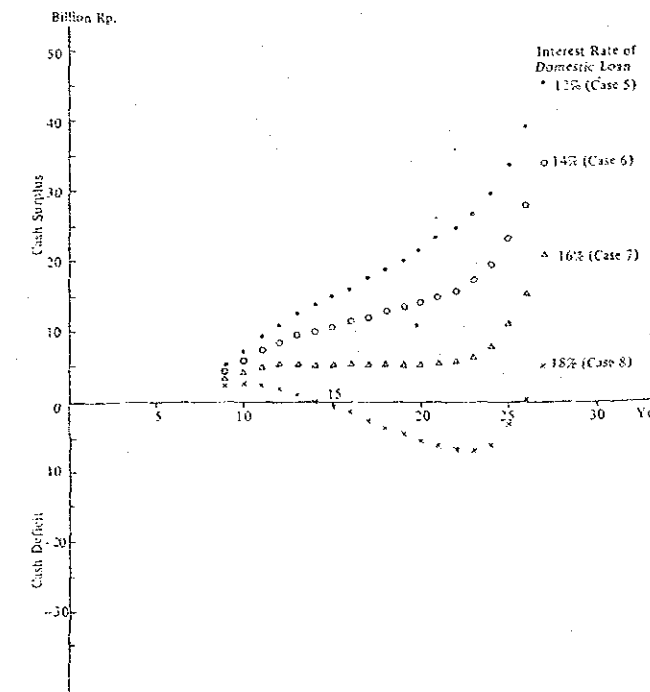
Foreign Portion	(Million Rp.)	
	40%	50%
1st year	611	611
2nd year	1,643	2,095
3rd year	2,086	2,456
4th year	3,510	4,408
5th year	6,122	7,318
6th year	3,086	3,818
7th year	5,359	6,627
8th year	3,697	4,568
Total	26,114	31,901

The amount of cumulative cash surplus or deficit is shown each for the cases of 40% and 50%. In the case of 40%, cash flow becomes deficit at the interest rate of 16% per annum, in the 5th year after completion of the construction. Whereas, in the case of 50%, cash flow becomes deficit at the interest rate of 18% per annum, in the 6th year after completion of the construction.

In order to assure the sound financial status of the project, it is very much essential that the implementation body makes efforts to arrange as low-interest loan as possible and to raise an occupancy rate of the residual floor.



CUMULATIVE CASH SURPLUS AND DEFICIT -- FOREIGN PORTION: 40%



CUMULATIVE CASH SURPLUS AND DEFICIT -- FOREIGN PORTION: 50%

● **Environments of the Area**

- (a) The Master Plan describes the area as urban residential area in need of environmental improvement.
- (b) The area presents poor living environment with high population density and lacks public facilities.
- (c) JABOTABEK railway improvement programmes indicate the betterment of the Western Line including the New Karet station project in the south of the area.

● **Renewal Plan**

The project includes:

- (a) Improvement of public facilities such as major roads, station-front plaza, public utilities, community facilities, etc.
- (b) Improvement of living environment such as decent flats, water-front park in the Melati Pond, etc.
- (c) Development of neighbourhood commercial function along the major roads.

● **Implementation Cost and Schedule**

(a) The implementation cost

	Unit: Million Rp.	
The implementation cost	Rp. 20,500	(100%)
The subsidy	Rp. 2,100	(10%)
The defrayment	Rp. 3,400	(17%)
Sales revenue of residual floor	Rp. 15,000	(73%)

- (b) Floor unit cost: F21, 25, 36, 54 112,300 Rp./m²
- (c) Right-conversion rate and added floor : Same as Manggarai
- (d) Implementation schedule is planned to be 3.5 years including the urban renewal planning.

● **Financial Analysis**

FIRR: 7.6%

Financial analysis shows that should the loan with the same conditions as in Manggarai be available, the project could produce surplus (profit) at the end of

the amortization period, and the surplus could offset 97 percent of the financial burden of the Government.

● **Economic Analysis**

As a result of economic analysis, the project is less feasible. However, as discussed previously, the result merely based on the quantifiable benefits should not defy the importance of the project.

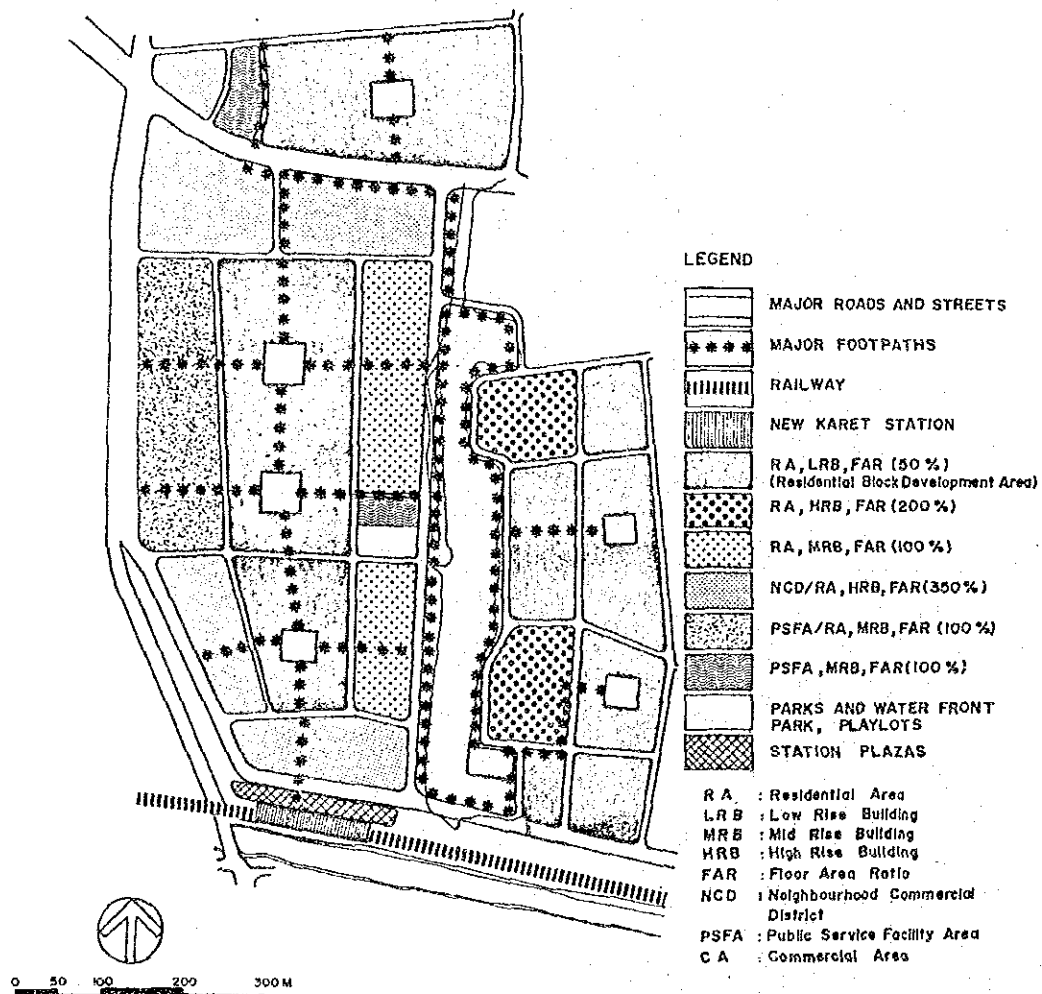
IRR : 11.7%

NPV : √Rp.4,106 Million (negative NPV)

The project may be implemented by a housing cooperative. To foster the urban renewal projects by cooperative, legal and institutional adjustments concerning the Government's subsidy and defrayment should be made. Furthermore, it should be controlled that cooperatives may carry out urban renewal projects only at sites designated by the city planning.

STRUCTURE PLAN

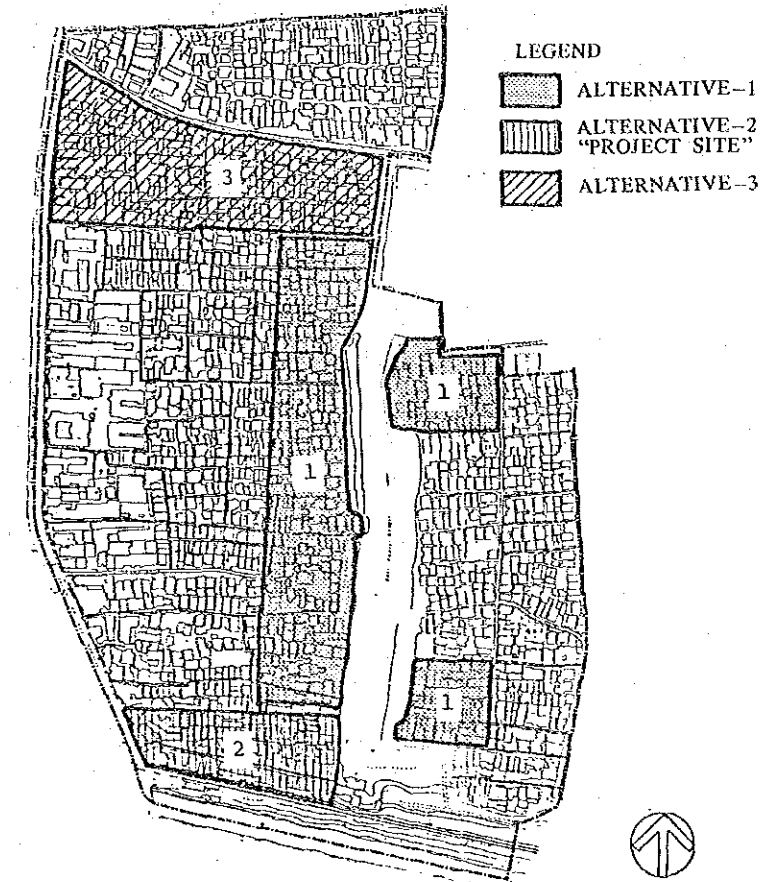
According to the Preliminary DKI Master Plan for the year 2005, Kebon Melati will be developed in the future as an attractive urban residential area together with neighbourhood commercial functions, linked with improvements of infrastructure. The proposed structure plan is shown below.



PROPOSED STRUCTURE PLAN IN KEBON MELATI

PROJECT SITE SELECTED

Three alternative sites for feasibility studies were recommended, and Alternative -- 2 was ultimately selected as "Project Site" by the Government.



CONDITIONS OF ALTERNATIVES

ALTERNATIVES	ALT. - 1	ALT. - 2	ALT. - 3
SITE AREA (Ha)	9.2	2.2	5.1
EXPECTED POPULATION	6,300	2,200	14,000
PROPOSED HOUSING FLOOR (M ²)	66,000	25,400	92,500
MAJOR IMPLEMENTATION ITEMS	Urban Renewal Housing (URH), Roads, Drainage & Sewerage (D&S); Water Front Park	URH, Roads, Station-Front Plaza, Neighbourhood Commercial District (NCD)	URH, Roads D&S, NCD

DESIGN CONCEPT & LAYOUT PLAN-KEBON MELATI 15

● Supply of low-cost housing and adequate community facilities

- Together with low-cost housing, a public open space is designed in the centre of the project site, taking into consideration the existing roads improved by KIP.
- Around the public open space, community facilities are allocated so as to serve for the inhabitants living in the site as well as in the neighbourhood.
- The public open space is also planned so that the inhabitants living north of the site can be easily accessible to the station.

● Development of commercial and business facilities

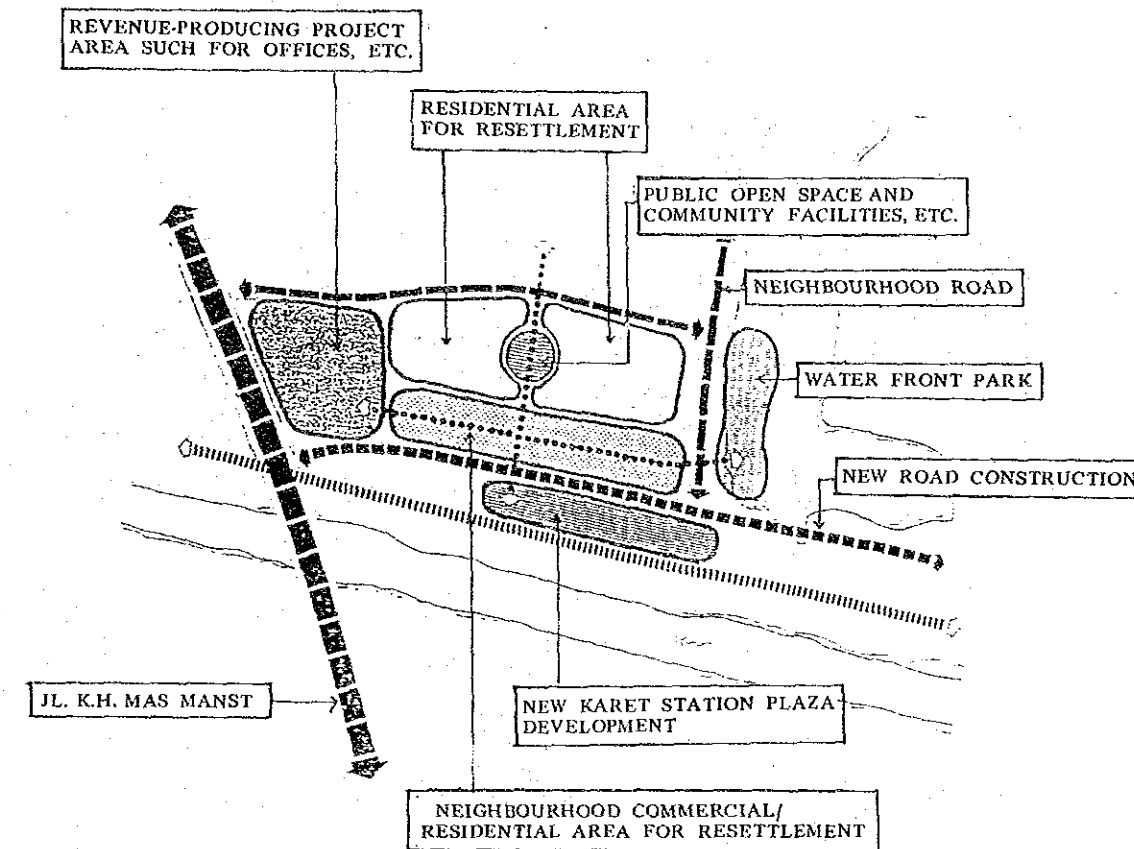
- 2-storey shopping malls are designed as neighbourhood shopping centres.
- A 12-storey office building is designed in the lot adjacent to Jl. H.H. Mas Mansyur (Main road).

● Development of a station-front plaza at the proposed Karet railway station

● New connection road between Jl. K.H.Mas Mansyur and Jl. Jend. Sudirman

● Improvement of the water front of the Meltari Pond

- Water-front park is designed to provide the amenity for the inhabitants.



URBAN RENEWAL CONCEPT PLAN

LEGEND

	PUBLIC OPEN AREA
	RESIDENTIAL AREA FOR RESETTLEMENT
	NEIGHBOURHOOD COMMERCIAL AREA/RESIDENTIAL AREA
	REVENUE-PRODUCING PROJECT AREA
	STATION PLAZA DEVELOPMENT
	WATER FRONT PARK
	MAJOR ROADS
	SECONDARY ROADS
	NEIGHBOURHOOD ROADS
	MAJOR FOOTPATHS
	RAIL WAY WESTERN LINE

KEBON MELATI

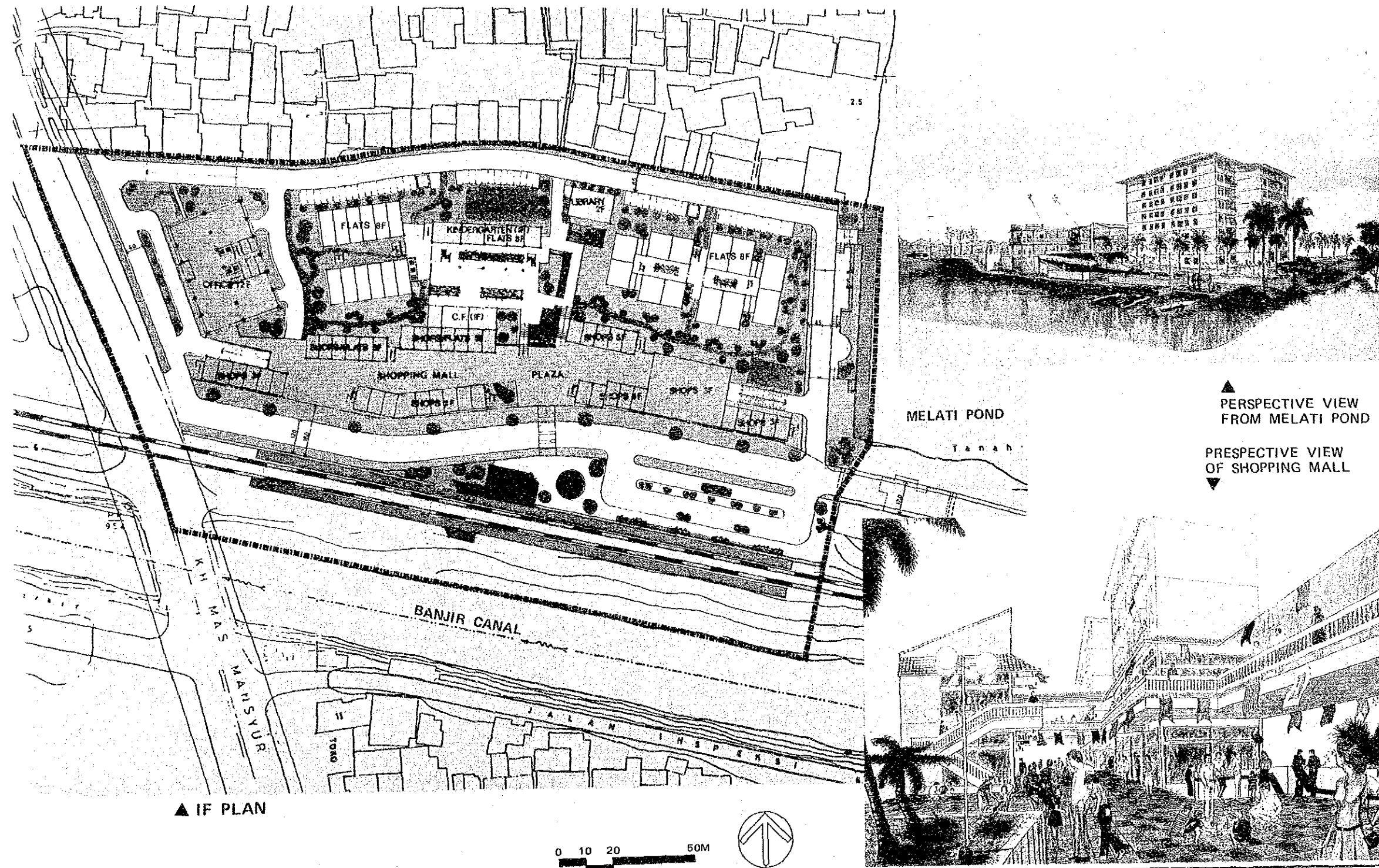


FIG. 5-9 LAYOUT PLANNING - KEBON MELATI

PROJECT DATA, IMPLEMENTATION SCHEDULE & FINANCIAL PLAN -KEBON MELATI 16

Project Summary (Kebon Melati)

General Condition of plan	Land Area	Present		Plan		Remarks
		Area	%	Area	%	
Public Use	Major road	1,700 m ²	4.4%	7,100 m ²	18.7%	
	Neighbourhood Road	2,080	5.4%	4,100	10.6%	
	Station front plaza	0	0%	2,000	5.2%	
	Park	0	0%	1,700	4.4%	
	Others	8,650	22.4%	8,000	20.7%	
	Sub-total	12,470	32.3%	22,900	59.3%	
	Building lot area	26,130	67.7%	15,700	40.7%	
	Project area	38,600	100%	38,600	100%	
	House	17,930		23,880		private floor 18,830
	Shop	600		3,310		2,300
Office	0		14,350		10,720	
Hotel	0		0		0	
Workshop	1,200		0		0	
Car park	0		4,800		4,800	
Public buildings	400		900		900	
Total	20,130		47,238		37,550	
Number area ratio		77%		270%		
Coverage ratio		70%		42%		
Number of housing unit				368		
Population		1,850		1,850		

Type of housing	Type	Private Floor area	Number of units	Type	Private Floor area	Number of units
F21	F21	21.0 m ²	56	F54	53.8 m ²	96
F25	F25	28.0	56	F70	76.5	48
F36	F36	39.2	28	F100	105	48

Community facilities (number)	Kindergarten	Meeting hall	Morsque	Library
	1	1	1	1

Financial plan	Revenue		Expenditure		Item of Subsidy	
	Amount	Description	Amount	Description	Amount	Description
* (Rp.1,000,000)	2,097	Subsidy	1,085	Planning	724	Planning
	3,420	Deffrayment	235	Land Preparation	504	Land Preparation
	14,953	Sales Revenue of residual floor	744	Compensation	752	Construction
			14,639	Construction	99	Over head, etc.
			172	Maintenance		Item of Deffrayment
			952	Overhead etc.	2,086	Land Cost
			1,464	Contingency	870	Construction
			1,162	Interest	301	Compensation
			20,452	Total	20,452	Overhead, etc.
					163	

Unit floor cost	House (1) (F21-F54)	House (2) (F70,F100)	House (3) (F368)	Shop (1)	Community facility	Office	Shop (2)
Rp. 1000/m ²	112.3	147.4	135.7	215.3	215.3	1,123.9	1,636.5

Right-conversion	Floor area for right holder	Conversion rate (land area)	Conversion rate (land area)
	19,501 m ²	1.0	1.3

Implementation schedule (Kebon Melati)

YEAR

	1	2	3	4	5	6	7	8	9	10
1 PLANNING										
2 TEMPORARY HOUSING										
3 LAND PREPARATION										
4 CONSTRUCTION										
-BUILDING (HOUSING)										
-BUILDING (OFFICE)										
-INFRASTRUCTURE, ETC.										

Construction & operation
 Demolition & grading
 Embankment, road, station plaza, bridge, water supply, sewerage, etc.

Financial Schedule in Kebon Melati

Financial Schedule in Kebon Melati

Unit: Rp.1,000,000

Items	CONSTRUCTION					Total
	1	2	3	4	5-23	
Equity	0	0	0	0	0	0
Share Deffrayment	1,140	0	0	2,281	0	3,421
Subsidy	1,175	456	462	0	0	2,093
Revenue from Rental Floor	0	0	0	330	40,907	41,237
Foreign Loan	951	2,549	3,400	818	0	7,718
Domestic Loan	0	3,119	6,065	90	0	9,274
Total	3,266	6,124	9,927	3,519	40,907	63,743
Implementation Cost	2,259	6,534	8,480	2,020	0	19,293
Interest of Foreign Loan **)	48	175	345	386	4,414	5,368
Interest of Domestic Loan **)	0	374	1,102	1,113	14,132	16,721
Repayment of Foreign Loan	0	0	0	0	7,718	7,718
Repayment of Domestic Loan	0	0	0	0	9,274	9,274
Total	2,307	7,083	9,927	3,519	35,538	58,374

Final Cash Balance = 63,743 - 58,374
 = 5,369 = 0.97 x (3,421 + 2,093)

**): 5%
 **): 12%
 *) Share Deffrayment + Subsidy

A sensitivity analysis was made to the financial schedule which will be greatly affected by fluctuations of the foreign portion and interest rates of domestic loan. The analysis was made to the cases as shown below.

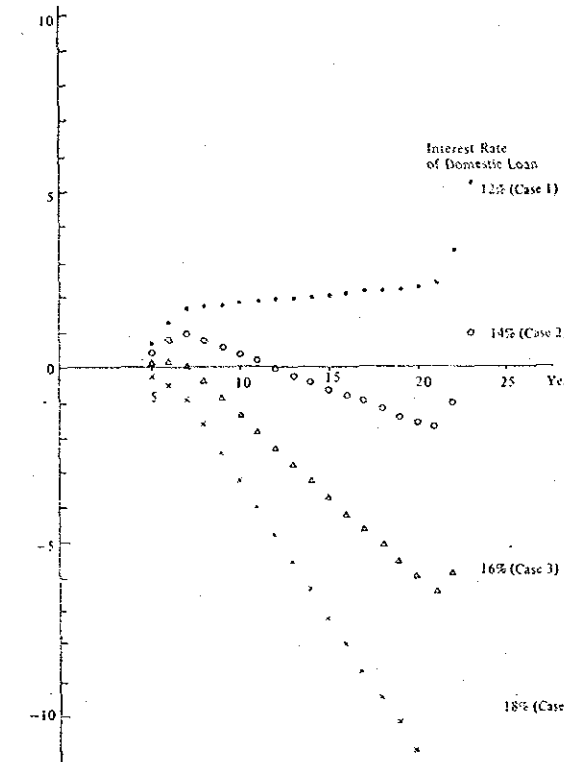
	Interest rate of domestic loan	12%	14%	16%	18%
Foreign portion					
40%		Case 1 (Basic Case)	Case 2	Case 3	Case 4
50%		Case 5	Case 6	Case 7	Case 8

The following table shows the amount of the foreign portion respective to the foreign cost component involved in the building construction being 40% and 50%.

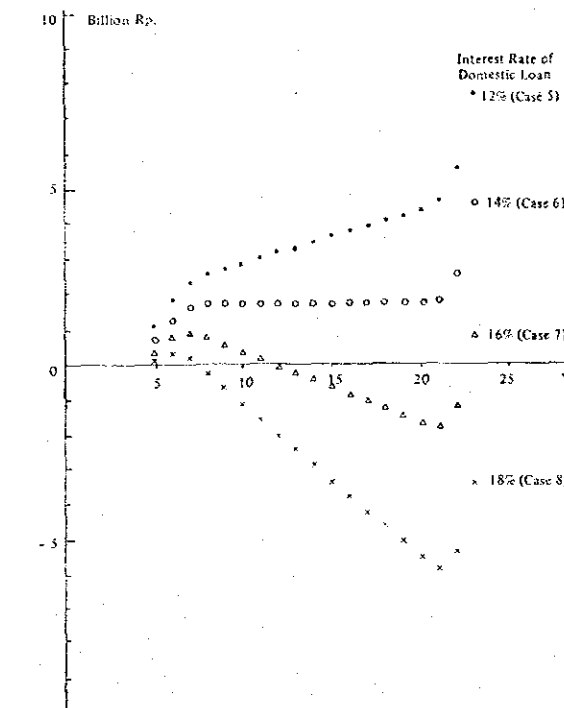
Foreign Portion	(Million Rp.)	
	40%	50%
1st year	951	951
2nd year	2,549	3,255
3rd year	3,400	4,340
4th year	818	982
Total	7,718	9,528

The amount of cumulative cash surplus or deficit is shown each for the cases of 40% and 50%. In the case of 40%, cash flow becomes deficit at the interest rate of 16% per annum, in the 5th year after completion of the construction. Whereas, in the case of 50%, cash flow becomes deficit at the interest rate of 18% per annum, in the 6th year after completion of the construction.

In order to assure the sound financial status of the project, it is very much essential that the implementation body makes efforts to arrange as low-interest loan as possible and to raise an occupancy rate of the residual floor.



CUMULATIVE CASH SURPLUS AND DEFICIT -- FOREIGN PORTION: 40%



CUMULATIVE CASH SURPLUS AND DEFICIT -- FOREIGN PORTION: 50%

